



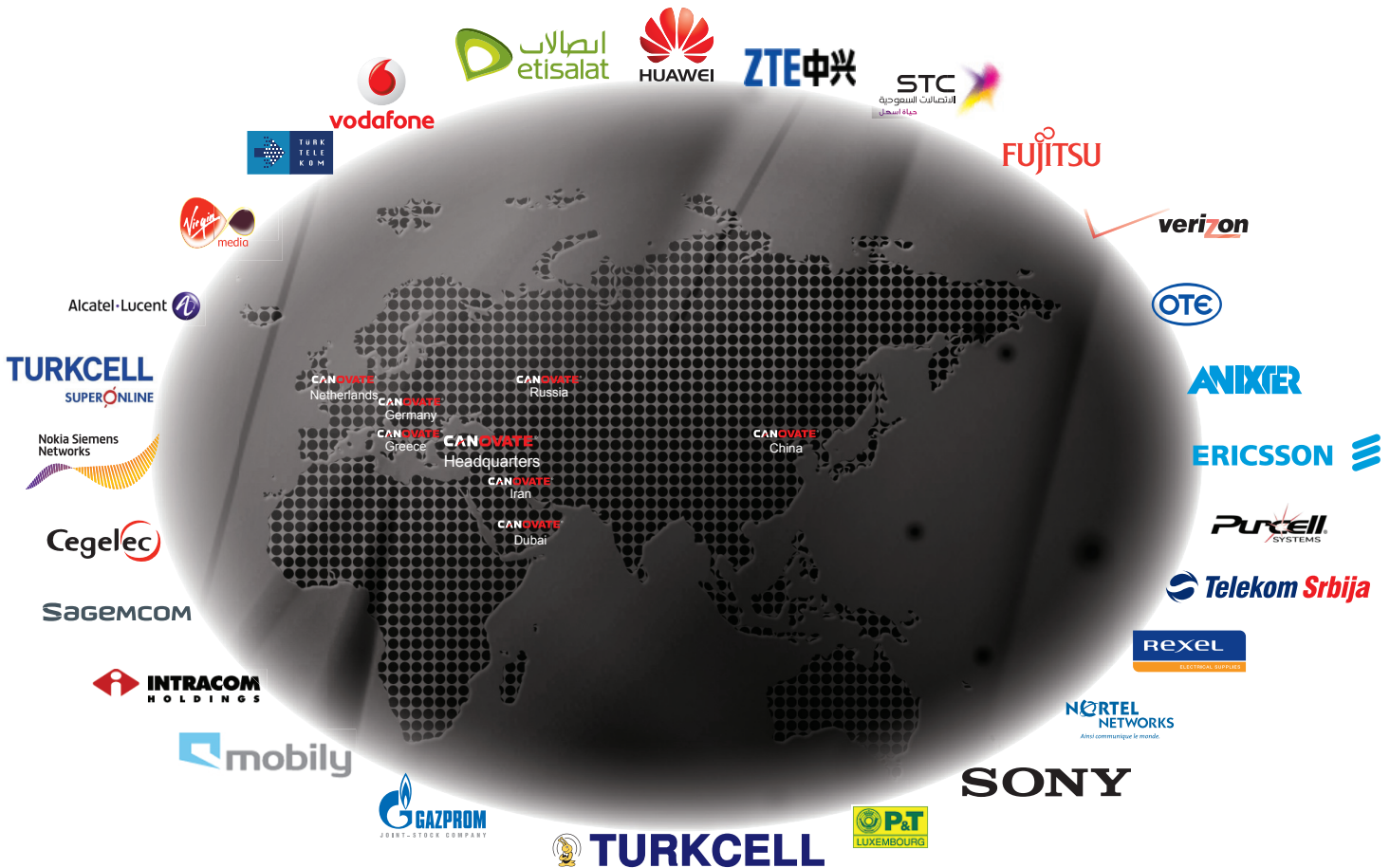
www.canovate.com



About Us

Canovate provides IT and Telecom infrastructure technology offerings that span from complete data centers, data center green cooling technologies to fiber optic connectivity based FTTX and fiber optic transmission and access solutions. Canovate designs and manufactures a wide range of innovative standard and customized products, technologies and solutions:

- ✓ Fiber optic connectivity based FTTX
- ✓ Fiber optic transmission and access
- ✓ Complete data centers
- ✓ Data center cooling, PDU, remote monitoring and access
- ✓ Outdoor racks and cabinets
- ✓ Wall-mount 19" enclosures
- ✓ Industrial 19" racks, cabinets and enclosures
- ✓ IT 19" network and server racks



Milestones

- 1965 Established as "PTT-ARLA" state owned Research Laboratory
- 1982 Became a private company, TELETAS
- 1984 Alcatel Telecom Exchange System 12 production
- 1991 ISO 9001 Certification
- 1993 Merger with ALCATEL
- 1996 Integration of ERP System
- 1999 Over 10 Million Subscriber line System 12 Exchange Systems developed, manufactured and delivered worldwide
- 2003 Relocation to brand new purpose built state-of-the-art manufacturing facilities in Istanbul
- 2004 Establishment of structural cabling and fiber optic business unit
- 2005 Multiple PCT Patent filings, 3rd Party Compliance Statement for Date and Telecom Products; development of fully integrated high density Optical Distribution Frame (ODF) Systems.
- 2006 Launch of Basic Outdoor Cabinet, Seismic 19" Rack Systems, Announcement of RoHS conformity, Gost-R Certification, IP41 up to IP65 approvals for cabinets and enclosures, UL approvals and renewals
- 2009 Launch of Data Center business unit including patented green cooling technology, Establishment of Canovate Russia and Establishment of Canovate Greece
- 2010 Launch of advanced high-density, industry first, Troy Fiber Optic ODF System, Establishment of Canovate Netherlands
- 2011 Establishment of fiber optic cable termination manufacturing lines and development IP PDU, Establishment of Canovate Iran
- 2012 Establishment of Canovate Middle East Office in UAE

Index

DATACENTER SOLUTIONS

- Cold & Hot Aisle Containment
- in-Row Cooler System
- Side Cooling System
- Direct Cooling
- Security
- 1U Fire Extinguisher System with Novec™ 1230
- Environmental Monitoring System
- CMS Central Management System software
- All-in-one Compact Datacenter
- Modular UPS
- Modular Power Distribution Panel
- Cracks and Chillers



4-36

- 10
- 12
- 15
- 20
- 24
- 25
- 26
- 27
- 28-31
- 32
- 33
- 34-38

FLOOR STANDING CABINETS

- Inorax-AL
 - Network Cabinet
 - Server Cabinet
 - Components of Inorax-AL
- Inorax-ST
 - Network Cabinet
 - Server Cabinet
 - Components of Inorax-ST
- Smart Server Rack
- WK4-Anti Theft Cabinet
- inorax-AL High End Server Rack Cabinet
- Seismic Rack
- ETSI Cabinet
- Open Frame Rack Cabinet
- Industrial Cabinet
- Thermal Cabinet



39-50

- 39
- 40
- 41
- 42-50
- 51-59
- 51
- 52
- 54-59
- 61
- 63
- 64
- 65
- 66
- 67
- 68
- 69

WALLMOUNT CABINETS

- Single Wallmount Cabinet with Fixed Side Panels
- Single Wallmount Cabinet with Openable Side Panels From Outside
- Single Wallmount Cabinet with Openable Side Panels From Inside
- Double Section Wallmount Cabinet
- Slim Line Wallmount Cabinet
- Single Wallmount Cabinet
- 19" SOHO Cabinet
- 10" SOHO Cabinet



67-72

- 56
- 56
- 57
- 57
- 58
- 58
- 59
- 59

ACCESSORIES

75-81

inorax OUTDOOR Enclosures

- Outdoor Cabinets
- inorax-09 Outdoor Cabinet
- inorax-10 Outdoor Cabinet
- inorax-11 Outdoor Cabinet
- inorax-12 Outdoor Cabinet
- inorax-13 Outdoor Cabinet
- inorax-14 Outdoor Cabinet
- inorax-15 Outdoor Cabinet
- inorax-16 Outdoor Cabinet
- inorax-17 Outdoor Cabinet
- Thermal Management



82-91

- 82-83
- 84
- 85
- 85
- 86
- 86
- 87
- 87
- 88
- 88
- 91

PDU's

92-101

- Basic PDU
- Metered PDU's
- Protected PDU
- Modular PDU
- Extendable PDU
- PDP (Power Distribution Panel)
- DC-PDU
- High Protection PDU
- Metered High Protection PDU
- AC Socket and Plugs
- IP PDU
- EMS "Environmental Monitoring System"
- CPDU "Metered Rack PDU"



- 93
- 94
- 94
- 95
- 95
- 96
- 96
- 96
- 97
- 97
- 97
- 98
- 99
- 101

Canovate Datacenter

Complete datacenter infrastructures including

- ✓ Racks
- ✓ Cooling solutions
- ✓ UPS
- ✓ Environmental monitoring
- ✓ PDU
- ✓ Power distribution
- ✓ Fire extinguishing system
- ✓ Remote CMS Central Management Software



All-in-One Compact Datacenter

Plug-and-Play Datacenter

Fully loaded, high efficiency, powerful, high-capacity mini/mobile datacenter. Scalable, modular, unmatched matrix of performance density, redundancy and reliability. Enables rapid deployment of a fully functional cost, space, and energy-efficient data center. Highly modular, vendor-specific and optimized server, network, storage and telecommunications environments.



Micro Datacenter

World's true compact, mobile and price efficient datacenter

Excellent for branch offices, cloud applications and mobility. Enables rapid deployment of a fully functional cost-space-energy-efficient datacenter.



Cold & Hot Aisle Containment System

- Enables isolation of hot and cold aisles to maximize cooling system efficiency and minimize cooling energy requirement
- Highly modular, scalable, expandable, and retrofit-able
- Optimum cooling solution for big and medium scale datacenters coupled with CRAC units to increase efficiency of cooling system.
- Provides moderate efficiency, energy saving and free cooling capabilities

Advantages:

- More efficient than traditional central CRAC cooling technologies up to 50% energy savings
- Modular, scalable, expandable, retrofit-able



Cold Aisle Containment + in-Row Cooler

- Cold & Hot Aisle Containment System coupled with inrow cooler system ensures ultimate cooling capacity enabling highest levels of energy efficiency
- Optimum solution for medium to large scale datacenters
- A chilled-water based technology bringing cold air right to the server racks where heat dissipation is maximum, eliminating raised floor requirement in contrast to CRAC cooling systems.

Advantages:

- Eliminates raised floor requirement
- Ultimately more efficient than traditional CRAC based cooling
- Industry leading cooling capacity enabled by 60kW Inrow Cooling System
- Water based cooling – A totally Green IT Solutions
- Free-cooling capability is significantly higher than CRAC cooling systems, for ambient temperatures below 14° C



in-Row Cooler (Front Cooler)

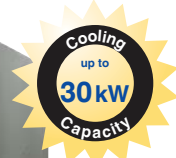
- InRow Cooler is an ultimate solution for medium to large scale data center applications
- A chilled-water based technology bringing cold air right to the server racks where heat dissipation is maximum, eliminating raised floor requirement in contrast to CRAC cooling systems
- Integration into Cold & Hot Aisle Containment Systems yields industry leading cooling efficiency performance

Advantages:

- Significantly more efficient than traditional CRAC based cooling
- Free-cooling capability is considerably higher than CRAC units (<= 14° C)
- Eliminates raised floor requirement
- Water based cooling – A totally Green IT
- Industry leading cooling capacity up to 60kW



W: 600 mm



W: 300 mm

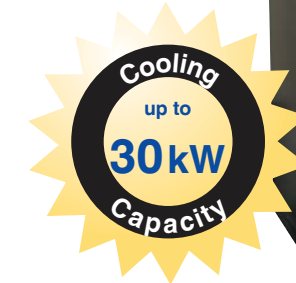


Side Cooler

- The perfect fit to high density standalone racks where thermal load exceeds 30 kW or for small computer server rooms where infrastructure is limited for necessary expansions
- Highly efficient for small to medium size enterprises, institutions and branch offices
- Side cooling system is a chilled-water based solution that is fully integrated to one or either side of IP protected racks and provides individual or standalone rack cooling up to 30 kW
- One side cooling system can serve up to three server cabinets with 10kW thermal load each

Advantages:

- Ideal for high density server racks and small datacenters
- Individual and standalone rack cooling capacity up to 30kW
- Water based cooling – A totally Green IT
- Eliminates raised floor requirement
- Free-cooling capability is significantly higher than CRAC cooling systems, for ambient temperatures below 14° C



Rack & Inrow Cooler Application (+Free Cooling)

Chiller + Free Cooling

Rack & CRAC Application

CRAC Units



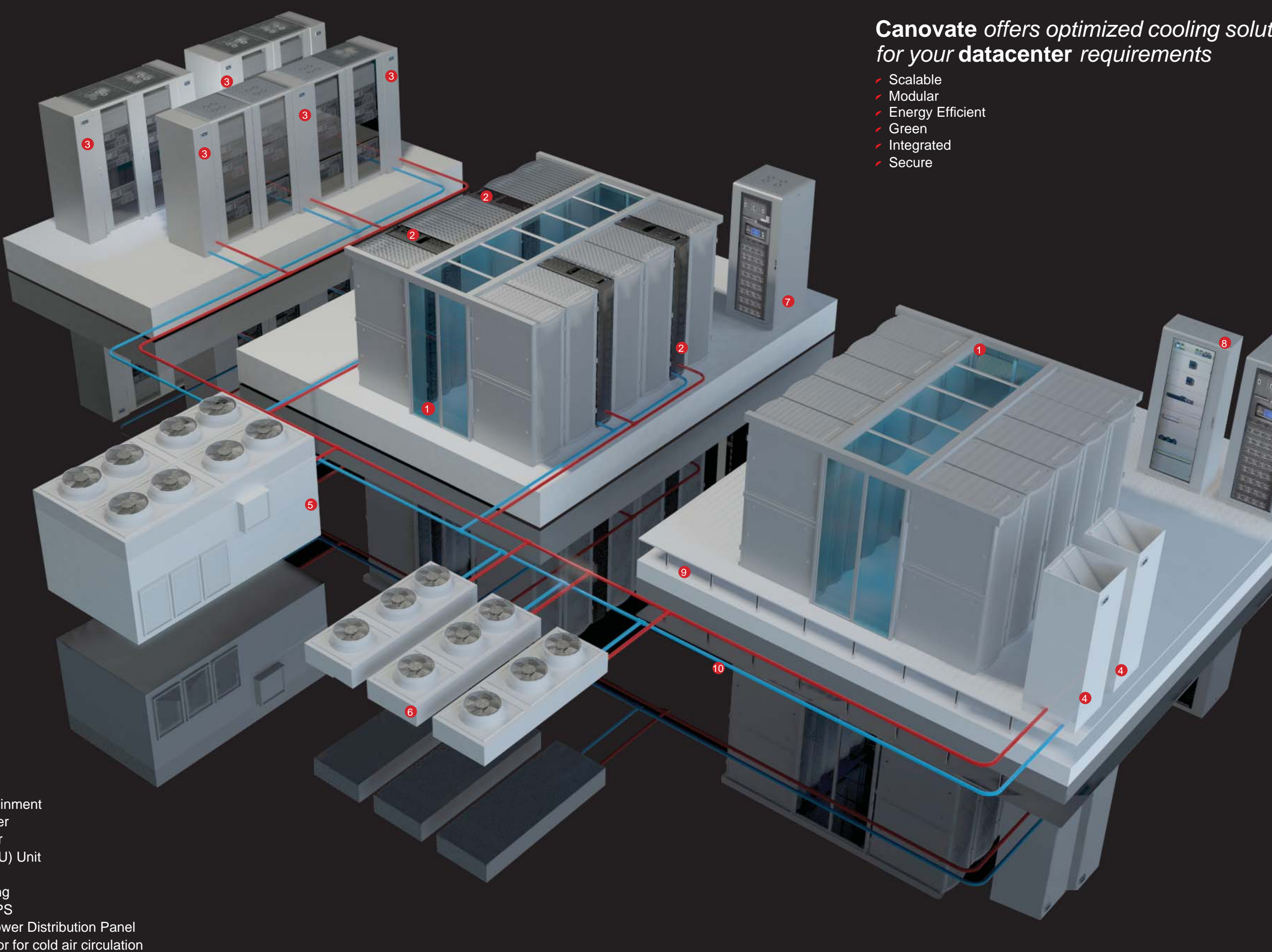
Cold / Hot Aisle Containment & Front Cooler Application (+Free Cooling)

Side Cooler (Inrack Cooling) Application (+Free Cooling)

Cold Aisle Containment & CRAC Application

Canovate offers optimized cooling solutions for your datacenter requirements

- ✓ Scalable
- ✓ Modular
- ✓ Energy Efficient
- ✓ Green
- ✓ Integrated
- ✓ Secure

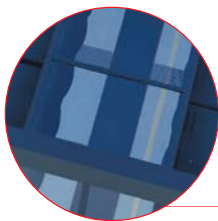
- 
- 1- Aisle Containment
2- Inrow Cooler
3- Side Cooler
4- CRAC (CCU) Unit
5- Chiller
6- Free Cooling
7- Modular UPS
8- Modular Power Distribution Panel
9- Raised Floor for cold air circulation
10- Piping

Datacenter Solutions

Cold&Hot Aisle Containment

Increase server performance and cooling efficiency in Datacenters

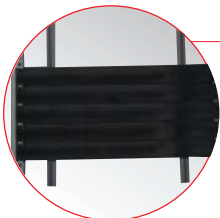
- ✓ Energy savings up to 50%
- ✓ Modular Concept
- ✓ Retrofittable
- ✓ Cooling capacity of up to 10kW per rack
- ✓ Green IT
- ✓ Complete system solution:
 - Power management
 - Monitoring
 - Cooling
 - Security
- ✓ Efficient energy management
- ✓ ROI within 30 months



Top Covers

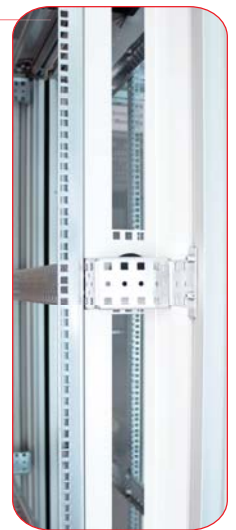
Easily removable acrylic glass panel to maximize the available light and reduce fire risk.

Blanking Panels



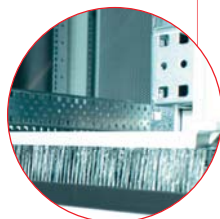
Skirt Type Blanking Panel

Closes the gap between 19" mounting rails and side panels. Enables zero U patch panel fitting and cable management.



Raised Floor

Cold & Hot Aisle Containment System must be built on raised floor to maximize cold air intake efficiency.



Brush

Protection from dust



Hinged Doors



Sliding Doors

Hinged or Sliding Doors

Manual or electronic locking Sliding Door systems for access management.

Datacenter Solutions



● Aisle Entrance Door

Sliding Door Manual System

Product Code	Product Description
DC-D1-X-42220	For 42U Cabinets, 1200 mm width
DC-D1-X-47220	For 47U Cabinets, 1200 mm width

Sliding Door Automatic System

Product Code	Product Description
DC-D4-X-42220	For 42U Cabinets, 1200 mm width
DC-D4-X-47220	For 47U Cabinets, 1200 mm width

Swing Type Door Panel Set

1 pc Left Door Panel, 1 pc Right Door Panel, 2 pcs Hydraulic Door Closer Systems

Product Code	Product Description
DC-D3-X-42220	For 42U Cabinets, 1200 mm width
DC-D3-X-47220	For 47U Cabinets, 1200 mm width

● Top Cover

Product Code	Product Description
DC-T-X-YY3Y0	For 300 mm width cabinet
DC-T-X-YY6Y0	For 600 mm width cabinet
DC-T-X-YY8Y0	For 800 mm width cabinet

● Accessories

Skirt Type Blanking Panel

2 pcs Blanking Panel between 19" mounting rail and cabinet profile (for 800 mm width cabinet)

Product Code	Product Description
DC-B3-X-428Y0	For 42U Cabinet
DC-B3-X-478Y0	For 47U Cabinet

Others

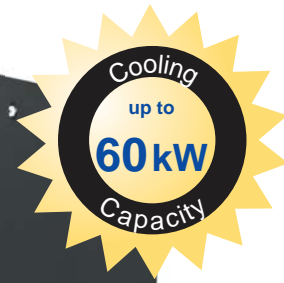
Product Code	Product Description
CCA-X-4001	19" 1U Blanking Panel
CCA-X-4003	19" 2U Blanking Panel
DC-D4-X-P	Fingerprint Reader
DC-D4-X-K	Key Pad
DC-D4-X-C	Card Reader

Datacenter Solutions

in-Row Cooler (Front Cooler)

Liquid based cooling

- ✓ Specially developed for cold & hot aisle containment applications
- ✓ Modular construction
- ✓ in-Row Technology
- ✓ No raised floor required
- ✓ Variable speed fans
- ✓ Modular design: Allows capacity expansion
- ✓ 30 kW or 60 kW cooling capacity
- ✓ Pressure controlled fans
- ✓ Hot-swappable fans
- ✓ EC-Technology
- ✓ No condenser needed due to 14° C inlet water temperature
- ✓ Increased freecooling capacity enabled by high inlet water temperature @ 14° C
- ✓ Efficient power consumption: 980 Watt for 60 kW Cooling



Specifications	DC-F1-X-420300	DC-F1-X-420600
	DC-F1-X-420320	DC-F1-X-420620
Cooling capacity	30 kW	60 kW
Cooling capacity sensible	24 kW	60 kW
Air inlet	38 C	38 C
Number of fans	5 x	3 x
Type of fans	axial	axial
Air flow	3.800 m/h	9.600 m/h
Power consumption	980 Watt	980 Watt
Currency	2,8 A	5,8 A
Power supply	230 Volt/50 Hz.	1t750 Hz.
Water temperature inlet	+14 C	+14 C
Water temperature outlet	+20 C	+20 C
Water flow	4,8 m/h	7,11 m/h
Pressure drop	42 kPa	
Water connection	1 inch.	1 1/2 inch.
Number of airfilter	1 x	1 x
Type of airfilter	G 2	G 2
Noise level in 1 mtr. distance	62 dB(A)	72 dB(A)
Dimensions		
Breadth	300 mm	600 mm
Depth	1.000 mm	1.000 mm
Height	2.000 mm	2.000 mm
Weight	153 kg.	
Color	RAL 9005 / RAL 7035	RAL 9005 / RAL 7035

Product Code	Description
DC-F1-X-420300	Front Cooler 30 kW 42U 300 X 1000
DC-F1-X-420320	Front Cooler 30 kW 42U 300 X 1200
DC-F1-X-420600	Front Cooler 60 kW 42U 600 X 1000
DC-F1-X-420620	Front Cooler 60 kW 42U 600 X 1200



Controller



Pressure Controlled Ziehl-Abegg / EBM EC Fans

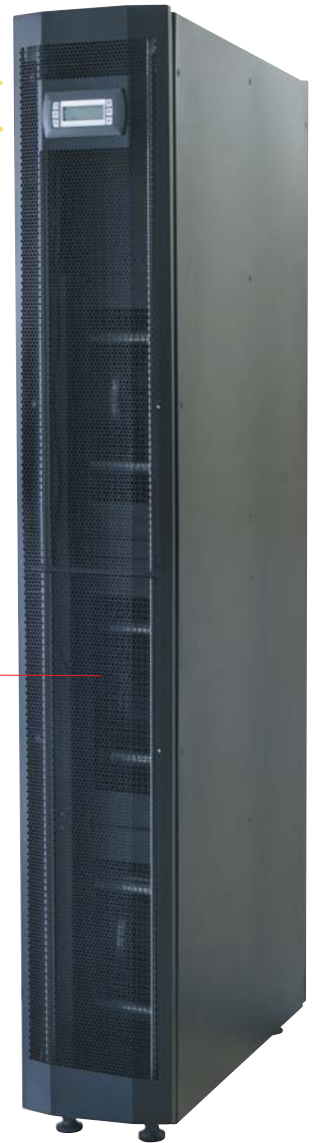
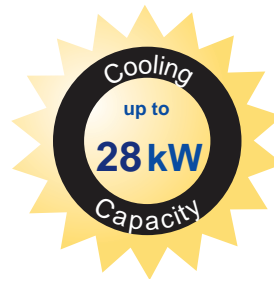


Datacenter Solutions

in-Row Cooler

DX (Refrigerant R 410A) based cooling

- ✓ 28 kW cooling capacity in 42U 300x1000 Cabinet
- ✓ Automatically controlled between 11 to 28 kW by
- ✓ Inverter technology for maximum energy efficiency
- ✓ COP ratio is above 4 for maximum energy efficiency
- ✓ External Compressor unit to have better noise level
- ✓ Cooling units work 100% sensible (without condensed water)
- ✓ Specially developed for cold & hot aisle containment applications
- ✓ Modular construction
- ✓ in-Row Technology
- ✓ Eliminates raised floor requirement
- ✓ Variable speed fans - EC-Technology
- ✓ Modular design: Allows capacity expansion
- ✓ Hot-swappable fans



Pressure Controlled
Ziehl-Abegg / EBM
EC Fans

Multipoint Injection system distributing R410 agent more efficiently within the heatexchanger unit

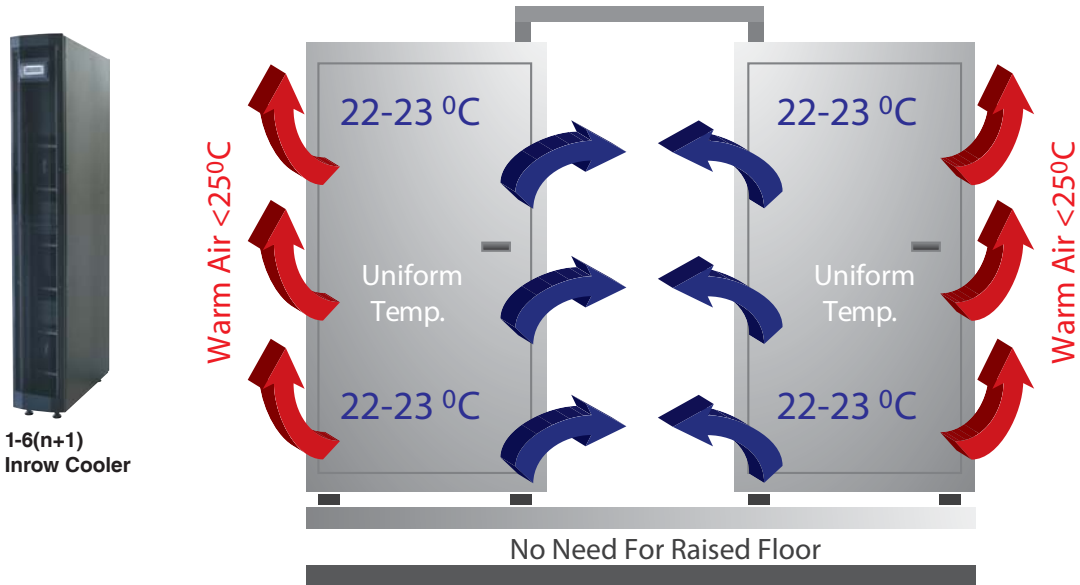
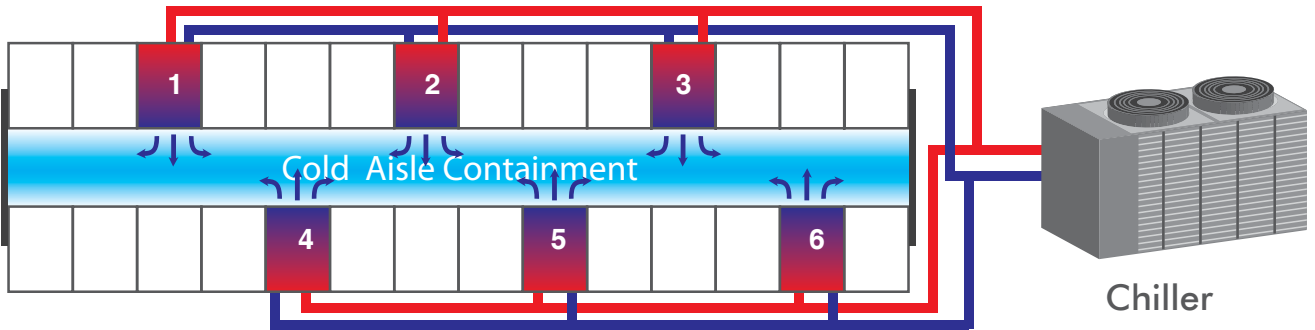


Hot-swappable
EC fan Drawer



Outdoor Unit-R410A
(Combined Compressor & Condenser)

Datacenter Solutions



A Snapshot from Inrow Control & Monitoring System

Front Cooler Control & Monitoring System

Anlagenkomponente	Schaltbefehl	Istwert	Minimum	Sollwert	Referenzwert
Zuluftventilator	Ein	<math>\text{<var>(0,3,10)\%}</math>			
Kühlventil		<math>\text{<var>(0,3,10)\%}</math>			
Stromaufnahme Zuluftventilatoren		<math>\text{<var>(0,3,12)\%}</math> mA		<math>\text{<var>(0,3,13)\%}</math> mA	

Sammelstörung

- Brand - Not - Aus
- Rücklufttemperatur kritischer Wert
- Zulufttemperatur kritischer Wert
- Zulufttemperatur Taupunktunterschreitung
- Störung Kaltwassersatz
- Überwachung Zuluftventilatoren
- Racktür geöffnet
- Fühler 1 - Leckwasser Anschluss prüfen
- Fühler 2 - Stromwandler Anschluss prüfen
- Fühler 3 - Rücklufttemperatur Anschluss prüfen
- Fühler 4 - Zulufttemperatur Anschluss prüfen
- Netzwerkstörung SideCooler 1
- Netzwerkstörung SideCooler 2
- Leckwasserüberwachung
- Alarmer Quittieren?

Buttons:

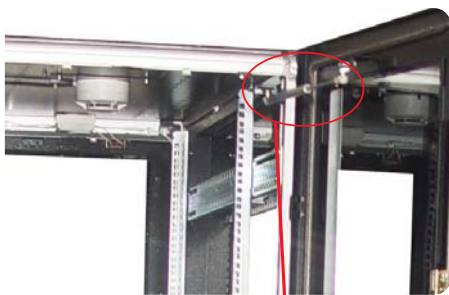
Datacenter Solutions

Side Cooler

- ✓ Liquid based cooling
- ✓ No raised floor needed
- ✓ 30 kW cooling capacity
- ✓ Efficient power consumption
- ✓ Easy adaptation to different racks
- ✓ Mountable to the side of the rack
- ✓ Easy installation on the existing racks
- ✓ Patented space saving shape
- ✓ Integrated monitoring system
- ✓ Hot-swappable fans
- ✓ 300 mm width
- ✓ No condensing water due to 14°C inlet water temperature
- ✓ More than 1000 installations worldwide

Specifications	DC-S1-X-420300
	DC-S1-X-420320
Cooling capacity	30 kW
Cooling capacity sensible	24 kW
Air inlet	38 C
Number of fans	5 x
Type of fans	axial
Air flow	3.800 m/h
Power consumption	980 Watt
Currency	2,8 A
Power supply	230 Volt/50 Hz.
Water temperature inlet	+14 C
Water temperature outlet	+20 C
Water flow	4,8 m/h
Pressure drop	42 kPa
Water connection	1 inch.
Number of airfilter	1 x
Type of airfilter	G 2
Noise level in 1 mtr. distance	62 dB(A)
Dimensions	
Breadth	300 mm
Depth	1.000 mm
Height	2.000 mm
Weight	153 kg.
Color	RAL 9005 / RAL 7035

Product Code	Description
DC-S1-X-420300	Side Cooler 30 kW 42U 300 X 1000
DC-S1-X-420320	Side Cooler 30 kW 42U 300 X 1200



Automated Door Release Hydraulic system

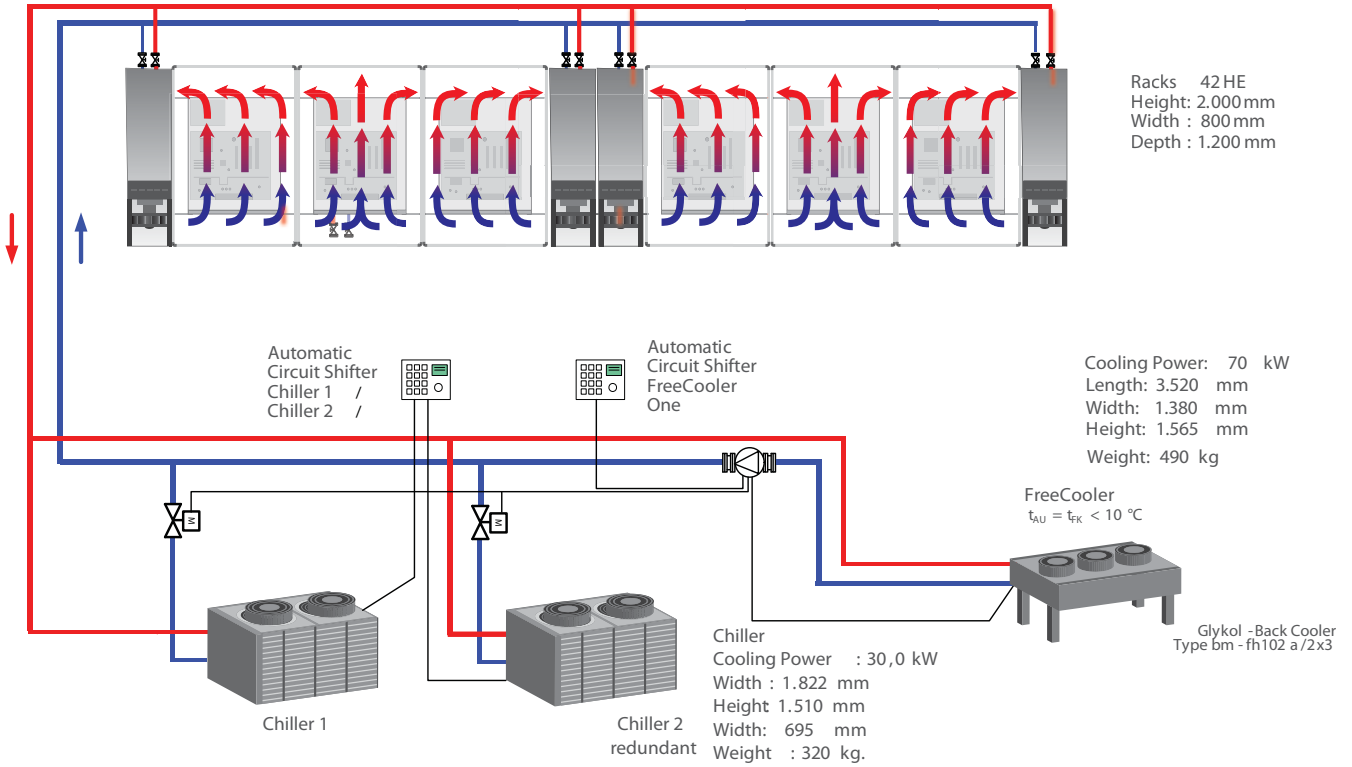


Side cooler with two racks cooling

Datacenter Solutions

Side Cooler (continued)

A Reference Side Cooler Application Layout



A Snapshot from Side Cooler Control & Monitoring System

Side Cooler Control & Monitoring System

Anlagenschalter

Fühler

Anlagenkomponente

Stromaufnahme

Sammelstörung

Status

Start

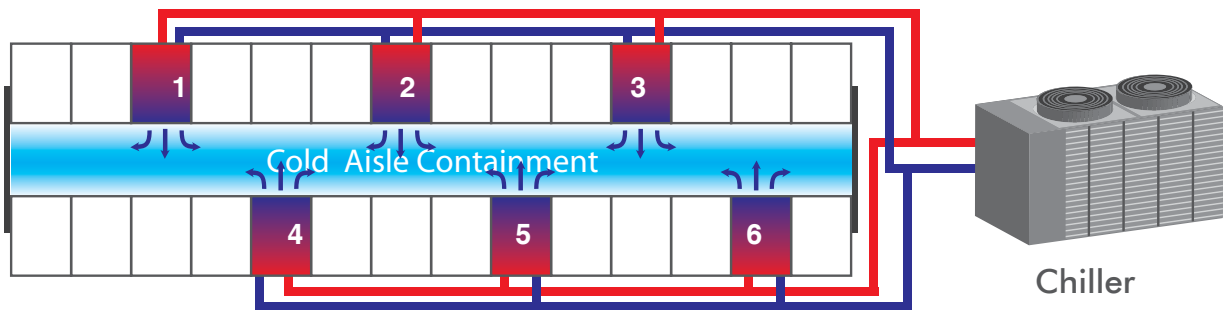
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Datacenter Solutions

Cold & Hot Aisle Containment + in-Row



Canovate Cold & Hot Aisle Containment Application



Comparison PUE of different Cooling solutions for Datacenter with 500 kW IT-load

FreeCooling FreeCooling 100% technic	No		Indirect ≤2°C		Indirect ≤13°C		Indirect ≤15°C	
	CRAC standard		Cold Aisle CRAC		Cold Aisle FC		SideCooler	
	%	kW	%	kW	%	kW	%	kW
IT Equipment	59,9%	500	72,3%	500	76,1%	500	79,5%	500
Cooling	24,0%	200	18,8%	130	15,2%	100	12,7%	80
Air Movement	9,6%	80	4,3%	30	3,8%	25	2,7%	17
USV	6,0%	50	4,3%	30	4,6%	30	4,8%	30
Lightening etc.	0,6%	5	0,3%	2	0,3%	2	0,3%	2
energy costs (€): (12 cent / kWh)	294.336		168.192		131.400		101.966	
	100%	835	100%	692	100%	657	100%	629
PUE:	1,67		1,38		1,31		1,26	
Energy costs %	289%		165%		129%		100%	



ROI (Return of Investment) = Only 2 Years!

Datacenter Solutions

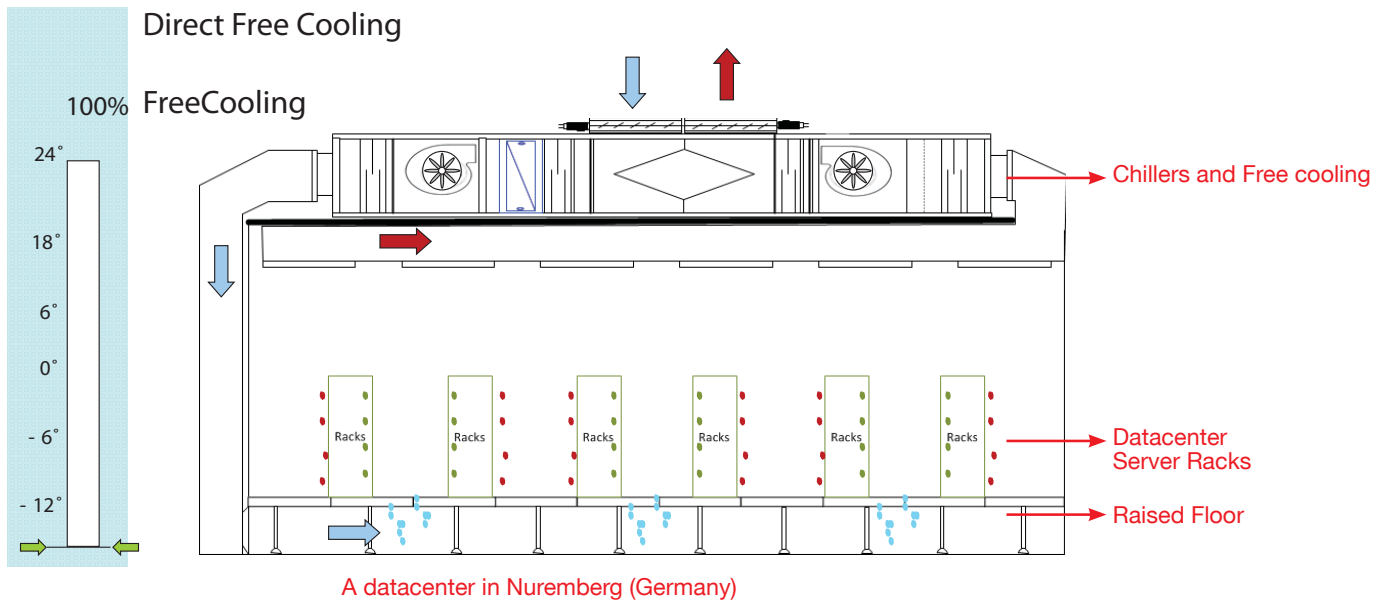
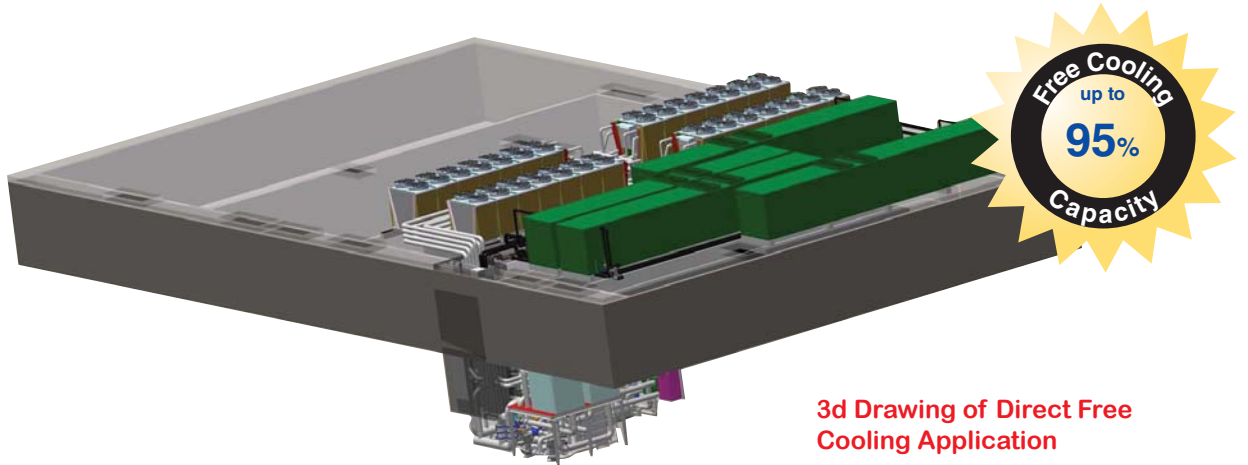




Datacenter Solutions

Direct Free Cooling

Inside datacenters, after appropriate filtration, cold external ambient air is injected through air channels. The external air is drawn directly from the direct freecooling unit. This is done using a damper controlled by the microprocessor. In direct freecooling systems liquid transfer is not needed as water or any other agent as in direct free cooling systems. Direct free cooling is used in ICT facilities with lower heat loads like base stations for mobile phone networks etc.



Datacenter Solutions

Formulation of task:

- High-availability computer centre
- High-security computer centre
- Highest possible energy efficiency
- As little air conditioning as possible in the computer centre room itself
- Limited space available for installing air conditioning
- Computer centre situated directly under the roof
- Computer centre floor space: 200 m²
- IT load: 2.5 kw/m² = 6 kW / rack

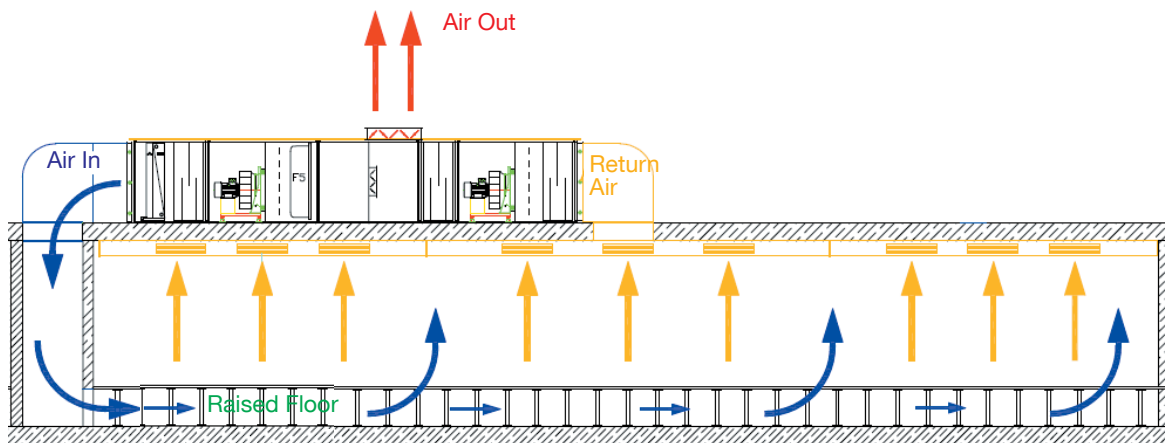
Requirements:

- Cooling capacity: 500 kW.
- Redundancy: N+1
- Minimisation of air conditioning costs

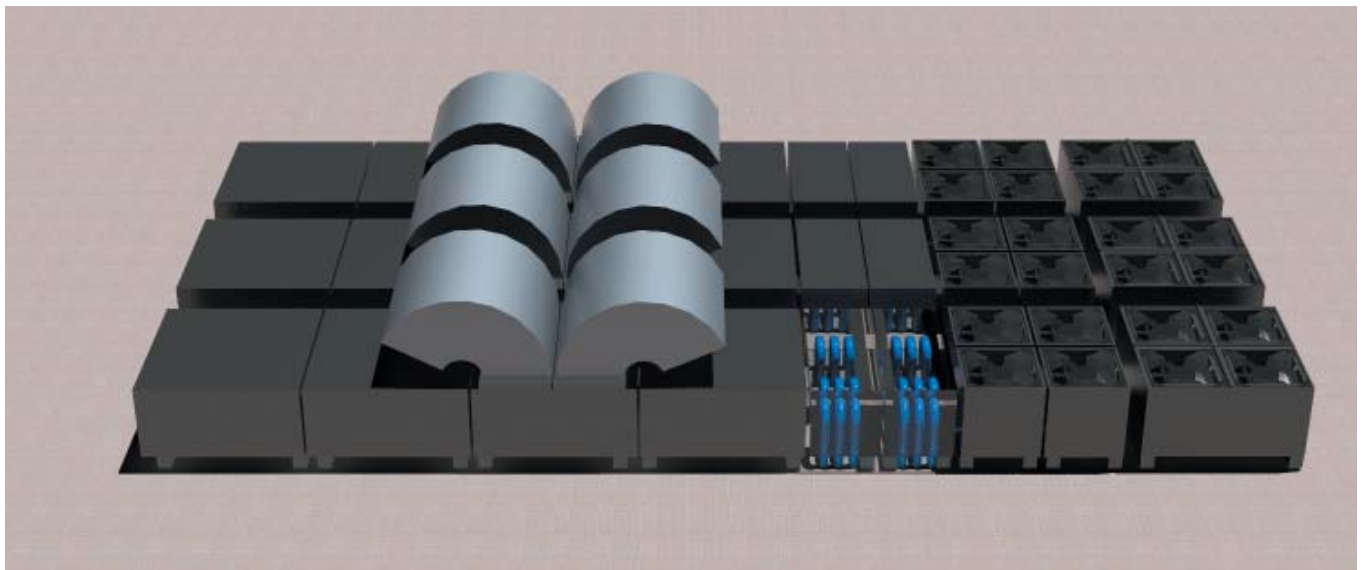
Solution:

The layout of our Direct Free Cooling Units (DFCUs) was specially adapted to the roof and computer centre layout for roof installation. The DFCUs draw in cold air up to an outdoor temperature of 22 °C. As required, the cold air is mixed via mixing dampers to obtain the required intake temperature. No mechanical cooling is required for this mode of operation. In Germany, on the basis of the mean values of the last 15 years, the direct free cooling is between 94% and 97% per year.

- Outgoing air Double floor
- Air intake Exhaust air



Schematic sketch of the Direct Free Cooling Units (DFCU) roof installation



DFCUs in roof installation with 3 x 250 kW cooling capacity

Three DFCUs with 250 kW cooling capacity each are installed. All three units function at 66% of their maximum cooling capacity in normal operation. Only if one unit fails (back-up mode), the other two units are driven at maximum capacity.

Fig. 2: DFCUs in roof installation with 3 x 250 kW cooling capacity

Datacenter Solutions

Functional principle:

Cold air is led directly to the double floor via air intake ducts. The cold air is blown through the perforated plates in front of the 19-inch racks. The air cools the servers and is dissipated as warm air at the rear of the racks. This air is led to special air-return ducts and then returned to the DFCUs. In summer operation, the warm air is dissipated directly to the outside. In winter operation, part of the warm air is mixed with the intake air for the double floor. In winter operation, a special energy-saving nozzle humidifying device maintains the pre-defined humidity level in the humidifying strip.

In the remaining time per year during which machine cooling is necessary (around 500 hours), this function is performed by a cooling register integrated in the DFCUs. The cooling components (compressors and condensers) are located in the front of the DFCUs. The entire cooling equipment is therefore on the roof, outside of the computer centre itself.

To optimise energy efficiency, the cooling rows in the computer centre are enclosed in a housing. This minimises the temperature gradient from the floor of the racks to the top of the racks.

Result:

- ✓ No mechanical cooling is required at outside temperatures below 22 °C. The compressors only operate around 5% per year.
- ✓ With a power usage effectiveness (PUE) of 1.17, this is one of the world's most energy-efficient computer centres.
- ✓ There is no air-conditioning equipment in the computer centre itself. 100% of the computer centre floor space is available for IT.
- ✓ The lightweight design does not impair the statics of the building.
- ✓ The enclosure of the cooling rows in a housing further optimises the system.

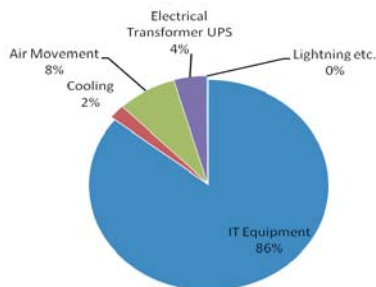
Power consumption – 500 kW cooling capacity

Lightning etc. = Lighting etc.

1,17 = 1.17

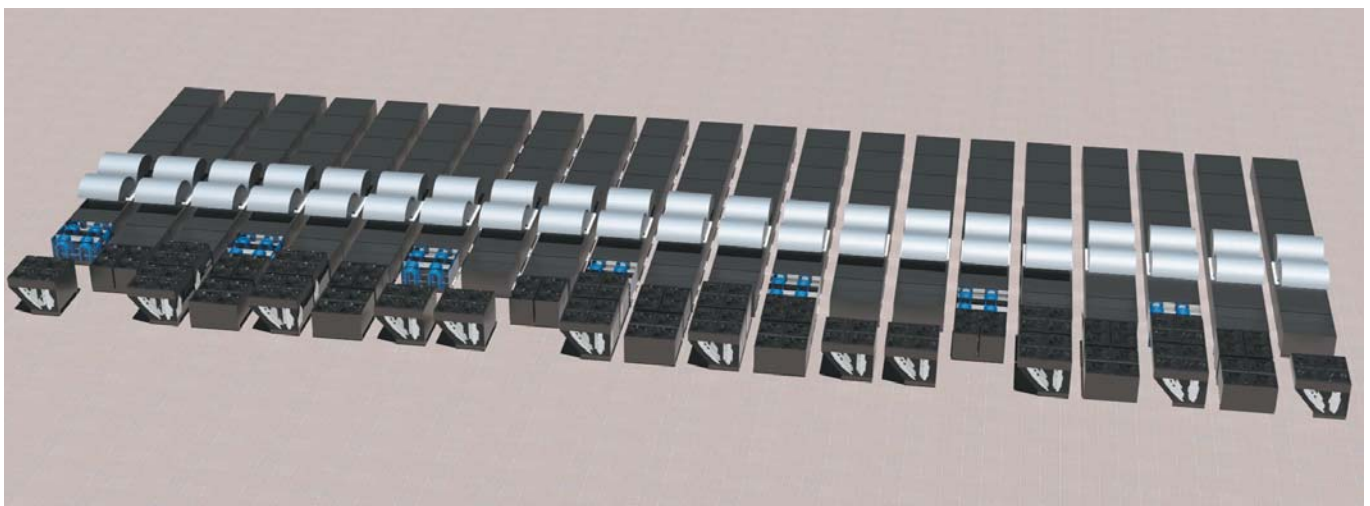
Energy efficiency / PUE:

Energy Consumption for 500 kW Cooling Capacity



PUE=584 kW/500kW= 1,17

	%	kW
IT equipment	85.6%	500
Cooling	2.1%	12
Air movement	7.9%	46
UPS	4.3 %	25
Lighting etc.	0.2 %	1
	100%	584
PUE	=	1.17

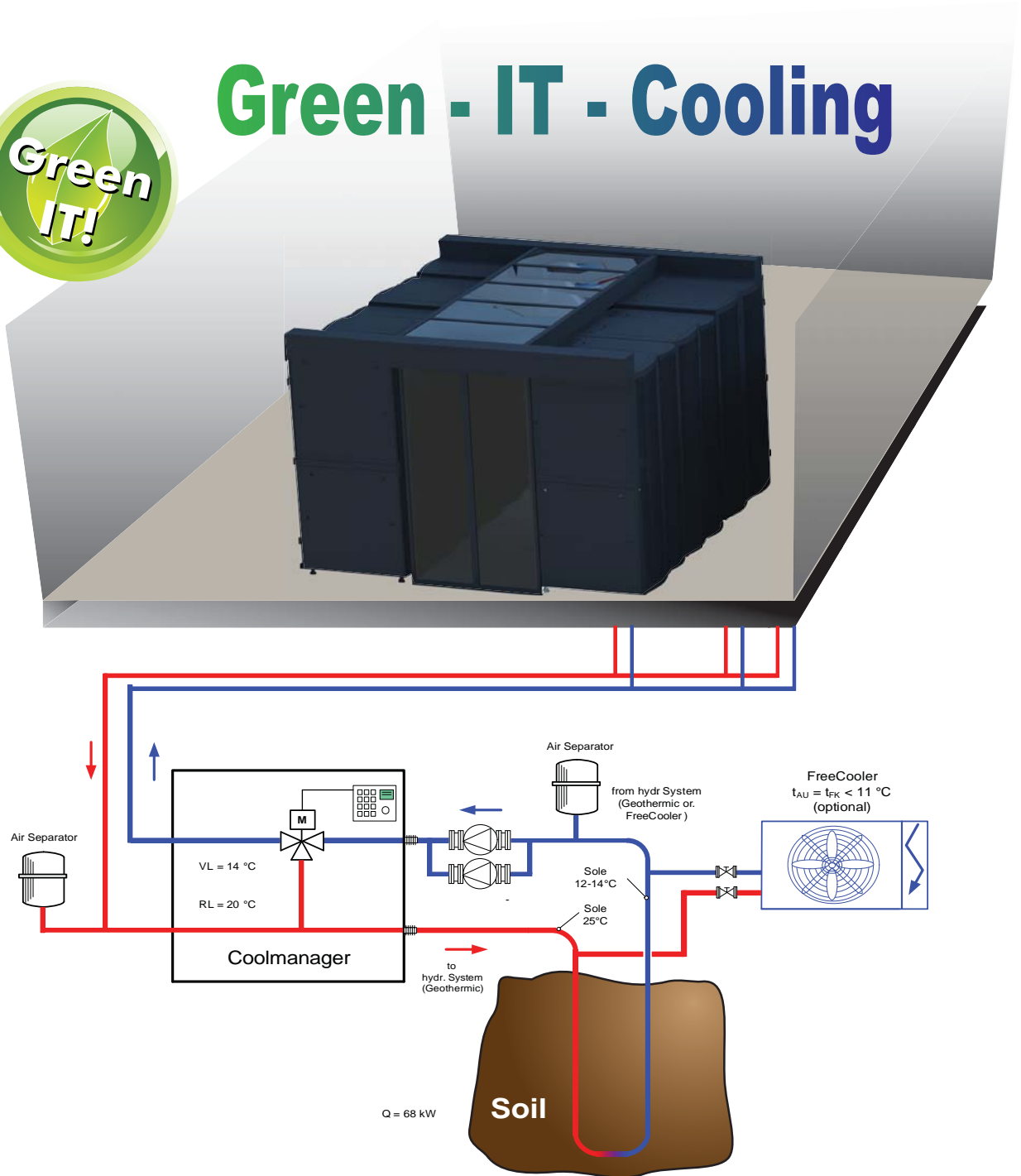


Direct Free Cooling Data Center with 2 * 4000 kW Cooling Capacity / PUE /1,18

“Using **Geothermal Cooling** for the direct rack and in row cooling”



Green - IT - Cooling



Canovate in-Row and Side Coolers require an inlet temperature of 14 C to operate efficiently and to avoid condensation during operation. In the solid (appx.90 meters deep) there is a constant temperature of 11 C, we can use this temperature to cool water required for the cooling units and eliminate the need of using chiller units. The glycol-water returns with app. 11C from the underground pipe with pumps. The supply temperature to the in-Row&Side Cooler of 14C is regulated by the three-way valve. In in-Row&Side Cooler units the water-glycol mix will gain a temperature of appx. 19C and the closed cycle transfers the heat of the IT equipment to the ground.

ROI for such an investment is approximately 18 months

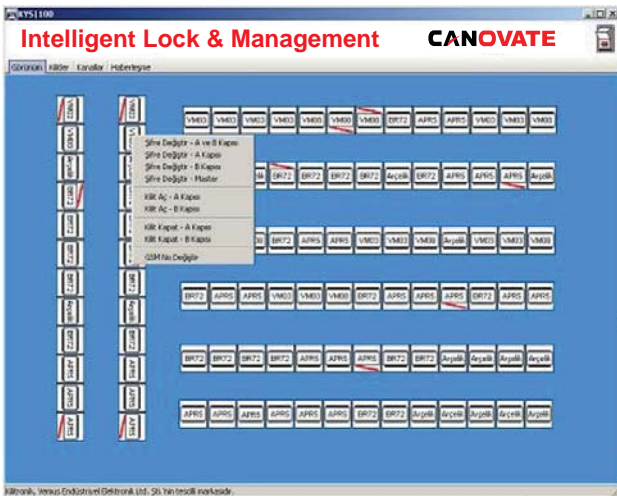
Datacenter Solutions

Security

Intelligent Lock and IP Controlled Access

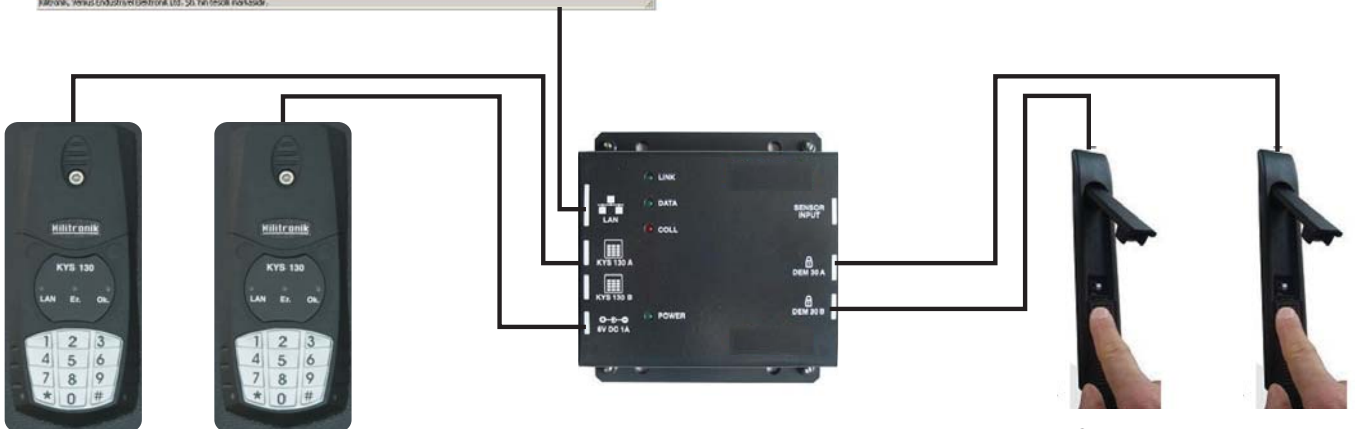
Convenient and user friendly control and management of access to high security cabinets and zones. Both electronic lock system and IP based Electronic Lock systems can be used in indoor and outdoor applications. Key-pad, door lock mechanism, lock controller and management software are included.

- ✓ User-Friendly online central management with graphical interface
- ✓ Graphical interface customization with addition of cabinet location scheme, including graphics and photos
- ✓ Fast access to locks via Ethernet(10/100 Mbps)
- ✓ Event log based on date, hour, minute with database
- ✓ Retrospective event query
- ✓ Audio and visual warnings for switching On&Off, wrong action, remaining open, etc.
- ✓ Notification of warnings and alarms to user through SMS
- ✓ A numerical Master password defined for opening all the locks
- ✓ User password may be defined in 4 to 8 numerical characters as desired
- ✓ Cryptographic (Hash) storage for passwords in the database
- ✓ Password resetting functionality with software
- ✓ Cabinet blocking after consecutive incorrect password entries
- ✓ Deactivating desired cabinets via the management panel
- ✓ Central monitoring of open and closed cabinets
- ✓ 10/100 Mbps Ethernet connection
- ✓ 2 levels password management
- ✓ Offline operation when disconnecting
- ✓ Ability to run on batteries in power failure
- ✓ Ergonomic, industrial and elegant design
- ✓ Easy of use with Push-Button functionality
- ✓ Automatic locking when the lever is shunt
- ✓ User-Friendly warnings; Lan, Er, Ok



Intelligent Lock Management

Product Code	Product Description
SL-00-KP	Numpad
SL-00-HL	Lock and Handle
SL-00-CM	Control Module
SL-00-MS	Management Software



CONTROLLER MODULE

CONTROLLER MODULE

Datacenter Solutions

1U Fire Extinguisher System with Novec™1230

OneU active extinguishing system The integrated smoke aspiration system continuously takes air samples from the entire switch cabinet that it is protecting through a sampling pipe with several openings which is installed in the switch cabinet. The smoke aspiration system is usually equipped with high-sensitive and normal-sensitive smoke detectors. In this way, two different alarm thresholds are provided for the graduated combination of device shutdown and fire. The evaluation of measured values by an intelligent microcontroller enables OneU to detect fire with very low tolerance for error. Optionally, the OneU active extinguishing system may also be connected to an external manual fire alarm for manual activation. The integrated extinguishing system consists mainly of a light metal container with the extinguishing agent Novec™ 1230, an release mechanism with valve and cartridge with propellant, loss monitoring for the extinguishing agent and the OneU discharge nozzle. During extinguishing, the cartridge with propellant is opened and the liquid agent flows to the OneU nozzle. The special geometry ensures that the agent is vaporised when exiting the nozzle and its full extinguishing effect is unfolded.



Applications

- ✓ Server Cabinets
- ✓ Electric Control Cabinets
- ✓ Oil Refineries
- ✓ Petrochemical Plants
- ✓ Clinical/diagnostic equipment
- ✓ Control rooms
- ✓ Pump stations
- ✓ Transformer vaults

Product Code	Product Description
SF-01-SM-H	Suppression Module
SF-01-DM-0	Smoke Aspiration Detection Module
SF-01-SD-H	Active Fire Suppression

Environmental Monitoring System with wireless sensors

In addition to the standard environmental monitoring functions, Canovate environmental monitoring module has additional features like; Timely control of the devices connected to its control outputs, logging, and integration with the central management softwares by using its standard SNMP support. Timing functions can be used to start cooling, heating and watering in a predetermined time slices within a day. Or any industrial device can be controlled

Environmental Monitoring System

Product Code	Product Description
SM-00-BM-42-C	Basic Module
SM-00-SM-42-C	SMS Module
SM-00-WM-42-C	Wireless Sensor Connection

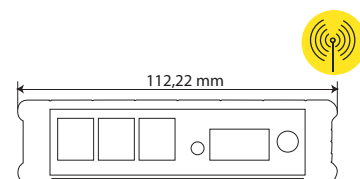
Sensors

Product Code	Product Description
SM-00-ST-XX	Temperature
SM-00-SH-XX	Humidity Sensor
SM-00-SC-XX	Temperature and humidity
SM-00-SW-XX	Water detector
SM-00-SS-XX	Smoke detector
SM-00-SD-XX	Door contact

XX = 03:3M, 06:6M, 09:9M, 0W :Wireless

Features

- ✓ Supports all FCC compliance, UL94 standards
- ✓ 100Mbit Ethernet connection
- ✓ Embedded Web server.
- ✓ Supports wireless sensor connections
- ✓ 4 channels temperature -20°C - 120°C
- ✓ 4 channels humidity 0rH - 99rH
- ✓ 2 channels RS232/RS485
- ✓ 2 channels 2KWatt dry contact relay output
- ✓ 1 channel "Frame Camera" input.
- ✓ 4 channels digital input
- ✓ Time slicing functions (timely control of outlets in a day)
- ✓ Up to 2 different time programs
- ✓ e-mail basic authentication (SMTP Client)
- ✓ SNMP Trap
- ✓ Precision timing Access to NTP servers by using SNTP (Time Protocol)
- ✓ Two users support (1 Admin and 1 standard user)
- ✓ User selectable alarm types and events (Inputs and sensors).
- ✓ User assignable http port (80-8080),
- ✓ Monitoring access port by using UDP(245)
- ✓ 2 dry contact outputs (240VAC/10A max)
- ✓ Size: 112x100x29mm / 4.41"x3.94"x1.14" inch
- ✓ Patented hardware and software topology..Patent No:2010311



Datacenter Solutions

EMS Environme Environmental Monitoring System

Advanced technology, excellent performance, strong functions, safe and reliable. Real-time monitoring of micro environment within the cabinet through LAN or WAN. Intelligent remote monitoring system combines complete software technique of embedded system, long-distance monitoring technique based on SNMP, network node technique of sensors, power distribution technique, modularized structure technique and other advanced techniques to precisely monitor the micro environment within one or several cabinets.

Three levels of monitoring is possible:

- ✓ Product Centered
- ✓ Cabinet Centered
- ✓ Room Centered

EMS Master Order Code : SM_EMS_MS



EMS Slave Order Code : SM_EMS_SL



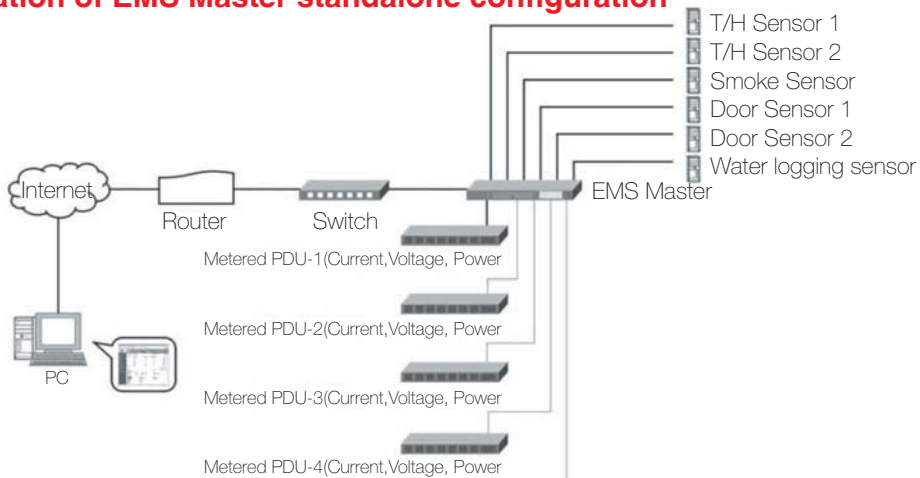
EMS Hub Order Code : SM_EMS_HB



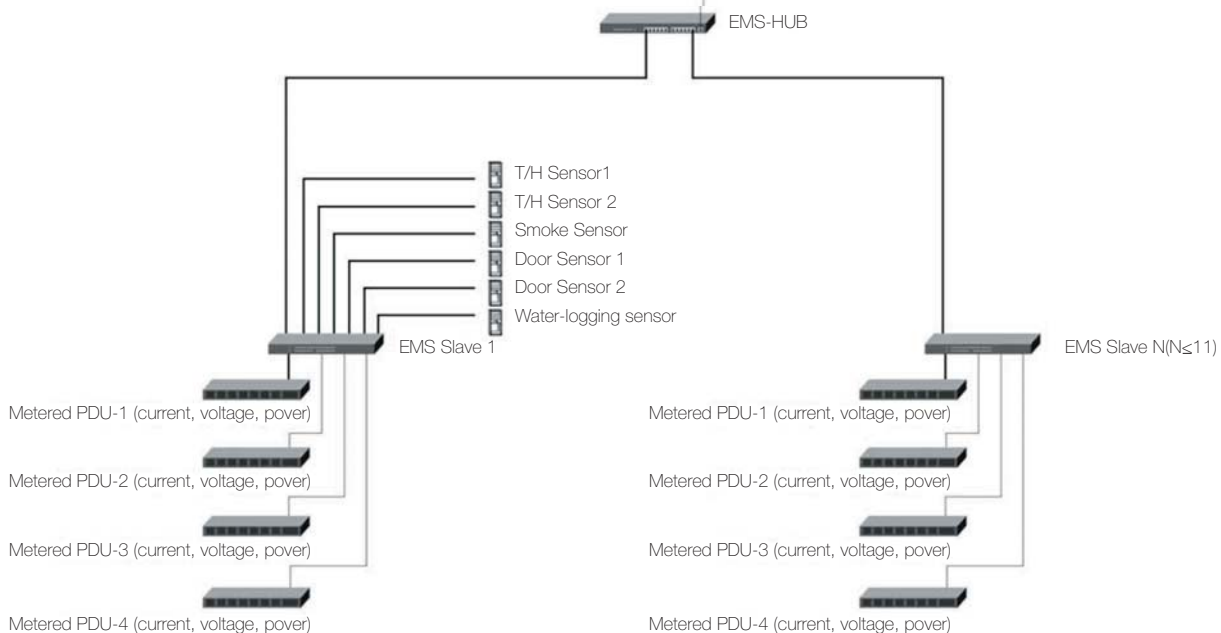
Power Distrubution Unit



Application of EMS Master standalone configuration

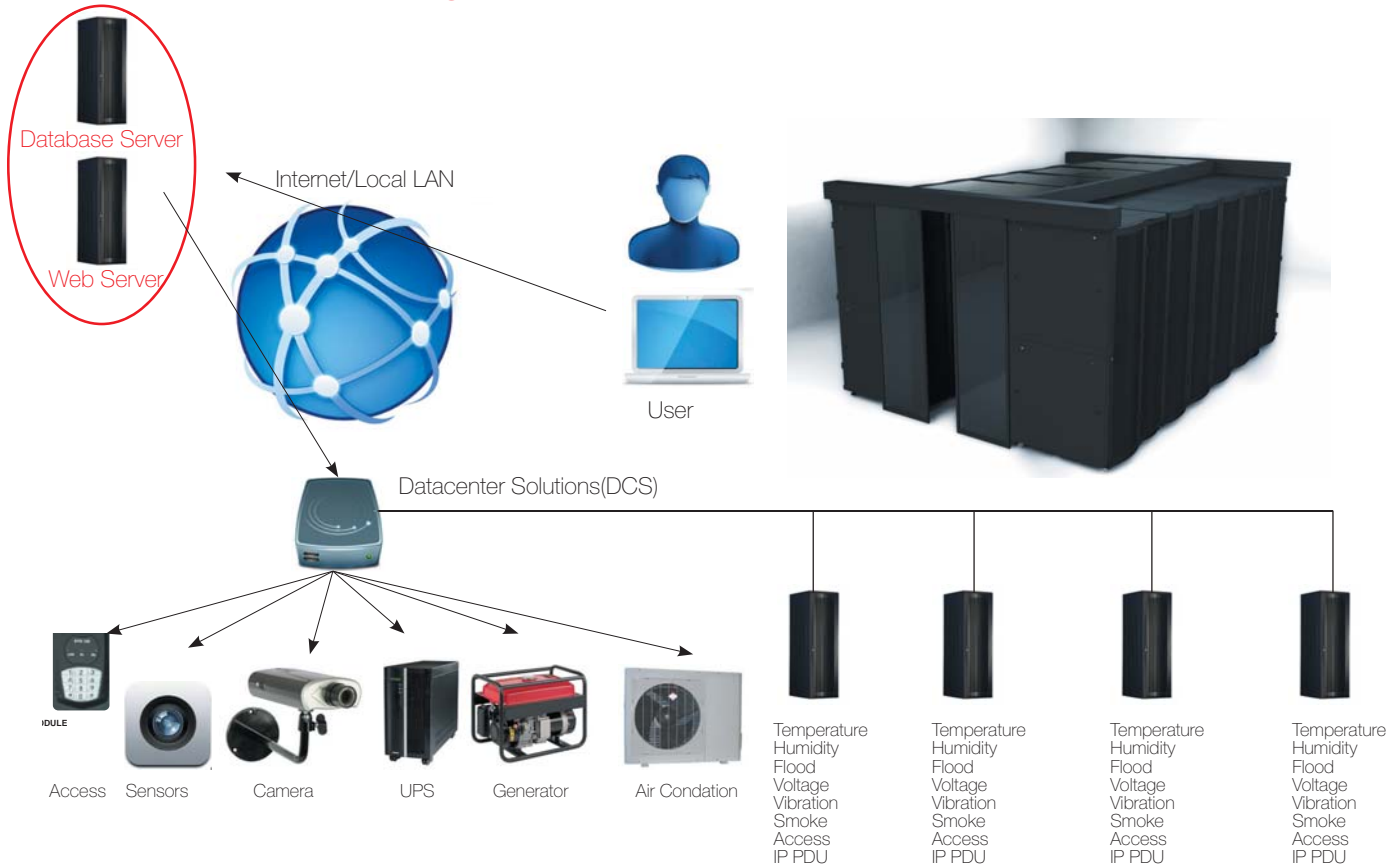


Application of EMS Master and Slave configuration



Datacenter Solutions

CMS Central Management System Software



A scalable datacenter or systems center solution. Controls and/or monitors all appliances supporting system centers: Power generators, UPS, HVAC, Cooling and free-cooling, Access Control, Environmental monitoring, Power management.

- ✓ The solution is expandable through chaining the RCU appliance
- ✓ Industry standard protocols supported (CAN Bus, ModBus, RS485, IP)
- ✓ The solution is customizable according to the customer's installed base conditions

The screenshot shows the CANOVATE software interface. The top left corner displays the 'CANOVATE' logo. Below it is a navigation tree under 'Enviroments' (note the typo) with the following structure: Company 1, Company 2, Company 3, Site Location 1 (Data Center 1, Data Center 2, Row of Racks 1 (Rack 1, Rack 2)), and Site Location 2. The main content area is titled 'Component User' and is divided into several sections: 'Humidity' showing a gauge at 20%, 'Temperature' showing two vertical scales at 20°C and 15°C, 'Sensors' with 'Flood Status' (Detected) and 'Smoke Status' (Clear), and 'Unit Details' listing Company: Company 3, Site Location: Site Location 1, Data Center: Datacenter 2, Row: Row fo Racks 1, and Rack: Rack 1. Below these is a 'Power Analysis' section featuring a 'Rack Power Consumption Chart' with a colorful area chart. The bottom right section is titled 'Access Details' and shows 'Door: Open' and 'Access Logs: Click to see Access Logs'.

All-in-one Compact Datacenter



Datacenter Solutions

All-in-one Compact Datacenter Server Rack with Integrated Side Cooler

Highlights :

- ✓ Install datacenter where you want and need it
- ✓ Rapid deployment in 4-6 weeks from plan to start-up
- ✓ Low total cost of ownership
- ✓ Up to 50% less space required
- ✓ No raised floor
- ✓ Full turnkey datacenter including cooling, structured cabling, monitoring, power management and protection
- ✓ Scalable from 1 rack to hundreds of racks
- ✓ Stand alone datacenter
- ✓ No raised floor needed
- ✓ Individual rack cooling up to 30 kW
- ✓ High level security within rack fire protection and monitoring systems
- ✓ Advanced power management with IP PDU and UPS systems
- ✓ Internal and external redundancy
- ✓ Structured cabling solutions with overhead cable channels

Applications:

- ✓ High density servers exceeding 10 Kw
- ✓ Mobile Containers/Shelters
- ✓ Branch Offices
- ✓ Closets
- ✓ Disaster recovery operations
- ✓ VOIP applications
- ✓ RFID applications
- ✓ Small clinics/hospitals
- ✓ Warehouses
- ✓ IT Equipment in non-translational places
- ✓ Remote installations
- ✓ Temporary installation
- ✓ Mobile applications

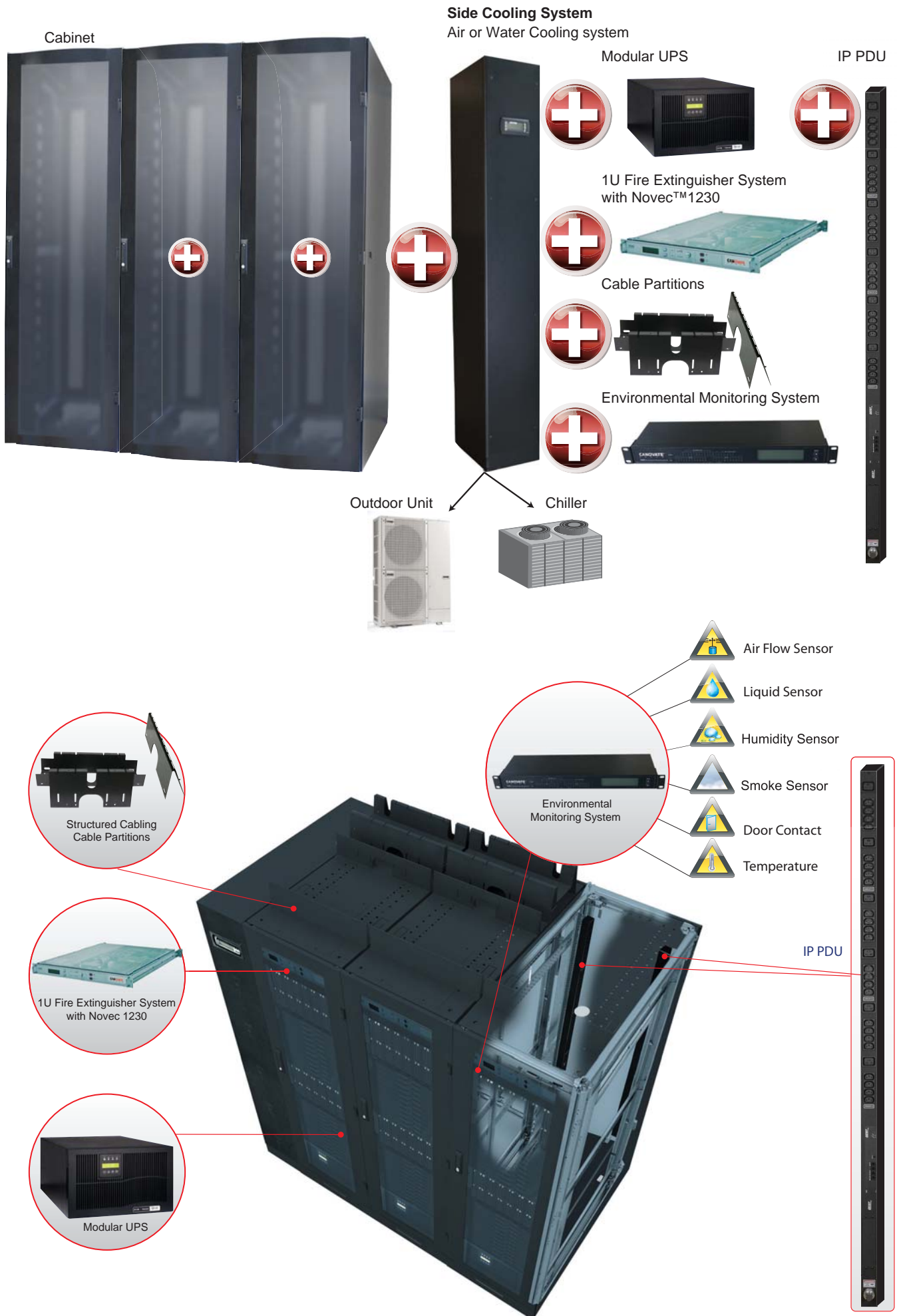


Specification:	Air cooled(DX) Side Cooler	Water Based Side Cooler
Cooling Capacity	30 kW	30 kW
Total Height with castors	207 cm	207 cm
Total Width of the unit	109 cm	109 cm
Rack Width	80 cm	80 cm
Weight (Empty)	255 kg	255 kg
Max Weight loaded	1000 kg	1100 kg

Different dimensioned units can be produced according to request.
Remote Central Monitoring can be possible with Canovate Central Management software

Datacenter Solutions

All-in-one Compact Datacenter



Datacenter Solutions

Micro Datacenter

Indoor/Outdoor Use

Highlights:

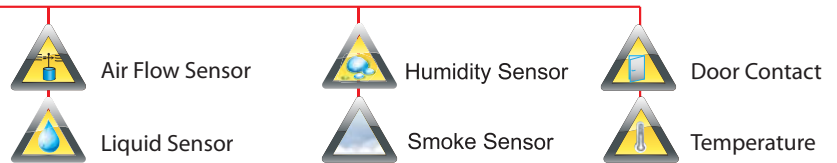
- ✓ All-in-one datacenter including cooling, monitoring, power management and protection
- ✓ Stand-alone datacenter
- ✓ Eliminates raised floor and external cooling equipment requirements
- ✓ Individual rack cooling up to 4 kW
- ✓ High level security with in rack fire protection and monitoring systems
- ✓ Advanced power management enabled by IP PDU and UPS systems
- ✓ Install datacenter where you want and need it
- ✓ Rapid deployment in 4-6 weeks from plan to start-up
- ✓ Low total cost of ownership
- ✓ Up to 50% space savings
- ✓ No raised floor
- ✓ Tested According to secure standards WK2
- ✓ EMS (Environmental Monitoring System)
- ✓ IP PDU
- ✓ UPS
- ✓ Fire Detection/Extinguishing system (1U)
- ✓ Intelligent Patch Panel
- ✓ Central management control system for all component
- ✓ Protection Grade:IP54, IP55 Protection

Applications :

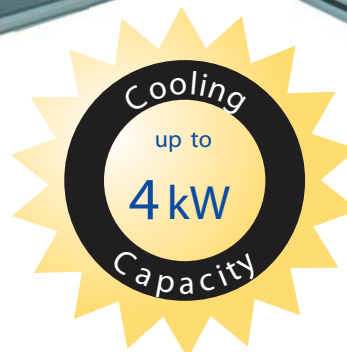
- ✓ Datacenter for small companies
- ✓ Branch offices of banks
- ✓ Hospitals
- ✓ Storage of personal data like lawyer, doctors
- ✓ Insurance Companies and other enterprises
- ✓ Remote installations
- ✓ Temporary installation
- ✓ Mobile applications



Front door cooler



IP PDU



Datacenter Solutions

MODULAR UPS CAN-RM-X

Modular and online double conversion UPS for sensitive equipments. Power rating covers from 25KVA to 250KVA delivering ultimate reliability, functionality, hot-swappable and flexibility at an affordable price. Designed specifically for data centers, computer systems and critical equipments.

Combines state of the art IGBT three-level technology together with DSP control arithmetic. Coupled with high input power factor, low THDi and high system efficiency, thus achieving very high load adaptability for all kinds of loads. Modular design ensures reliable and trouble free operation for ranging critical loads. Power expansion through additional power modules yields 250KVA power in single frame. Possibility to connect two frames in parallel to reach maximum 500KVA power.

Modular Design

Hot swappable power modules enabling power expansions and easy system maintenance. Independent controlled modules help avoid single point failure risk. If any module fails or disconnects, system keeps running and keeps on supplying power without any interruptions providing a high level of reliability and protection.

Easy Operation And Installation

Offers flexible installation for reducing installation time. Consequently, it can be maintained and controlled easily that provides the highest reliability and best protection for supplying power. With the large touch screen LCD panel, the user can easily access information of the power module and system.

Intelligent Battery Management

Each UPS module builds in with super charger and the power reaches 3200W. With 10 installed UPS modules, the total charging power rating is up to 32KW. The charger is controlled by DSP with intelligent digital arithmetic thus to prolong the life time of the battery.

Intelligent Protection System

All the power modules and the system are protected simultaneously by the hardware and the software. All kinds of protection functions are realized, including current and voltage abnormal, thermal abnormal, short circuit, etc. The reliability of the power module and the system reaches an incredible high level through all of these technologies.

Technical Features

- ✔ High input powerfactor (>0.99), low input THDi (<3%).
- ✔ Strong load adaptability for linear and nonlinear load.
- ✔ Intelligent module and system protection design.
- ✔ Incredible low noise system design.
- ✔ Double DSP controller for individual power module.
- ✔ Digital control for the whole parts including rectifier, inverter, charger and dis-charger.
- ✔ IGBT modules rather than discrete components are applied in the power module.
- ✔ Battery cold start module
- ✔ All PCB with conformal coating
- ✔ Inbuilt switch for cabinet input, output and maintenance connection.
- ✔ Large touch screen LCD with plenty of information.
- ✔ Independent charger for batteries, intelligent battery management system,
- ✔ 4 Digital paralleling technology, very low circle current between modules.
- ✔ Totally front access, top and bottom cable connection.
- ✔ Each individual module is configured with independent controller, avoid single point failure risk.
- ✔ Friendly generator interface

Options

- ✔ SNMP communication card
- ✔ Battery temperature compensation module
- ✔ Dust-Proof net
- ✔ Parallel kit



UPS Module



Hot Swappable UPS Module

Datacenter Solutions

Modular Power Distribution Panel

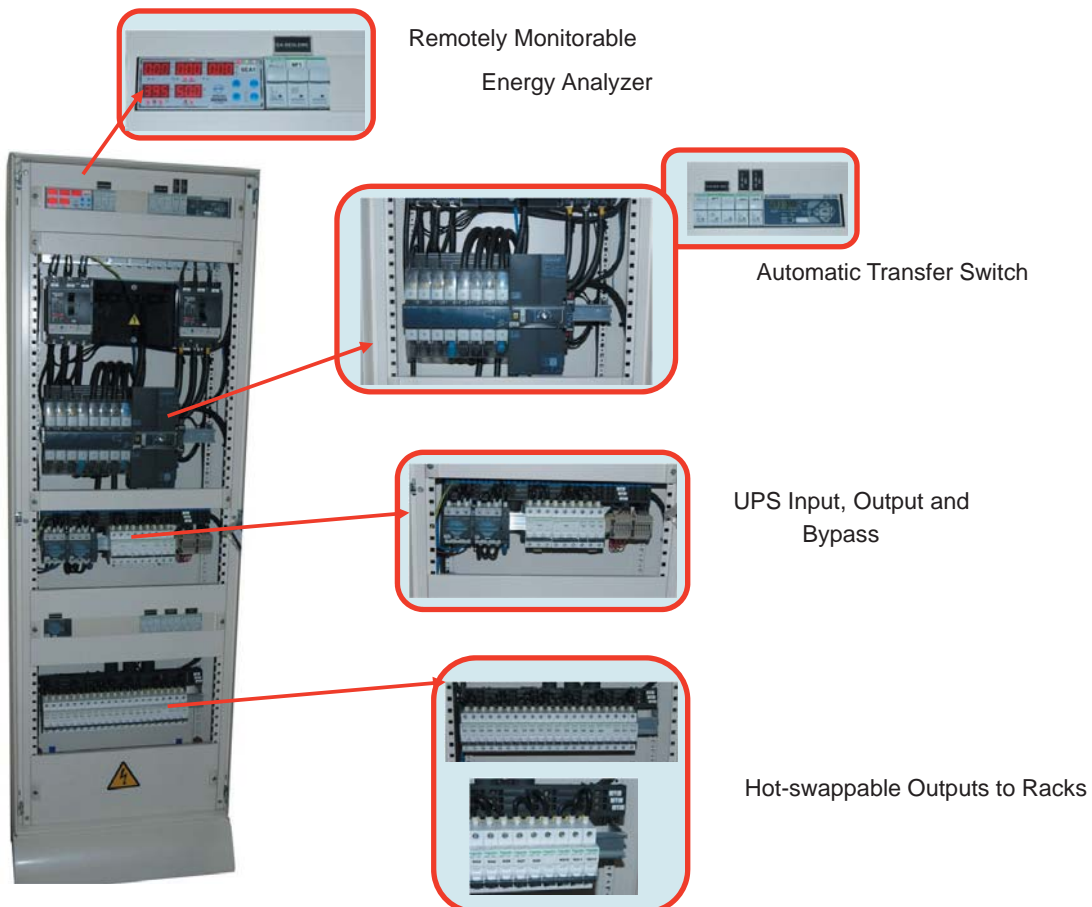
Canovate power distribution systems are serving what a new generation datacenter requires with their modular, scalable, and safe structure.

- ✓ Modular and Scalable
- ✓ Capacity upto 3200A
- ✓ Shock-safe
- ✓ Add extra circuit without prior scheduling
- ✓ Temperature control
- ✓ Dielectric properties
- ✓ Short-circuit withstand

Electrical distribution panel can be configured according to your datacenter power distribution requirements.

Automatic Transfer Switch

- ✓ Isolation with positive break indication.
- ✓ On load switching.
- ✓ Manual emergency operation.
- ✓ 3 stable positions.(I, 0, II).
- ✓ Padlocking in 0 or in all three positions (I, 0, II).
- ✓ AUTO / MANUEL selector.
- ✓ Command of the device in 0 position thanks to the energy storage device (ATyS M 6e).
- ✓ Single phase or three phase control on networks I and II (ATyS M 6s and M 6e).
- ✓ Electrical measurements (ATyS M 6e).



Datacenter Solutions

CCU(CRAC) UNITS

DIRECT EXPANSION CLOSE CONTROL UNITS WITH REMOTE CONDENSERS REFRIGERANT R410A

Designed for use in data centers, data processing rooms, in telecom centres and in such applications where it is important to keep the thermo-hygrometric conditions constant all over the year, so assuring the correct operation of the equipments installed in these sites.

Thanks to their technologically advanced design, these close control units are able to control the ambient temperature with remarkably high precision and, when the humidity level is required, adapting their cooling capacity to the room requirements, all automatically managed by the microprocessor on board.

The high technology employed during their design together with the use of the best components available on the markets, make these units extremely reliable and therefore able to work for long periods, without a break.

These units can be also installed easily in small spaces and easily accessible on the front side for ordinary and extraordinary service operations. Assembling and testing are made in the factory.

Main components:

Structure realized with a framework and internal parts made of galvanized steel riveted profiles and supports, making the structure strong and suitable also for extreme transport and handling conditions. The external panels, fixed to frame with quick opening connections, are made of pre-painted steel sheet (RAL 9005), ensuring a long-term durability to the unit. They are internally insulated with class 1 sound-proofing material, in conformity to the main European regulations in force, reducing the overall sound level of the unit and allowing a good air tightness. All the front and side panels can be dismantled so to allow an easy access to the main components.

Moreover, the front of the unit is provided with double panels, suitably arranged to let the unit work also with open panels during technical interventions, to allow more accurate regulations and more quick timing for ordinary and extraordinary service operations.

EC centrifugal fans with backward curved blade made of high-performance composite material, directly coupled to a three-phase electrical rotor with IP54 protection grade, which have the possibility of a continuous regulation of the speed by means of 0-10V signal, sent and integrated to the control. The fans are fixed on suitable supports reducing the transmission of vibration to the frame and the impeller is statically and dynamically balanced with long-life bearings. Thanks to their technology, the EC fans ensure a lower electrical absorption and sound level, if compared to the traditional centrifugal fans. Adjusting their air flow to the head pressure requested on site is possible.

Chilled water coil, realized with copper tube and aluminium fins, suitably sized with a wide exchange surface and a low air crossing speed so to allow a remarkable heat exchange and reduce the pressure drops on the air side. It is provided with a hydrophilic treatment, reducing the surface tension between water and metal surface, promoting film condensation and avoiding the risk of condensing drops outside the drain tray.

Condensing drain tray, made in corrosion proof aluminium, placed underneath the evaporating coil, it is provided with a flexible pipe for condensing water discharge.

Washable and self-extinguishing air filters Efficiency G4 – of pleated types which are made of synthetic fibre and are contained in a suitable metal frame. Their pleated arrangement, with a wide surface area, ensures a higher filtering efficiency and low pressure drops.



CCU (CRAC) Units with Cooling capacity from 7 to 138 kW (1 and 2 circuits) are available

Water circuit realized with pipes entirely coated with insulated material and complete with 3-way valve with modulating control and temperature probe. The max pressure of the circuit is 10 bar (PN 10).

Electric board in compliance with CE norms, protected by a panel is separated by the air flow and is provided with main switch, automatic switches, remote control switches, motor protection switches, low-tension auxiliary circuits and terminal board for free contacts and remote general alarm, magnetothermic switches for humidifier and electric heaters (when installed).

Unit management microprocessor installed on the internal safety panel of the electrical board, complete with hour counter and electronic card in order to program the switch-over and rotation between to units, after a pre-set time. On this purpose, in case of order, the information necessary for programming must be clearly defined.

Datacenter Solutions

CCU(CRAC) UNITS CLOSE CONTROL UNITS WITH CHILLED WATER COIL

Designed for use in technological centres, data processing rooms, in telecom centres and in such applications where it is important to keep the thermo-hygrometric conditions constant all over the year, so assuring the correct operation of the equipments installed in these sites. Depending on the cooling capacity, available with 1 and 2 cooling circuits.

Thanks to their technologically advanced design, these close control units are able to control the ambient temperature with remarkably high precision and, when the humidity level is required, adapting their cooling capacity to the room requirements, all automatically managed by the microprocessor on board. The high technology employed during their design together with the use of the best components available on the markets, make these units extremely reliable and therefore able to work for long periods, without a break.

These units can be also installed easily in small spaces and easily accessible on the front side for ordinary and extraordinary service operations. Assembling and testing are made in the factory and supplied with nitrogen charge.

Main components:

Structure realized with a framework and internal parts made of galvanized steel riveted profiles and supports, making the structure strong and suitable also for extreme transport and handling conditions.

The closing panels, fixed to frame with quick opening connections, are made of steel sheet and painted with epoxy powders (RAL 7035) and are internally insulated with sound-proofing material, reducing the overall sound level of the unit and allowing a good air tightness. The access to the main components and the operation also with open panels allow more accurate regulations and more quick intervention timing for ordinary and extraordinary service operations.

Compressor option: High-efficiency scroll compressor with low sound level, internal heat protection, installed on rubber vibration dampers, supplied with crankcase heater when necessary. In the case of 2 circuit units, in case of problem on one of the circuit, the 50% operation of the unit is anyway granted.

Direct expansion option: Direct expansion evaporating coil, realized with copper tube and aluminium fins; suitably sized with a wide exchange surface and a low air crossing speed so to allow a remarkable heat exchange and reduce the pressure drops on the air side.

Condenser option : Condensing coil with copper tubes and aluminium fins.

Chilled water option: Chilled water coil with copper pipe and aluminium fins; suitably sized with a wide exchange surface and a low air crossing speed so to allow a remarkable heat exchange and reduce the pressure drops on the air side and equipped with purging air valves, three-way modulating valve with servomotor, electronically controlled.

Centrifugal fans with low-speed aluminium impeller, statically and dynamically balanced, with electrical motor directly coupled to an external rotor and provided with a thermal protection inside the motor winding. The fans are fixed on suitable supports reducing the transmission of vibration to the frame, equipped with a low airflow alarm which, by means of a pressure switch, stops the unit operation in case of fans problems and with a differential air flow switch for clogged filter alarm.



CCU (CRAC) Units with Cooling capacity from 7 to 300 kW are available

In-built free-cooling system, made by a dampers modulating the external air, controlled by a proportional servomotor, with the possibility of a simultaneous operation of the compressor (optional) and of freecooling.

Condensing drain tray, made in corrosion proof aluminium, placed underneath the evaporating coil, provided with a flexible pipe for condensing water discharge.

Washable air filters- Efficiency F4 – of pleated type which are made of synthetic fibre and are contained in a suitable metal frame.

Electric board in compliance with CE norms, protected by a panel is separated by the air flow and is provided with main switch, automatic switches, remote control switches, motor protection switches, low-tension auxiliary circuits and terminal board for free contacts and remote general alarm.

Unit management microprocessor installed on the internal safety panel of the electrical board, complete with hour counter.

Datacenter Solutions

CCU(CRAC) UNITS

CLOSE CONTROL UNITS FOR DATA&TELECOM CENTRES DIRECT EXPANSION AND CHILLER WATER CLOSE CONTROL UNITS WITH FREE-COOLING SYSTEMS-PACKAGED AND SPLIT VERSION

The range of close control units with in-built free-cooling system of packaged and direct expansion type or with remote condenser or of chilled water type is particularly indicated for use in technological centres, data processing rooms, in telecom centres and in such applications where it is important to keep the thermo-hygrometric conditions constant all over the year, so to assure the correct operation of the equipments installed in these sites. Depending on the cooling capacity, they are available with 1 and 2 cooling circuits.

Thanks to their technologically advanced design, these close control units are able to control the ambient temperature with remarkably high precision and, when the humidity level is required, to adapt their cooling capacity to the room requirements, all automatically managed by the microprocessor on board. The high technology employed during their design together with the use of the best components available on the markets, make these units extremely reliable and therefore able to work for long periods, without a break.

These units are particularly easy to install also in small spaces and easily accessible on the front side for ordinary and extraordinary service operations. They are completely assembled and tested in the factory and supplied with nitrogen charge.

Main components:

Structure realized with a framework and internal parts made of galvanized steel riveted profiles and supports, making the structure strong and suitable also for extreme transport and handling conditions.

The closing panels, fixed to frame with quick opening connections, are made of steel sheet and painted with epoxy powders (RAL 7035) and are internally insulated with sound-proofing material, reducing the overall sound level of the unit and allowing a good air tightness. The access to the main components and the operation also with open panels allow more accurate regulations and more quick intervention timing for ordinary and extraordinary service operations.

Compressor option: High-efficiency scroll compressor with low sound level, internal heat protection, installed on rubber vibration dampers, supplied with crankcase heater when necessary. In the case of 2 circuit units, in case of problem on one of the circuit, the 50% operation of the unit is anyway granted.

Direct expansion option: Direct expansion evaporating coil, realized with copper tube and aluminium fins; it is suitably sized with a wide exchange surface and a low air crossing speed so to allow a remarkable heat exchange and reduce the pressure drops on the air side.

Condenser option : Condensing coil with copper tubes and aluminium fins.

Chilled water option: Chilled water coil with copper pipe and aluminium fins; it is suitably sized with a wide exchange surface and a low air crossing speed so to allow a remarkable heat exchange and reduce the pressure drops on the air side and it is equipped with purging air valves, three-way modulating valve with servomotor, electronically controlled.

Centrifugal fans with low-speed aluminium impeller, statically and dynamically balanced, with electrical motor directly coupled to an external rotor and provided with a thermal protection inside the motor winding. The fans are fixed on suitable supports reducing the transmission of vibration to the frame. They are equipped with a low airflow alarm which, by means of a pressure switch, stops the unit operation in case of fans problems and with a differential air flow switch for clogged filter alarm.



CCU (CRAC) Units with Cooling capacity from 5 to 27 kW (1 and 2 refrigerant circuits) are available

In-built **free-cooling system**, made by a dampers modulating the external air, controlled by a proportional servomotor, with the possibility of a simultaneous operation of the compressor (optional) and of freecooling.

Condensing **drain tray**, made in corrosion proof aluminium, placed underneath the evaporating coil, it is provided with a flexible pipe for condensing water discharge.

Washable air filters- Efficiency F4 – of pleated type, they are made of synthetic fibre and are contained in a suitable metal frame.

Electric board in compliance with CE norms, protected by a panel is separated by the air flow and is provided with main switch, automatic switches, remote control switches, motor protection switches, low-tension auxiliary circuits and terminal board for free contacts and remote general alarm.

Unit management microprocessor installed on the internal safety panel of the electrical board, complete with hour counter.

Datacenter Solutions

CHILLER UNITS

AIR COOLED CHILLERS WITH SCREW COMPRESSORS AND AXIAL FANS REFRIGERANT R407C - R134A

In-built free-cooling system, made by dampers modulating the external air, controlled by a proportional servomotor, with the possibility of a simultaneous operation of the compressor (optional) and of freecooling.

Condensing drain tray, made in corrosion proof aluminium, placed underneath the evaporating coil, provided with a flexible pipe for condensing water discharge.

Washable air filters- Efficiency F4 – of pleated type which are made of synthetic fibre and are contained in a suitable metal frame.

Electric board in compliance with CE norms, protected by a panel is separated by the air flow and is provided with main switch, automatic switches, remote control switches, motor protection switches, low-tension auxiliary circuits and terminal board for free contacts and remote general alarm.

Unit management microprocessor installed on the internal safety panel of the electrical board, complete with hour counter.

Main components

Strong and compact frame made of pressed and bended galvanized steel profiles, panels and base-frame of high thickness galvanized and painted steel and coated by rust-proof paint, suitable to resist to external agents. The technical housing, completely closed and suitably isolated from the air flow, is containing the compressors and the main components. The external panels, easily to be dismantled, allow the complete access in case of service, without compromising the operation of the unit itself. When required, the hydraulic kit (buffer tank and pump group) are installed inside the unit, with no change in overall dimensions.

Semi-hermetic screw compressors equipped with capacity steps, motor thermal protection, oil crankcase heater and phase monitor. The compressors lubrication is of forced type, with no pump and in order to prevent many oil migrations to the cooling circuit, the compressors are provided with an oil separator, in-built to the discharge side. The electrical motor is foreseen for lower inrush current and, in this case, the unit is equipped with an automatic partial load inrush device and mechanical interlock of the inrush control switches, preventing accidental short circuits.

Heat-exchange external coil with copper tube and turbo aluminium fins for a better efficiency. It is suitably sized with a wide exchange surface, so to allow the unit operation also at very high external air temperatures. On request, in case of installation in aggressive environments, several coil protection treatments are available.

For free-cooling version only, additional free-cooling water coil with copper tube and aluminium fins, complete with mixing valve, for production of chilled water by means of the very low external air temperatures. This allows a remarkable reduction of the compressors working hours with a consequent energy saving, also considering that each circuit is completely independent.



Chiller Units with Cooling capacity from 190 to 737 kW (2 circuits) are available

Low rpm axial fans, of directly coupled type, with 6-8 pole electrical motor complete with in-built overload protection, electronic balance, low sound level blades with wing profile and safety protection grid. On request, available the modulating fans speed regulation (optional).

Dry expansion shell and tube evaporator with two refrigerant circuits and one water circuit, with very low pressure drops. Shell and tubes plate made in carbon steel and copper tubes. Some plastic and corrosion-proof baffles are suitably placed inside the shell, allowing a correct water distribution and making the tube bundle particularly strong and vibration-free, also in case of very high water flows.

Cooling circuit composed of thermostatic expansion valve, dehydrating filter, sight glass, high pressure safety device, antifreeze thermostat, high and low pressure switches, high and low pressure gauges, non-return valve on discharge side, shut-off valve on liquid line, shut-off valve on compressor discharge side.

Electric board in compliance with CE norms, contained in a suitable partition protected by the internal safety panel, provided with a lock-door main switch. Inside, complete with all control and protection switches, the terminal board and auxiliaries. The electrical board also includes the control device for power supply phases, to prevent the compressor to turn in the wrong sense. The microprocessor, complete with display, is also placed inside the electrical board.

Unit management microprocessor installed on the internal safety panel of the electrical board, controlling the chilled water temperature regulation, the working parameters, auto-detection failure system, remote management and supervision, complete with compressors hour counter.

Datacenter Solutions

ECO CHILLERS CHILLERS FOR PROCESSING WATER

Provides connection in closed circuit to the central units of powerful systems requiring water cooling process which are supplied with a high pressure pump for water circulation and a gas bypass device allowing the units to constantly produce chilled water at a steady temperature. All available with 1 or 2 refrigerant circuits. The units provided with two compressors are especially designed, operating with a 100% fallback system: a main operating line and a stand-by line, enabled, in case of failure, by an automatic switching device; in addition a time-device guarantees an automatic self-acting turnout for a regular use of both circuits. When necessary, the 2 circuits are allowed to run simultaneously. In the units with two circuits, the 100% fallback system is granted by two totally independent regulation systems and two pumps.

Main components:

Structure made of section irons and steel panels, finely painted with epoxy powders and sound insulated by means of polyurethane panels with a high sound absorbing degree.

High-efficiency scroll compressor, with low sound level, internal heat protection, installed on rubber vibration dampers.

Weld-brazed plate evaporator in AISI 316 stainless steel, with pipes and patented manifold so reaching a high heat exchange coefficient. Its design allows a uniform water distribution, compatibly with pressure drops. The exchanger is provided with close-cell insulating material.

Electric pump of packaged centrifugal type with a motor-pump direct coupling which is supplied with a 2 -pole motor, class F insulation, IP 54 protection.

Cooling circuit made of: thermostatic expansion valve, dehydrating filter, safety valve, liquid receiver, sight glass, high and low pressure switches, high and low pressure gauges, modulating condensing control device installed on the fans, hot gas valve.

Water circuit made of: electric pump, expansion vessel, filter, filling group, flow switch, safety valve.

Regulation system composed of microprocessor with a liquid crystal display, complete with compressors hour counter.



Chiller Units with Cooling capacity from 16 to 82 kW (1 and 2 circuits) are available

inorax-AL Cabinets

inorax Network & Server Rack Cabinets

In today's and future datacenter trends, the most important factors to be considered are power distribution, cooling and cable management on rack level. Efficiently engineered rack mounting capabilities and capacity become most critical feature to optimize utilization of available space. Canovate offers ideal rack enclosure technologies offering innovative, flexible, stylish and cost effective form, fit and function; whether it is a datacenter, a server room or a stand-alone application.

Ultimate Thermal Management

Over 80% of today's IT managers identify thermal management as their greatest challenge. This is no surprise considering the average heat load generated per cabinet by new equipment has doubled since year 2000. Creating a properly configured cabinet that works with your cooling system to control airflow and maximize cooling effectiveness which is vital to overall success.

Efficient Cable Management & Power Distribution

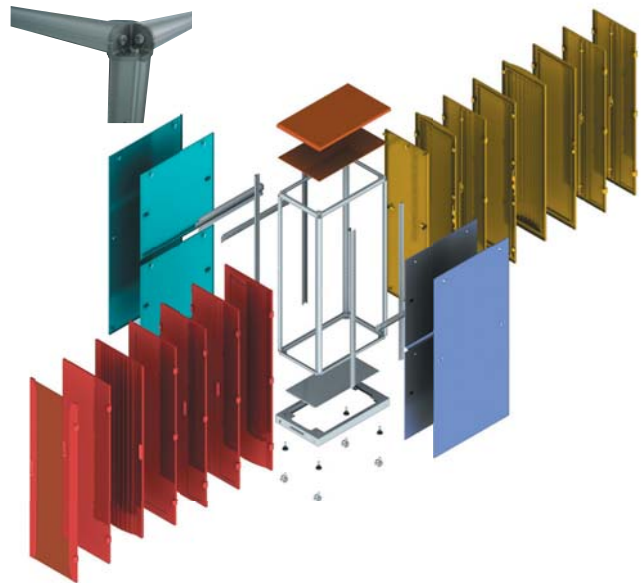
Convenient network cable management, power distribution and fiber management options designed for fiber and copper cables, meeting your highest-density cabling requirements and future network growth. Single, three-phase and IP PDUs can easily be mounted to match your connectivity and monitoring requirements.

You can choose from two different rack cabinets based on two alternative frame technologies according to your exact requirements and specifications:

inorax-AL Network & Server Rack Cabinets

Its patented aluminum modular frame technology, capabilities and exceptional strength make this model unique and stand out in terms of providing industry leading structural rigidity, better access, optimized available mounting space and ease of installation, not to mention wide range of interoperable accessory range. Available as flat-pack.

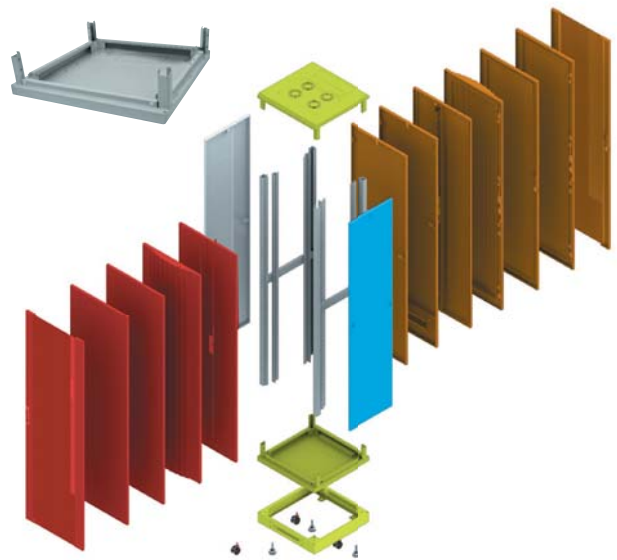
- ✓ Designed according to very high structural rigidity requirements
- ✓ Industry leading static load carrying capacity exceeding 2000KG
- ✓ Lighter weight frame technology enabling ease of transport and convenient handling
- ✓ Higher corrosion resistance
- ✓ Interlocking bolt-on and heavy-duty modular frame joints, an innovative weld-free technology
- ✓ Easy to assemble and completely disassemble in a matter of minutes
- ✓ Ultimate cosmetic appearance



inorax-ST Network & Server Rack Cabinets

High strength steel based modular or fully welded patent-pending frame technology and wide range of configuration options makes it a cost-effective reliable solution offering optimized available mounting space and ease of installation. Available as flat-pack.

- ✓ Designed according to high structural rigidity requirements
- ✓ Static load carrying capacity exceeding 1500KG
- ✓ Interlocking bolt-on and heavy-duty top and bottom frames
- ✓ Easy to assemble and completely disassemble in a matter of minutes
- ✓ Appealing cosmetic appearance



inorax-AL Cabinets

inorax-AL Network Rack Cabinet

Inorax-AL network rack cabinet system offers the best solution for IT and Telecom applications in dense and complex cabling environments. A wide range of cable management accessories is available to ensure perfect management of copper & fiber cables and 19" equipment. Vertical 19" mounting rails can be adjusted freely through the depth, which simplifies mounting of any device and configuration of connecting cables. Black tinted left and right sections on the front glass door hides the excess cables from the view of the user and gives an aesthetic look to the rack. Flat-pack option enables savings up to 60% in the transport cost and warehouse space.

Technical Features

Material Frame ; Anodized aluminum extrusion profiles

Other parts : 1,2 and 2 mm steel

Color RAL 7035 or RAL 9005

Compliance RoHS, UL Certified

Packaging Assembled or unassembled

Maximum Static Load Up to 2000 kg.

Finish Doors, side panels, top and bottom covers:

Electrostatic Powder Paint, 19" mounting rails: Zinc-plated

Related Accessories Cable Organizer-

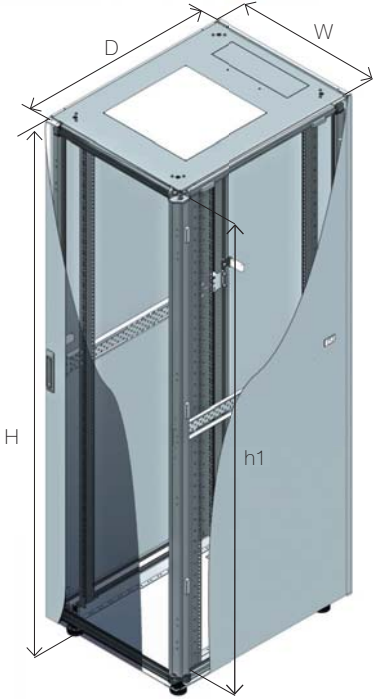
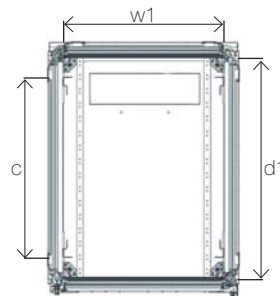
Blanking Panels

Cable Channels



Standard Configuration:

- Front door with safety glass
- Solid Side Panels with cylindrical locks and latches
- Solid Rear Panel with cylindrical locks
- Internal top sheet with 3 cable entry and fan cut-outs
- 2 Pairs of depth adjustable heavy duty 19" Mounting Rails
- 2 Pairs of Adjustable Feet
- Front Door with swing-handle single point lock
- Color RAL 7035 or RAL 9005
- RoHS compliant, UL and Gost-R Certified
- Bottom sheet is not included



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
26U	600	600	1322	1187	503	550	129-429	56,72	CPN-X-2666A
26U	600	800	1322	1187	503	750	129-629	74,17	CPN-X-2668A
26U	800	800	1322	1187	703	750	129-629	83,94	CPN-X-2688A
32U	600	600	1589	1454	503	550	129-429	67,16	CPN-X-3266A
32U	600	800	1589	1454	503	750	129-629	82,78	CPN-X-3268A
32U	800	800	1589	1454	703	750	129-629	95,28	CPN-X-3288A
36U	600	600	1767	1632	503	550	129-429	74,12	CPN-X-3666A
36U	600	800	1767	1632	503	750	129-629	88,52	CPN-X-3668A
36U	800	800	1767	1632	703	750	129-629	102,84	CPN-X-3688A
39U	800	800	1900	1765	703	750	129-629	108,51	CPN-X-3988A
42U	600	600	2033	1898	503	550	129-429	84,56	CPN-X-4266A
42U	600	800	2033	1898	503	750	129-629	97,14	CPN-X-4268A
42U	600	1000	2033	1898	503	950	129-829	102,88	CPN-X-4260A
42U	800	800	2033	1898	703	750	129-629	114,18	CPN-X-4288A
42U	800	1000	2033	1898	703	950	129-829	119,05	CPN-X-4280A
47U	600	600	2255	2120	503	550	129-429	93,26	CPN-X-4766A
47U	600	800	2255	2120	503	750	129-629	104,33	CPN-X-4768A
47U	600	1000	2255	2120	503	950	129-829	120,10	CPN-X-4760A
47U	800	800	2255	2120	703	750	129-629	123,64	CPN-X-4788A
47U	800	1000	2255	2120	703	950	129-829	130,14	CPN-X-4780A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

inorax-AL Cabinets

inorax-AL Server Rack Cabinet

The ultimate server rack cabinet system ever developed for complex data-center environments. inorax-AL server rack cabinet system is the ultimate solution designed and engineered for demanding datacenter environments. It is designed to house all servers manufactured by major brands including HP, Dell, Sun, Cisco, Juniper, IBM, Compaq to name but a few. To achieve optimum versatility within the server rack, users can set multiple depths throughout the cabinet by adjustable 19" mounting rails mounted on heavy duty side supports. Horizontally divided side panels provide ease of access and convenient post-installation maintenance. Optional % 80 perforations on front and rear doors enable optimum airflow within the rack cabinet and industry leading static load carrying capacity of the aluminum extruded frame satisfies the most of all standards specified for Tier-4 datacenter. Optional cable tray channels can be fitted on top of the rack provides perfect cable routing eliminating the need for raised floor systems. Flat-pack option enables savings up to 60% in the transport cost and warehouse space.



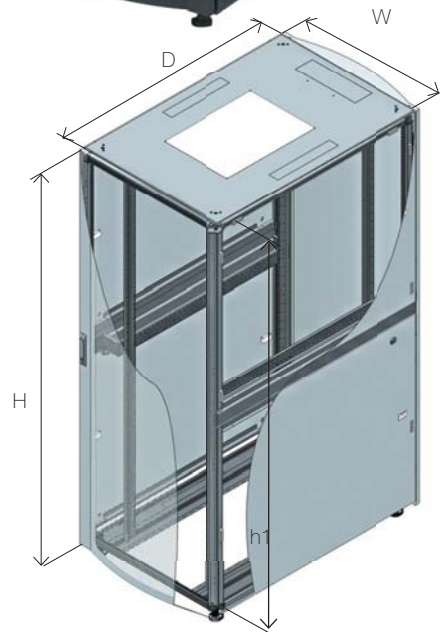
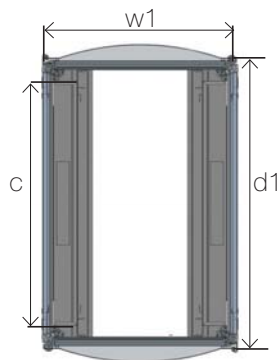
Technical Features

- Material** Frame ; Anodized aluminum extrusion profiles
Other parts : 1,2 and 2 mm steel
- Color** RAL 7035 or RAL 9005
- Compliance** RoHS, UL Certified
- Packaging** Assembled or unassembled
- Maximum Static Load** Up to 2000 kg. (in 600x600 mm)
- Finish** Frame, doors, side panels, top and bottom covers
Electrostatic Powder Paint, 19" mounting rails: Zinc-plated
- Related Accessories** Rack Monitoring System
Power Distribution Units
Integral Console



Standard Configuration:

- ✓ Perforated front and rear doors, Free Air Ratio (FAR): %67
- ✓ Front & rear doors with swing handle Multi point-espagnolette
- ✓ Split side panels
- ✓ Bottom sheet
- ✓ Internal top sheet with 3 cable entry and fan cut-outs
- ✓ 2 Pairs of depth adjustable heavy duty 19" Mounting Rails
- ✓ 2 Pairs of Adjustable Feet
- ✓ Color RAL 7035 or RAL 9005
- ✓ RoHS compliant, UL and Gost-R Certificated

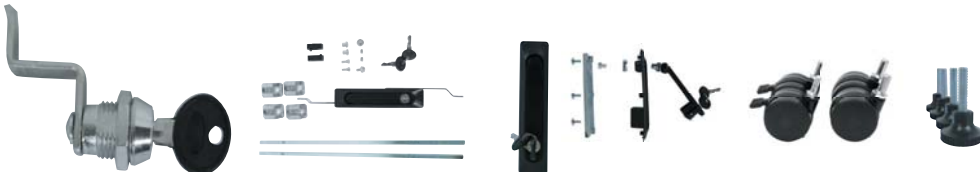
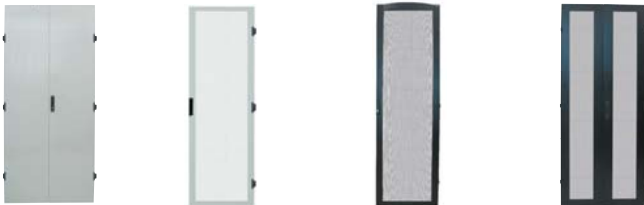
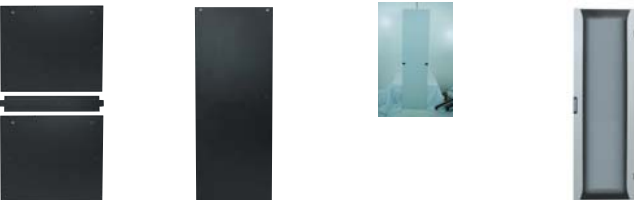
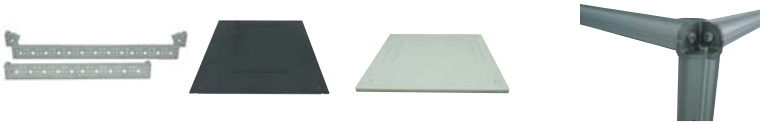


Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
26U	600	1000	1322	1187	503	950	129 - 829	75,45	CPS-X-2660A
26U	600	1200	1322	1187	503	1150	129 - 1029	95,55	CPS-X-2662A
36U	600	1000	1767	1632	503	950	129 - 829	94,88	CPS-X-3660A
36U	600	1200	1767	1632	503	1150	129 - 1029	113,88	CPS-X-3662A
39U	800	1000	1900	1765	703	950	129 - 829	111,45	CPS-X-3980A
42U	600	1000	2033	1898	503	950	129 - 829	106,48	CPS-X-4260A
42U	600	1070	2033	1898	503	1050	129-929	115,65	CPS-X-4261A
42U	600	1200	2033	1898	503	1150	129-1029	124,82	CPS-X-4262A
42U	800	1000	2033	1898	703	950	129-829	117,28	CPS-X-4280A
42U	800	1070	2033	1898	703	1050	129-929	126,34	CPS-X-4281A
42U	800	1200	2033	1898	703	1150	129-1029	135,40	CPS-X-4282A
47U	600	1000	2255	2120	503	950	129-829	116,18	CPS-X-4760A
47U	600	1070	2255	2120	503	1050	129-929	125,07	CPS-X-4761A
47U	600	1200	2255	2120	503	1150	129-1029	133,97	CPS-X-4762A
47U	800	1000	2255	2120	703	950	129-829	126,71	CPS-X-4780A
47U	800	1070	2255	2120	703	1050	129-929	135,51	CPS-X-4781A
47U	800	1200	2255	2120	703	1150	129-1029	144,31	CPS-X-4782A

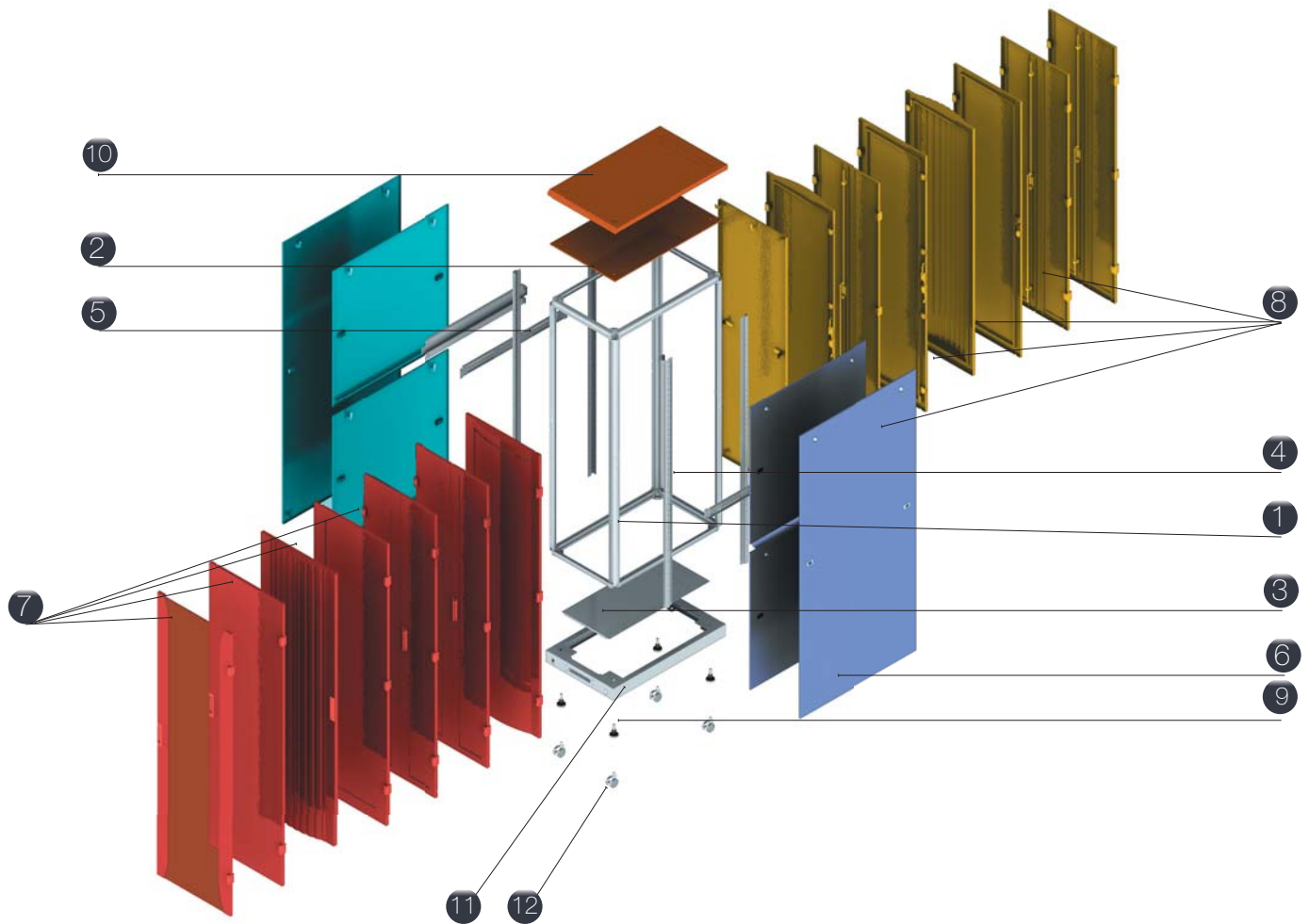
X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

inorax-AL Cabinets



inorax-AL Cabinets

Components of Inorax-AL



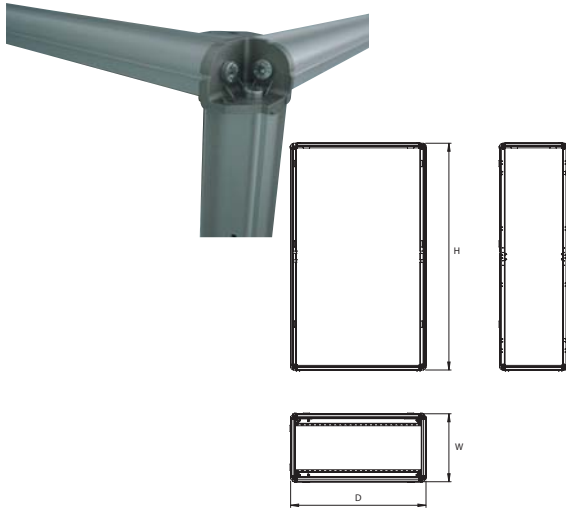
- 1- Aluminum Frame
- 2 - Top Sheet
- 3 - Bottom Sheet
- 4 - 19" Mounting Rails
- 5 - Side Support Rail
- 6 - Side Panel Options
- 7 - Front Door Options
- 8 - Rear Door Options

- 9 - Adjustable Feet
- 10 - External Top Cover
- 11 - Plinth
- 12 - Castor

inorax-AL Cabinets

Components of Inorax-AL

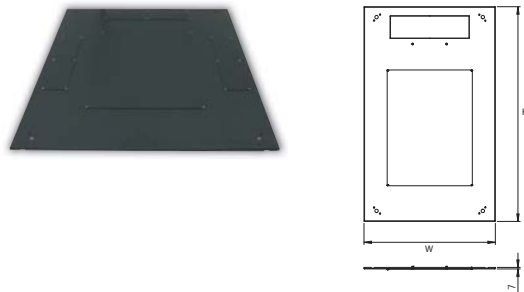
Frame



Material Anodized Aluminum Extrusion **Finish** Anodic Oxidation (Eloxal)
Maximum Static Load 2000 kg

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1308,8	600	600	16,00	CPZ-0-26660-0100
26U	1308,8	600	800	17,28	CPZ-0-26680-0100
26U	1308,8	600	1000	18,66	CPZ-0-26600-0100
26U	1308,8	800	800	26,22	CPZ-0-26880-0100
32U	1575,5	600	600	16,40	CPZ-0-32660-0100
32U	1575,5	600	800	17,71	CPZ-0-32680-0100
32U	1575,5	800	800	26,60	CPZ-0-32880-0100
36U	1753,3	600	600	16,65	CPZ-0-36660-0100
36U	1753,3	600	800	17,98	CPZ-0-36680-0100
36U	1753,3	600	1000	19,42	CPZ-0-36600-0100
36U	1753,3	600	1200	20,97	CPZ-0-36620-0100
36U	1753,3	800	800	26,84	CPZ-0-36880-0100
39U	1886,6	800	800	26,96	CPZ-0-39880-0100
39U	1886,6	800	1000	29,93	CPZ-0-39800-0100
42U	2020	600	600	17,03	CPZ-0-42660-0100
42U	2020	600	800	18,39	CPZ-0-42680-0100
42U	2020	600	1000	19,86	CPZ-0-42600-0100
42U	2020	600	1100	20,65	CPZ-0-42610-0100
42U	2020	600	1200	21,45	CPZ-0-42620-0100
42U	2020	800	800	27,15	CPZ-0-42880-0100
42U	2020	800	1000	30,14	CPZ-0-42800-0100
42U	2020	800	1100	31,79	CPZ-0-42810-0100
42U	2020	800	1200	33,45	CPZ-0-42820-0100
47U	2242,25	600	600	17,33	CPZ-0-47660-0100
47U	2242,25	600	800	18,72	CPZ-0-47680-0100
47U	2242,25	600	1000	20,21	CPZ-0-47600-0100
47U	2242,25	600	1200	21,83	CPZ-0-47620-0100
47U	2242,25	800	800	27,46	CPZ-0-47880-0100
47U	2242,25	800	1000	30,48	CPZ-0-47800-0100
47U	2242,25	800	1200	33,83	CPZ-0-47820-0100

Top Sheet

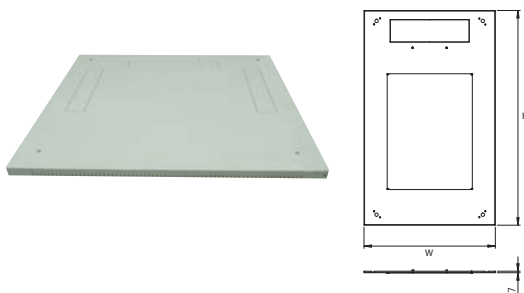


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	600	7	3,24	CPZ-X-YY660-0402
600	800	7	4,34	CPZ-X-YY680-0402
600	1000	7	5,82	CPZ-X-YY600-0402
600	1070	7	6,25	CPZ-X-YY610-0402
600	1200	7	7,80	CPZ-X-YY620-0402
800	800	7	5,76	CPZ-X-YY880-0402
800	1000	7	5,92	CPZ-X-YY800-0402
800	1070	7	6,39	CPZ-X-YY810-0402
800	1200	7	6,96	CPZ-X-YY820-0402

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

External Top Cover

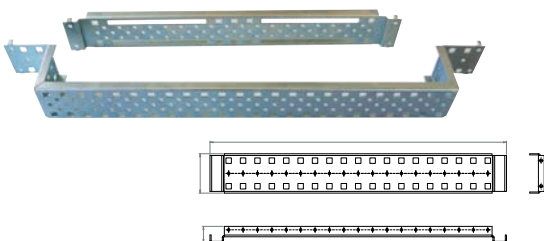


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	600	30	4,49	CPZ-X-YY660-0404
600	800	30	5,76	CPZ-X-YY680-0404
600	1000	30	7,05	CPZ-X-YY600-0404
600	1070	30	7,82	CPZ-X-YY610-0404
600	1200	30	8,6	CPZ-X-YY620-0404
800	800	30	7,11	CPZ-X-YY880-0404
800	1000	30	9,12	CPZ-X-YY800-0404
800	1070	30	10,12	CPZ-X-YY810-0404
800	1200	30	11,12	CPZ-X-YY820-0404

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Side Support Rails



Material 2 mm Steel **Finish** Zinc Plated

Cabinet W (mm)	Cabinet D (mm)	Weight kg	Part No
600	600	0,75	CPZ-0-YY660-0700
600	800	0,80	CPZ-0-YY680-0700
600	1000	0,85	CPZ-0-YY600-0700
600	1070	0,87	CPZ-0-YY610-0700
600	1200	0,90	CPZ-0-YY620-0700
800	800	0,85	CPZ-0-YY880-0700
800	1000	0,92	CPZ-0-YY800-0700
800	1070	0,97	CPZ-0-YY810-0700
800	1200	1,02	CPZ-0-YY820-0700

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

inorax-AL Cabinets

Bottom Sheet

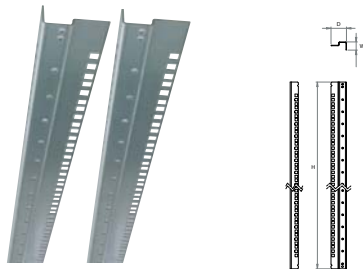


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	600	5	1,84	CPZ-X-YY660-0403
600	800	5	2,45	CPZ-X-YY680-0403
600	1000	5	3,06	CPZ-X-YY600-0403
600	1070	5	3,37	CPZ-X-YY610-0403
600	1200	5	3,67	CPZ-X-YY620-0403
800	800	5	2,45	CPZ-X-YY880-0403
800	1000	5	3,06	CPZ-X-YY800-0403
800	1070	5	3,37	CPZ-X-YY810-0403
800	1200	5	3,67	CPZ-X-YY820-0403

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

19" Mounting Rails

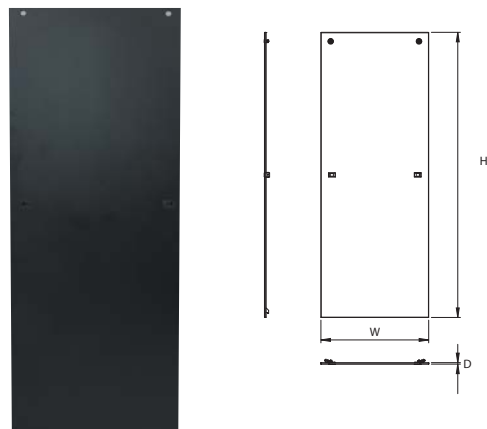


Material 2 mm Steel **Finish** Zinc-Plated

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1198	33	52	1,52	CPZ-0-26YY0-0600
32U	1464	33	52	1,85	CPZ-0-32YY0-0600
36U	1642	33	52	2,08	CPZ-0-36YY0-0600
39U	1776	33	52	2,25	CPZ-0-39YY0-0600
42U	1909	33	52	2,42	CPZ-0-42YY0-0600
47U	2131	33	52	2,7	CPZ-0-47YY0-0600

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Side Panel

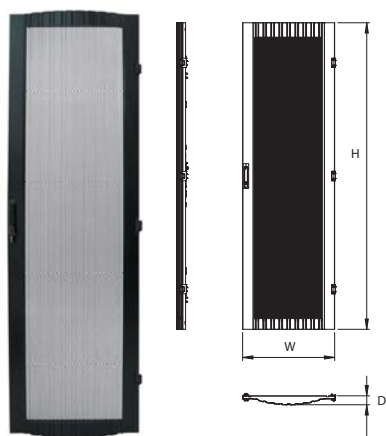


Material 1,2 mm Steel and Plastic Hinges **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	10	7,11	CPZ-X-26Y60-0501
26U	1264	800	10	9,46	CPZ-X-26Y80-0501
26U	1264	1000	10	12,58	CPZ-X-26Y00-0501
32U	1531	600	10	8,53	CPZ-X-32Y60-0501
32U	1531	800	10	11,35	CPZ-X-32Y80-0501
36U	1709	600	10	9,49	CPZ-X-36Y60-0501
36U	1709	800	10	12,62	CPZ-X-36Y80-0501
39U	1842	800	10	13,57	CPZ-X-39Y80-0501
42U	1975	600	10	10,93	CPZ-X-42Y60-0501
42U	1975	800	10	14,54	CPZ-X-42Y80-0501
47U	2198	600	10	12,13	CPZ-X-47Y60-0501
47U	2198	800	10	16,13	CPZ-X-47Y80-0501

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

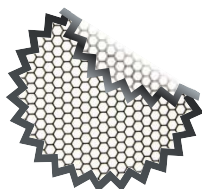
High Perforation Rated Formed Curved Door



Material 1.2 mm Steel **Perforation Rate** 82%
Finish Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	57	9,61	CPZ-X-266Y0-0914
36U	1709	600	57	12,75	CPZ-X-366Y0-0914
39U	1842	800	76	17,20	CPZ-X-398Y0-0914
42U	1975	600	57	14,63	CPZ-X-426Y0-0914
42U	1975	800	76	18,38	CPZ-X-428Y0-0914
47U	2198	600	57	16,20	CPZ-X-476Y0-0914
47U	2198	800	76	20,36	CPZ-X-478Y0-0914

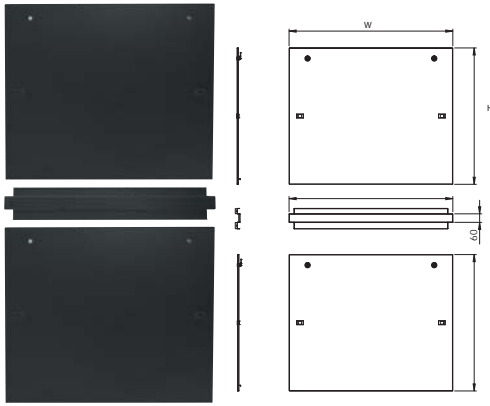
X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)



Formed Pattern
Perforation with 82%

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Split Side Panel

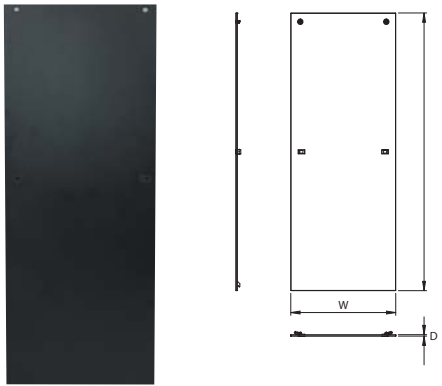


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
36U	1709	1000	10	16,79	CPZ-X-36Y00-0503
36U	1709	1200	10	22,33	CPZ-X-36Y20-0503
39U	1842	1000	10	18,06	CPZ-X-39Y00-0503
42U	1975	1000	10	19,33	CPZ-X-42Y00-0503
42U	1975	1070	10	23,67	CPZ-X-42Y10-0503
42U	1975	1200	10	25,71	CPZ-X-42Y20-0503
47U	2198	1000	10	21,46	CPZ-X-47Y00-0503
47U	2198	1070	10	25,00	CPZ-X-47Y10-0503
47U	2198	1200	10	28,54	CPZ-X-47Y20-0503

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Rear Metal Solid Panel

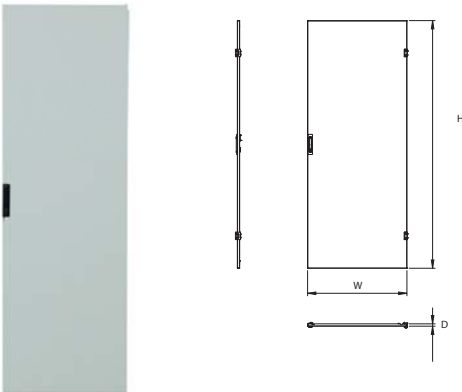


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	23	8,40	CPZ-X-266Y0-0901
26U	1264	800	23	11,59	CPZ-X-268Y0-0901
32U	1531	600	23	10,09	CPZ-X-326Y0-0901
32U	1531	800	23	13,92	CPZ-X-328Y0-0901
36U	1709	600	23	11,21	CPZ-X-366Y0-0901
36U	1709	800	23	15,47	CPZ-X-368Y0-0901
39U	1842	800	23	16,62	CPZ-X-398Y0-0901
42U	1975	600	23	12,89	CPZ-X-426Y0-0901
42U	1975	800	23	17,79	CPZ-X-428Y0-0901
47U	2198	600	23	14,29	CPZ-X-476Y0-0901
47U	2198	800	23	19,72	CPZ-X-478Y0-0901

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Metal Solid Door

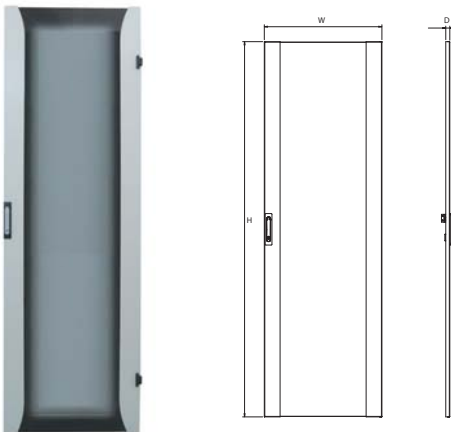


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	10	11,08	CPZ-X-266Y0-0902
26U	1264	800	10	13,74	CPZ-X-268Y0-0902
32U	1531	600	10	13,15	CPZ-X-326Y0-0902
32U	1531	800	10	16,31	CPZ-X-328Y0-0902
36U	1709	600	10	14,50	CPZ-X-366Y0-0902
36U	1709	800	10	17,98	CPZ-X-368Y0-0902
39U	1842	800	10	19,24	CPZ-X-398Y0-0902
42U	1975	600	10	16,54	CPZ-X-426Y0-0902
42U	1975	800	10	20,51	CPZ-X-428Y0-0902
47U	2198	600	10	18,24	CPZ-X-476Y0-0902
47U	2198	800	10	22,62	CPZ-X-478Y0-0902

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Glass Door Supported By Metal Brackets



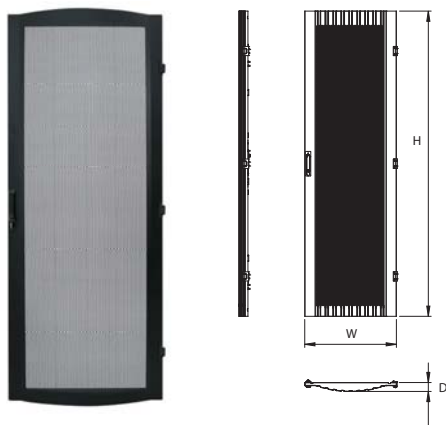
Material 1.2 mm Steel, 3 mm Tempered Glass, tinted on left and right sides
Finish Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	19	9,41	CPZ-X-266Y0-0903
26U	1264	800	19	11,86	CPZ-X-268Y0-0903
32U	1531	600	19	11,29	CPZ-X-326Y0-0903
32U	1531	800	19	14,23	CPZ-X-328Y0-0903
36U	1709	600	19	12,55	CPZ-X-366Y0-0903
36U	1709	800	19	15,81	CPZ-X-368Y0-0903
39U	1842	800	19	17,00	CPZ-X-398Y0-0903
42U	1975	600	19	14,43	CPZ-X-426Y0-0903
42U	1975	800	19	18,18	CPZ-X-428Y0-0903
47U	2198	600	19	16,00	CPZ-X-476Y0-0903
47U	2198	800	19	20,16	CPZ-X-478Y0-0903

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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Perforated Curved Door

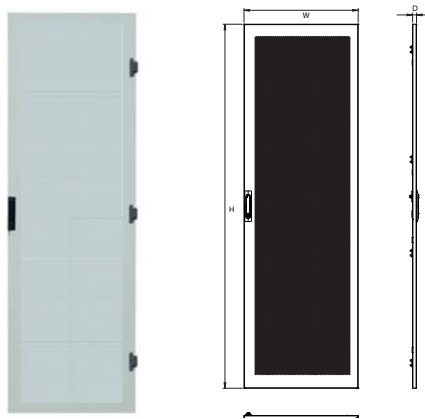


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 69% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	57	9,41	CPZ-X-266Y0-0905
36U	1709	600	57	12,55	CPZ-X-366Y0-0905
39U	1842	800	76	17,00	CPZ-X-398Y0-0905
42U	1975	600	57	14,43	CPZ-X-426Y0-0905
42U	1975	800	76	18,18	CPZ-X-428Y0-0905
47U	2198	600	57	16,00	CPZ-X-476Y0-0905
47U	2198	800	76	20,16	CPZ-X-478Y0-0905

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Perforated Flat Door

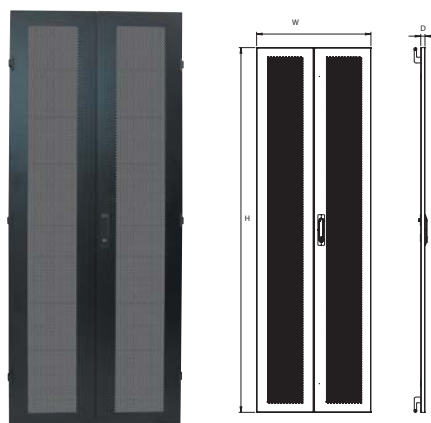


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 67% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	19	8,21	CPZ-X-266Y0-0904
36U	1709	600	19	11,35	CPZ-X-366Y0-0904
39U	1842	800	19	15,50	CPZ-X-398Y0-0904
42U	1975	600	19	12,23	CPZ-X-426Y0-0904
42U	1975	800	19	16,08	CPZ-X-428Y0-0904
47U	2198	600	19	14,90	CPZ-X-476Y0-0904
47U	2198	800	19	18,86	CPZ-X-478Y0-0904

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Perforated Double Flat Door

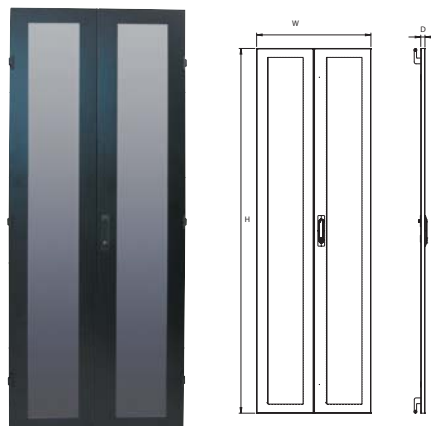


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 67% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	19	8,38	CPZ-X-266Y0-0908
36U	1709	600	19	10,14	CPZ-X-366Y0-0908
39U	1842	800	19	13,53	CPZ-X-398Y0-0908
42U	1975	600	19	11,45	CPZ-X-426Y0-0908
42U	1975	800	19	14,40	CPZ-X-428Y0-0908
47U	2198	600	19	12,57	CPZ-X-476Y0-0908
47U	2198	800	19	15,74	CPZ-X-478Y0-0908

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Double Glass Door



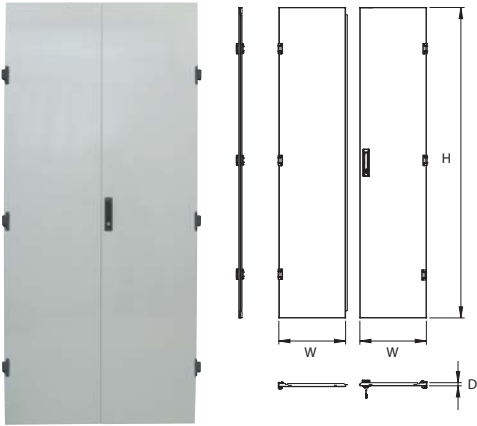
Material 1.2 mm Steel, 3 mm Tempered Glass
Color RAL 7035 (Light Grey) and RAL 9005 (Black)
Finish Electrostatic Powder Paint

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
42U	1975	800	19	20,66	CPZ-X-428Y0-0907
47U	2198	800	19	22,70	CPZ-X-478Y0-0907

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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Double Metal Solid Door

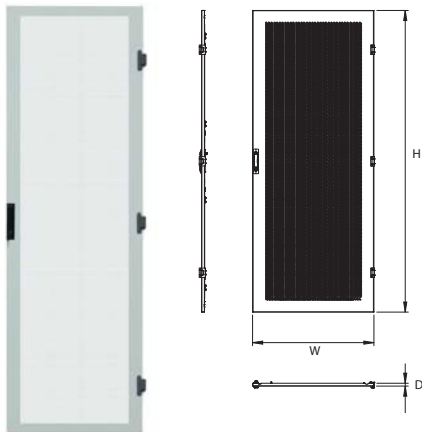


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
42U	1975	800	19	20,81	CPZ-X-428Y0-0906
47U	2198	800	19	23,12	CPZ-X-478Y0-0906

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

High Perforation Rated Flat Door

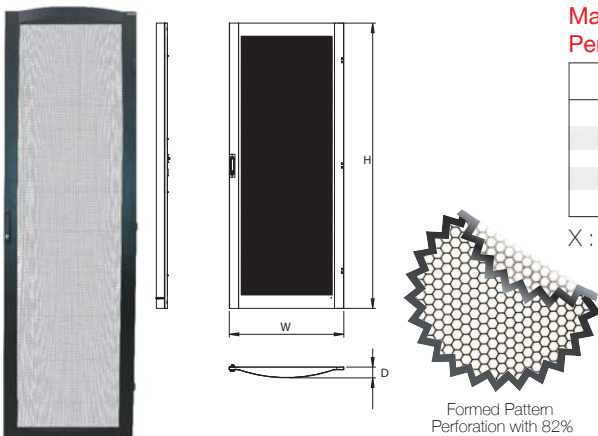


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 80% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	19	7,91	CPZ-X-266Y0-0909
42U	1975	600	19	11,93	CPZ-X-426Y0-0909
42U	1975	800	19	15,78	CPZ-X-428Y0-0909
47U	2198	600	19	14,60	CPZ-X-476Y0-0909
47U	2198	800	19	18,56	CPZ-X-478Y0-0909

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

High Perforation Rated Curved Door

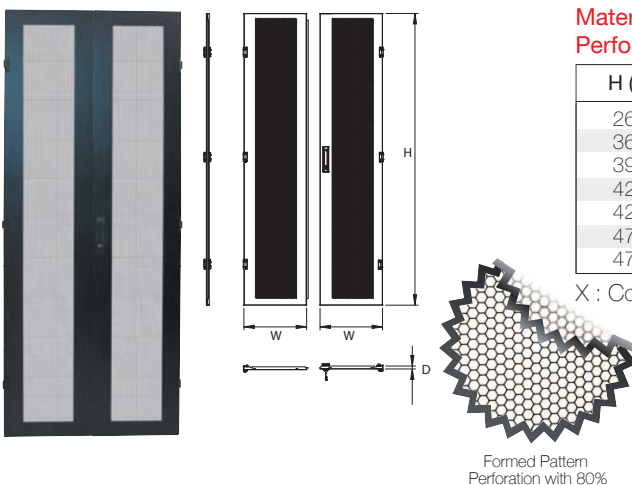


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 80% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	57	9,10	CPZ-X-266Y0-0910
42U	1975	600	57	14,13	CPZ-X-426Y0-0910
42U	1975	800	76	17,88	CPZ-X-428Y0-0910
47U	2198	600	57	15,70	CPZ-X-476Y0-0910
47U	2198	800	76	19,86	CPZ-X-478Y0-0910

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

High Perforation Rated Double Flat Door



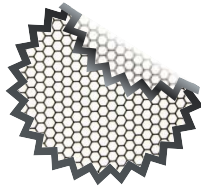
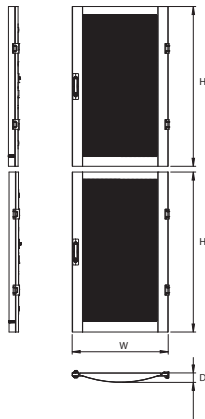
Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 80% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	19	8,08	CPZ-X-266Y0-0911
36U	1709	600	19	9,84	CPZ-X-366Y0-0911
39U	1842	800	19	13,23	CPZ-X-398Y0-0911
42U	1975	600	19	11,15	CPZ-X-426Y0-0911
42U	1975	800	19	14,10	CPZ-X-428Y0-0911
47U	2198	600	19	12,27	CPZ-X-476Y0-0911
47U	2198	800	19	15,44	CPZ-X-478Y0-0911

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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High Perforation Rated Curved Door for Colocation Cabinets



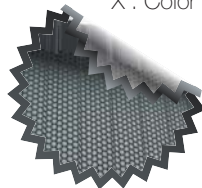
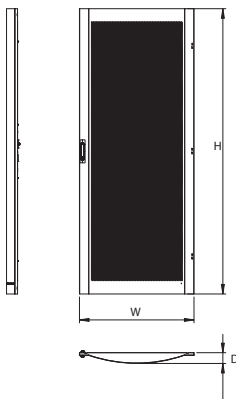
Formed Pattern
Perforation with 82%

Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 82% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
21U+21U	1975	600	57	10,20	CPZ-X-426Y0-0912
21U+21U	1975	800	76	11,32	CPZ-X-428Y0-0912

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Formed Perforated Curved Door



Formed Pattern
Perforation with 71%

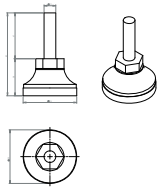
Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 71% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1264	600	57	9,81	CPZ-X-266Y0-0913
36U	1709	600	57	12,95	CPZ-X-366Y0-0913
39U	1842	800	76	17,40	CPZ-X-398Y0-0913
42U	1975	600	57	14,83	CPZ-X-426Y0-0913
42U	1975	800	76	18,58	CPZ-X-428Y0-0913
47U	2198	600	57	16,40	CPZ-X-476Y0-0913
47U	2198	800	76	20,56	CPZ-X-478Y0-0913

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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Adjustable Feet



Material Steel and Plastic ABS **Finish** Zinc Plated
Packaging 4 pcs in a box

Maximum Static Load	Set Weight kg	Part No
600 kg / piece	0.35	CCA-0-7014

Multi Point Lock for Double Doors



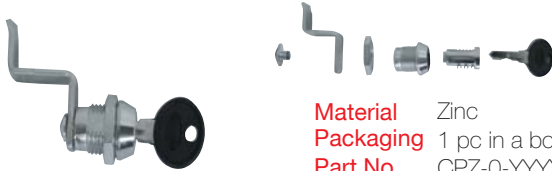
Material Polyamide
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1005

Multi Point Lock for Single Perforated Door



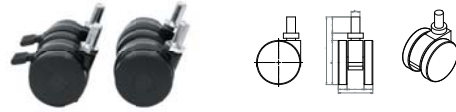
Material Polyamide
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1004

Cylindrical Lock for Rear Metal Solid Panel



Material Zinc
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1002

Castor Set



Material Steel and Plastic ABS **Finish** Zinc Plated

Packaging 2 pcs with stopper and 2 pcs without Stopper in a box

Maximum Static Load	Set Weight kg	Part No
250 kg / piece	0.77	CCA-0-7015

Single Point Lock



Material Polyamide
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1003

Cylindrical Lock for Side Panel



Material Zinc
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1001

inorax-ST Cabinets

inorax-ST Network Cabinet

Inorax-ST, a cost effective network rack cabinet system fulfills high density cabling and data center requirements. With its modular structure, a practical option for your future plans. Offers advanced fiber and copper cable management options; helps simplify cable installation and maintenance while providing maximum cable capacity for your high-density cabling requirements. A wide range of cable management accessories is available to ensure perfect management of copper, fiber cables and 19" equipment. Flat-pack option enables savings up to 60% in the transport cost and warehouse space.

Technical Features

Material 1,2 - 1,5 - 2mm Steel

Color RAL 7035 or RAL 9005

Compliance RoHS, UL Certificated

Packaging Assembled or unassembled

Maximum Static Load Up to 2000 kg.

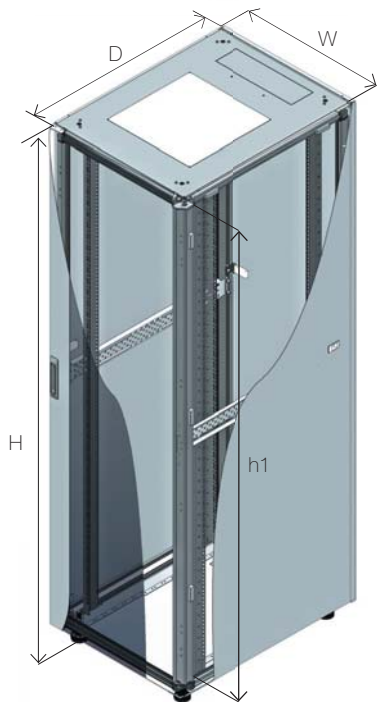
Finish Doors, side panels, top and bottom covers

Electrostatic Powder Paint, 19" mounting rails: Zinc-plated

Related Accessories Cable Organizer-

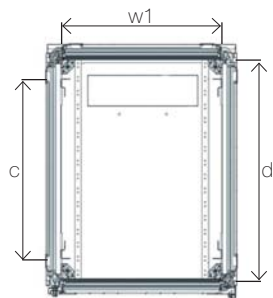
Blanking Panels

Cable Channels



Standard Configuration:

- ✓ Front door with safety glass
- ✓ Solid Side Panels with cylindrical locks and latches
- ✓ Solid Rear Panel with cylindrical locks
- ✓ Internal top sheet with 3 cable entry and fan cut-outs
- ✓ 2 Pairs of depth adjustable heavy duty 19" Mounting Rails
- ✓ 2 Pairs of Adjustable Feet
- ✓ Front Door with swing-handle single point lock
- ✓ Color RAL 7035 or RAL 9005
- ✓ RoHS compliant, UL and Gost-R Certificated
- ✓ Bottom cover



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
16U	600	600	878	718	503	550	123 - 373	52,82	CSN-X-1666A
22U	600	600	1144	984	503	550	123 - 373	62,21	CSN-X-2266A
22U	600	800	1144	984	503	750	123 - 573	70,66	CSN-X-2268A
26U	600	600	1322	1162	503	550	123 - 373	68,49	CSN-X-2666A
26U	600	800	1322	1162	503	750	123 - 573	77,60	CSN-X-2668A
26U	800	800	1322	1162	703	750	123 - 573	91,62	CSN-X-2688A
32U	600	600	1588	1428	503	550	123 - 373	77,88	CSN-X-3266A
32U	600	800	1588	1428	503	750	123 - 573	88,01	CSN-X-3268A
32U	800	800	1588	1428	703	750	123 - 573	103,14	CSN-X-3288A
36U	600	600	1766	1723	503	550	123 - 373	84,17	CSN-X-3666A
36U	600	800	1766	1723	503	750	123 - 573	94,95	CSN-X-3668A
36U	800	800	1766	1723	703	750	123 - 573	109,81	CSN-X-3688A
39U	800	800	1900	1740	703	750	123 - 573	115,56	CSN-X-3988A
42U	600	600	2033	1873	503	550	123 - 373	93,62	CSN-X-4266A
42U	600	800	2033	1873	503	750	123 - 573	105,41	CSN-X-4268A
42U	600	1000	2033	1873	503	950	123 - 773	113,85	CSN-X-4260A
42U	800	800	2033	1873	703	750	123 - 573	121,31	CSN-X-4288A
42U	800	1000	2033	1873	703	950	123 - 773	133,54	CSN-X-4280A
47U	600	600	2255	2095	503	550	123 - 373	101,47	CSN-X-4766A
47U	600	800	2255	2095	503	750	123 - 573	114,09	CSN-X-4768A
47U	600	1000	2255	2095	503	950	123 - 773	123,20	CSN-X-4760A
47U	800	800	2255	2095	703	750	123 - 573	120,91	CSN-X-4788A
47U	800	1000	2255	2095	703	950	123 - 773	144,10	CSN-X-4780A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

inorax-ST Cabinets

inorax-ST Server Cabinet

A cost effective server rack cabinet system developed for independent use and datacenter environments. inorax-ST server rack cabinet system is designed and engineered for demanding datacenter environments. It is designed to house all servers manufactured by major brands including HP, Dell, Sun, Cisco, Juniper, IBM, Compaq to name but a few. To achieve optimum versatility within the server rack, users can set multiple depths throughout the cabinet by adjustable 19" mounting rails mounted on heavy duty side supports. Horizontally divided side panels provide ease of access and convenient post-installation maintenance. Optional % 80 perforations on front and rear doors enable optimum airflow within the rack cabinet. Optional cable tray channels can be fitted on top of the rack provides perfect cable routing eliminating the need for raised floor systems. Flat-pack option enables savings up to 60% in the transport cost and warehouse space.



Technical Features

Material 1,2 - 1,5 - 2mm Steel

Color RAL 7035 or RAL 9005

Compliance RoHS, UL Certified Gost-R Certificated

Packaging Assembled or unassembled

Maximum Static Load Up to 2000 kg. (in 600x600 mm)

Finish Frame, doors, side panels, top and bottom covers
Electrostatic Powder Paint, 19" mounting rails: Zinc-plated

Related Accessories Rack Monitoring System

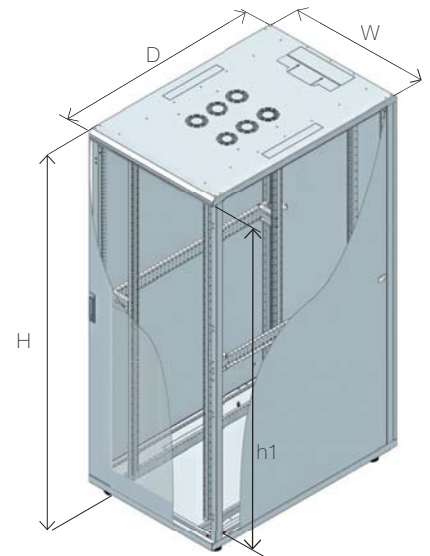
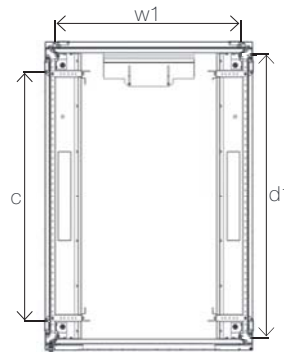
Power Distribution Units

Integral Console



Standard Configuration:

- ✓ Perforated front and rear doors, Free Air Ratio (FAR): %67
- ✓ Front & rear doors with swing handle Multi point-espagnolette
- ✓ Solid Side Panels with cylindrical locks and latches
- ✓ Internal top sheet with 3 cable entry and fan cut-outs
- ✓ 2 Pairs of depth adjustable heavy duty 19" Mounting Rails
- ✓ 2 Pairs of Adjustable Feet
- ✓ Color RAL 7035 or RAL 9005
- ✓ RoHS compliant, UL and Gost-R Certificated
- ✓ Bottom cover



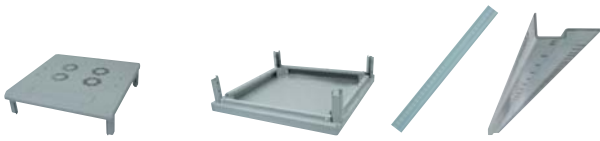
Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
26U	600	1000	1322	1162	503	950	123 - 773	84,09	CSS-X-2660A
26U	600	1200	1322	1162	503	1150	123 - 973	95,78	CSS-X-2662A
36U	600	1000	1766	1723	503	950	123 - 773	104,79	CSS-X-3660A
36U	600	1200	1766	1723	503	1150	123 - 973	116,48	CSS-X-3662A
39U	800	1000	1900	1740	703	950	123 - 773	130,19	CSS-X-3980A
42U	600	1000	2033	1873	503	950	123 - 773	117,21	CSS-X-4260A
42U	600	1100	2033	1873	503	1050	123 - 873	123,05	CSS-X-4261A
42U	600	1200	2033	1873	503	1150	123 - 973	128,9	CSS-X-4262A
42U	800	1000	2033	1873	703	950	123 - 773	136,88	CSS-X-4280A
42U	800	1100	2033	1873	703	1050	123 - 873	143,63	CSS-X-4281A
42U	800	1200	2033	1873	703	1150	123 - 973	150,48	CSS-X-4282A
47U	600	1000	2255	2095	503	950	123 - 773	126,72	CSS-X-4760A
47U	600	1100	2255	2095	503	1050	123 - 873	132,98	CSS-X-4761A
47U	600	1200	2255	2095	503	1150	123 - 973	139,25	CSS-X-4762A
47U	800	1000	2255	2095	703	950	123 - 773	147,31	CSS-X-4780A
47U	800	1100	2255	2095	703	1050	123 - 873	154,47	CSS-X-4781A
47U	800	1200	2255	2095	703	1150	123 - 973	161,74	CSS-X-4782A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

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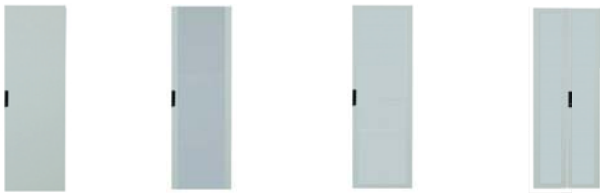
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Page :56



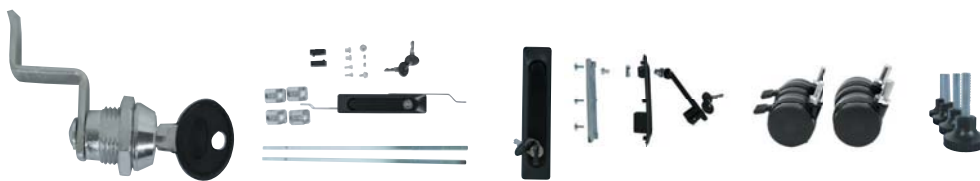
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Page :58

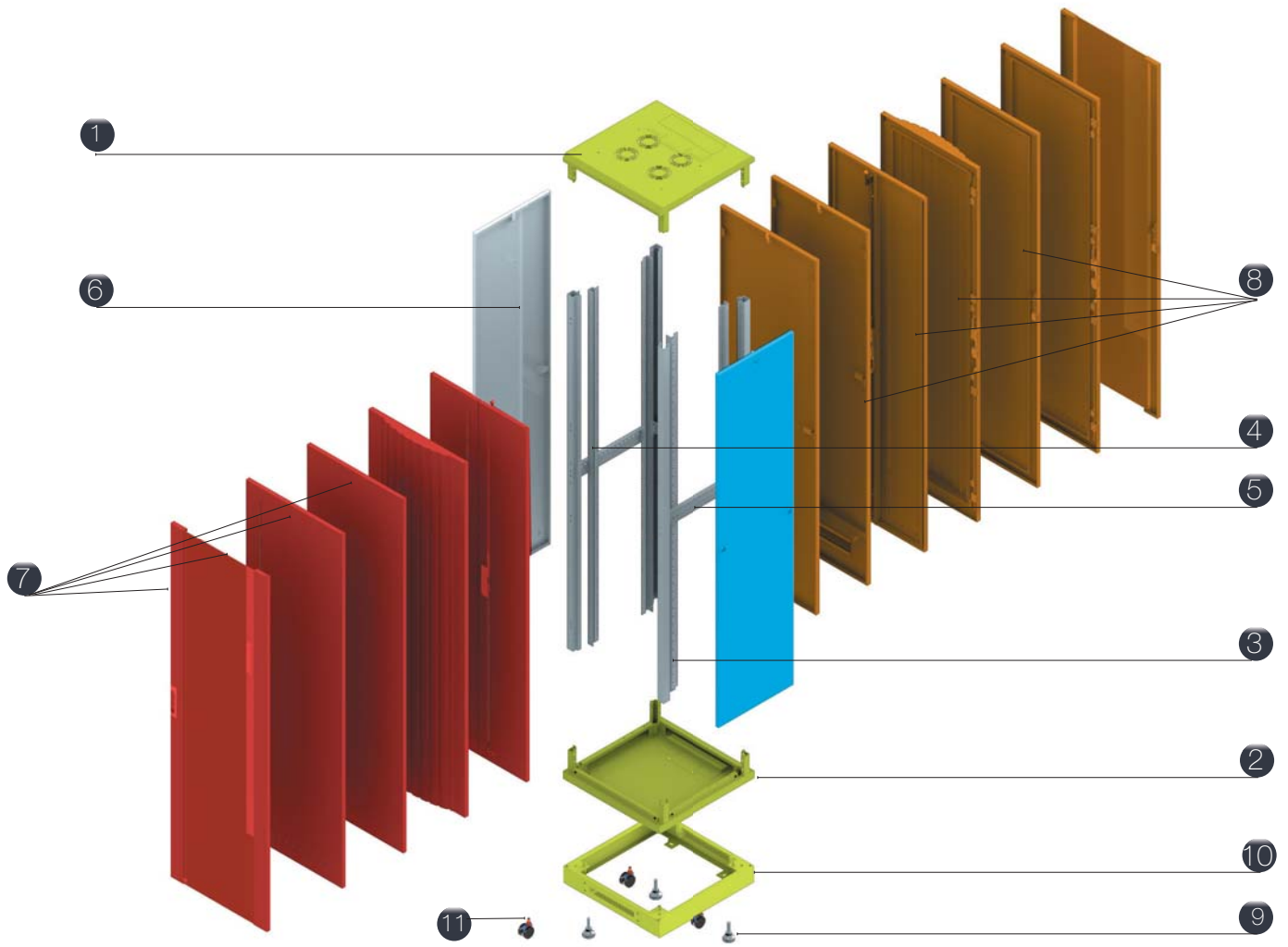


Page :59



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Components of inorax-ST



- 1 - Top Cover
- 2 - Bottom Cover
- 3 - Vertical Profiles
- 4 - 19" Mounting Rails
- 5 - Side Support Rails
- 6 - Side Panel
- 7 - Front Door Options
- 8 - Rear Door Options

- 9 - Adjustable Feet
- 10 - Plinth
- 11 - Castor

inorax-ST Cabinets

Components of inorax-ST

Top Cover



Material 1.5 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	600	154	10,79	CSZ-X-YY660-0401
600	800	154	12,70	CSZ-X-YY680-0401
600	1000	154	14,62	CSZ-X-YY600-0401
600	1100	154	15,47	CSZ-X-YY610-0401
600	1200	154	16,42	CSZ-X-YY620-0401
800	800	154	16,76	CSZ-X-YY880-0401
800	1000	154	19,62	CSZ-X-YY800-0401
800	1100	154	20,95	CSZ-X-YY810-0401
800	1200	154	22,39	CSZ-X-YY820-0401

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Bottom Cover



Material 1.5 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	600	154	11,16	CSZ-X-YY660-0403
600	800	154	13,07	CSZ-X-YY680-0403
600	1000	154	14,99	CSZ-X-YY600-0403
600	1100	154	15,94	CSZ-X-YY610-0403
600	1200	154	16,90	CSZ-X-YY620-0403
800	800	154	17,17	CSZ-X-YY880-0403
800	1000	154	20,04	CSZ-X-YY800-0403
800	1100	154	21,47	CSZ-X-YY810-0403
800	1200	154	22,91	CSZ-X-YY820-0403

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Vertical Profiles



Material 1.5 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	W (mm)	D (mm)	H (mm)	Weight kg	Part No
16U	48,5	57	754	1,36	CSZ-X-16YY0-0300
22U	48,5	57	1021	1,84	CSZ-X-22YY0-0300
26U	48,5	57	1199	2,17	CSZ-X-26YY0-0300
32U	48,5	57	1465	2,65	CSZ-X-32YY0-0300
36U	48,5	57	1643	2,97	CSZ-X-36YY0-0300
39U	48,5	57	1777	3,21	CSZ-X-39YY0-0300
42U	48,5	57	1910	3,46	CSZ-X-42YY0-0300
47U	48,5	57	2132	3,86	CSZ-X-47YY0-0300

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

19" Mounting Rails



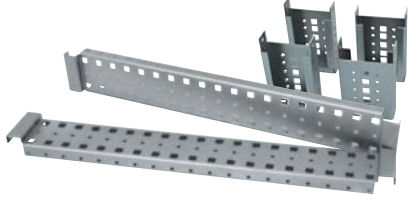
Material 2 mm Steel **Finish** Zinc-Plated
Color Metal Grey

H (U)	W (mm)	D (mm)	H (mm)	Weight kg	Part No
16U	33	52	753	0,96	CSZ-0-16YY0-0600
22U	33	52	1020	1,29	CSZ-0-22YY0-0600
26U	33	52	1198	1,52	CSZ-0-26YY0-0600
32U	33	52	1464	1,85	CSZ-0-32YY0-0600
36U	33	52	1642	2,08	CSZ-0-36YY0-0600
39U	33	52	1776	2,25	CSZ-0-39YY0-0600
42U	33	52	1909	2,42	CSZ-0-42YY0-0600
47U	33	52	2131	2,70	CSZ-0-47YY0-0600

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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Side Support Rails



Material 2 mm Steel

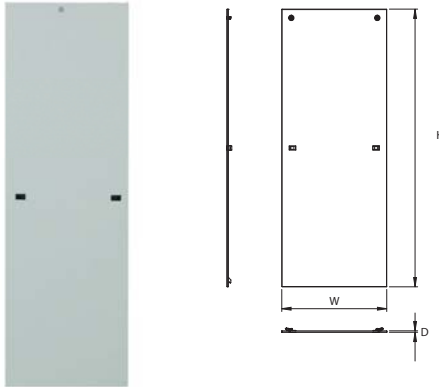
Finish Zinc-Plated

Color Metal Grey

Cabinet W (mm)	Cabinet D (mm)	Weight kg	Part No
600	600	0,75	CSZ-0-YY660-0700
600	800	0,80	CSZ-0-YY680-0700
600	1000	0,85	CSZ-0-YY600-0700
600	1100	0,87	CSZ-0-YY610-0700
600	1200	0,90	CSZ-0-YY620-0700
800	800	0,85	CSZ-0-YY880-0700
800	1000	0,92	CSZ-0-YY800-0700
800	1100	0,97	CSZ-0-YY810-0700
800	1200	1,0 2	CSZ-0-YY820-0700

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Side Panel



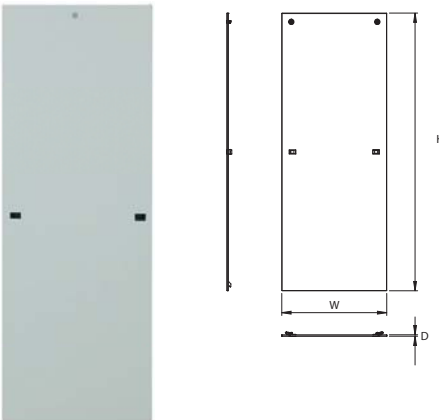
Material 1.5 mm Steel **Finish** Electrostatic Powder Paint

Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
16U	749	600	22	600	CSZ-X-16Y60-0501
22U	1016	600	22	600	CSZ-X-22Y60-0501
22U	1016	800	22	800	CSZ-X-22Y80-0501
26U	1194	600	22	600	CSZ-X-26Y60-0501
26U	1194	800	22	800	CSZ-X-26Y80-0501
26U	1194	1000	22	1000	CSZ-X-26Y00-0501
32U	1460	600	22	600	CSZ-X-32Y60-0501
32U	1460	800	22	800	CSZ-X-32Y80-0501
36U	1638	600	22	600	CSZ-X-36Y60-0501
36U	1638	800	22	800	CSZ-X-36Y80-0501
36U	1638	1000	22	1000	CSZ-X-36Y00-0501
36U	1638	1200	22	1200	CSZ-X-36Y20-0501
39U	1772	800	22	800	CSZ-X-39Y80-0501
39U	1772	1000	22	1000	CSZ-X-39Y00-0501
42U	1905	600	22	600	CSZ-X-42Y60-0501
42U	1905	800	22	800	CSZ-X-42Y80-0501
42U	1905	1000	22	1000	CSZ-X-42Y00-0501
42U	1905	1100	22	1100	CSZ-X-42Y10-0501
42U	1905	1200	22	1200	CSZ-X-42Y20-0501
47U	2127	600	22	600	CSZ-X-47Y60-0501
47U	2127	800	22	800	CSZ-X-47Y80-0501
47U	2127	1000	22	1000	CSZ-X-47Y00-0501
47U	2127	1100	22	1100	CSZ-X-47Y10-0501
47U	2127	1200	22	1200	CSZ-X-47Y20-0501

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Rear Metal Solid Panel



Material 1.5 mm Steel **Finish** Electrostatic Powder Paint

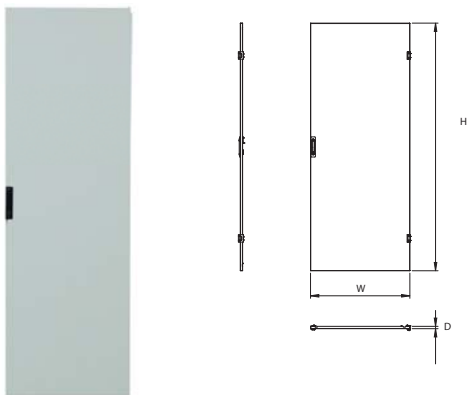
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
16U	752	600	23	5,11	CSZ-X-166Y0-0901
22U	1018	600	23	6,76	CSZ-X-226Y0-0901
22U	1018	800	23	8,79	CSZ-X-228Y0-0901
26U	1196	600	23	7,86	CSZ-X-266Y0-0901
26U	1196	800	23	10,22	CSZ-X-268Y0-0901
32U	1463	600	23	9,5	CSZ-X-326Y0-0901
32U	1463	800	23	12,37	CSZ-X-328Y0-0901
36U	1641	600	23	10,6	CSZ-X-366Y0-0901
36U	1641	800	23	13,80	CSZ-X-368Y0-0901
39U	1774	800	23	14,88	CSZ-X-398Y0-0901
42U	1907	600	23	12,25	CSZ-X-426Y0-0901
42U	1907	800	23	15,95	CSZ-X-428Y0-0901
47U	2130	600	23	13,62	CSZ-X-476Y0-0901
47U	2130	800	23	17,74	CSZ-X-478Y0-0901

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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Metal Solid Door

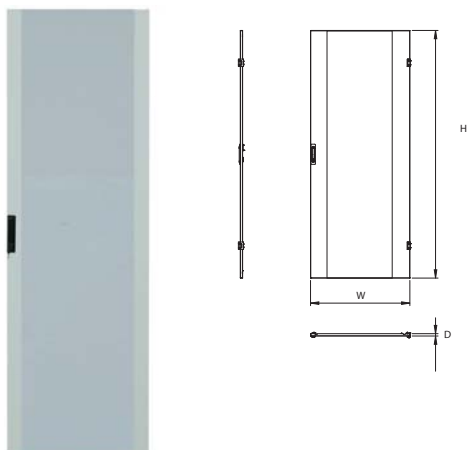


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
16U	749	600	22	6,87	CSZ-X-166Y0-0902
22U	1016	600	22	8,94	CSZ-X-226Y0-0902
22U	1016	800	22	11,26	CSZ-X-228Y0-0902
26U	1194	600	22	10,32	CSZ-X-266Y0-0902
26U	1194	800	22	12,97	CSZ-X-268Y0-0902
32U	1460	600	22	12,39	CSZ-X-326Y0-0902
32U	1460	800	22	15,54	CSZ-X-328Y0-0902
36U	1638	600	22	13,77	CSZ-X-366Y0-0902
36U	1638	800	22	17,26	CSZ-X-368Y0-0902
39U	1772	800	22	18,54	CSZ-X-398Y0-0902
42U	1905	600	22	15,84	CSZ-X-426Y0-0902
42U	1905	800	22	19,83	CSZ-X-428Y0-0902
47U	2127	600	22	17,56	CSZ-X-476Y0-0902
47U	2127	800	22	21,97	CSZ-X-478Y0-0902

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Glass Door

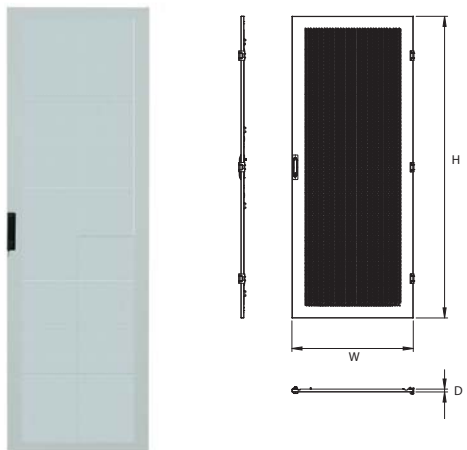


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
16U	749	600	22	5,53	CSZ-X-166Y0-0903
22U	1016	600	22	7,42	CSZ-X-226Y0-0903
22U	1016	800	22	9,77	CSZ-X-228Y0-0903
26U	1194	600	22	8,68	CSZ-X-266Y0-0903
26U	1194	800	22	11,42	CSZ-X-268Y0-0903
32U	1460	600	22	10,56	CSZ-X-326Y0-0903
32U	1460	800	22	13,9	CSZ-X-328Y0-0903
36U	1638	600	22	11,82	CSZ-X-366Y0-0903
36U	1638	800	22	15,55	CSZ-X-368Y0-0903
39U	1772	800	22	16,79	CSZ-X-398Y0-0903
42U	1905	600	22	13,7	CSZ-X-426Y0-0903
42U	1905	800	22	18,02	CSZ-X-428Y0-0903
47U	2127	600	22	15,27	CSZ-X-476Y0-0903
47U	2127	800	22	20,09	CSZ-X-478Y0-0903

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Perforated Flat Door



Material 1.2 mm Steel **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)
Finish Electrostatic Powder Paint **Perforation Rate** 67%

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1194	600	22	7,81	CSZ-X-266Y0-0904
36U	1638	600	22	10,15	CSZ-X-366Y0-0904
39U	1772	800	22	14,02	CSZ-X-398Y0-0904
42U	1905	600	22	11,80	CSZ-X-426Y0-0904
42U	1905	800	22	15,17	CSZ-X-428Y0-0904
47U	2127	600	22	12,97	CSZ-X-476Y0-0904
47U	2127	800	22	16,69	CSZ-X-478Y0-0904

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Double Perforated Door



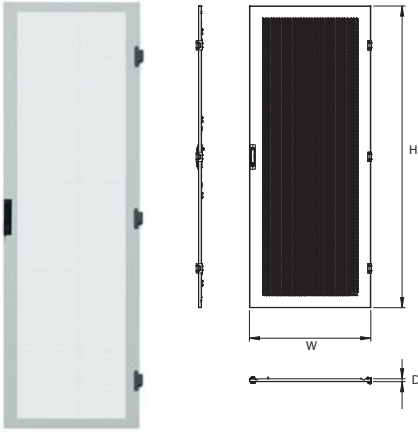
Material 1.2 mm Steel **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)
Finish Electrostatic Powder Paint **Perforation Rate** 67%

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1194	600	22	11,99	CSZ-X-266Y0-0908
36U	1638	600	22	15,70	CSZ-X-366Y0-0908
39U	1772	800	22	21,19	CSZ-X-398Y0-0908
42U	1905	600	22	18,16	CSZ-X-426Y0-0908
42U	1905	800	22	22,83	CSZ-X-428Y0-0908
47U	2127	600	22	20,01	CSZ-X-476Y0-0908
47U	2127	800	22	25,16	CSZ-X-478Y0-0908

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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High Perforation Rated Flat Door

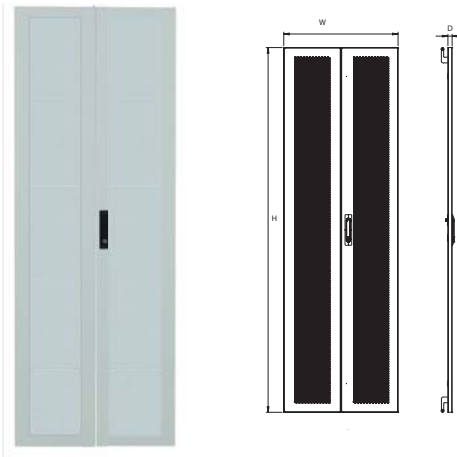


Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 80% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1194	600	22	7,51	CSZ-X-266Y0-0909
36U	1638	600	22	9,85	CSZ-X-366Y0-0909
39U	1772	800	22	13,72	CSZ-X-398Y0-0909
42U	1905	600	22	11,50	CSZ-X-426Y0-0909
42U	1905	800	22	14,87	CSZ-X-428Y0-0909
47U	2127	600	22	12,67	CSZ-X-476Y0-0909
47U	2127	800	22	16,39	CSZ-X-478Y0-0909

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

High Perforation Rated Double Door



Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Perforation Rate 80% **Color** RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
26U	1194	600	22	11,69	CSZ-X-266Y0-0911
36U	1638	600	22	15,40	CSZ-X-366Y0-0911
39U	1772	800	22	20,89	CSZ-X-398Y0-0911
42U	1905	600	22	17,86	CSZ-X-426Y0-0911
42U	1905	800	22	22,53	CSZ-X-428Y0-0911
47U	2127	600	22	19,71	CSZ-X-476Y0-0911
47U	2127	800	22	24,86	CSZ-X-478Y0-0911

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Rear Metal Panel with Cable Entry



Material 1.5 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (U)	H (mm)	W (mm)	D (mm)	Weight kg	Part No
3U	133	600	23	0,97	CSZ-X-036Y0-0915
3U	133	800	23	1,35	CSZ-X-038Y0-0915
4U	178	600	23	1,24	CSZ-X-046Y0-0915
4U	178	800	23	1,71	CSZ-X-048Y0-0915
5U	222	600	23	1,52	CSZ-X-056Y0-0915
5U	222	800	23	2,06	CSZ-X-058Y0-0915
6U	267	600	23	1,79	CSZ-X-066Y0-0915
6U	267	800	23	2,42	CSZ-X-068Y0-0915

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Adjustable Cable Entry Panel with EPDM Gasket



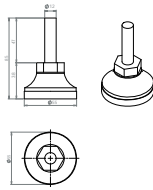
Material 1.2 mm Steel **Finish** Electrostatic Powder Paint
Color RAL 7035 (Light Grey) and RAL 9005 (Black)

H (mm)	W (mm)	D (mm)	Weight kg	Part No
20	350	152	0,53	CSZ-X-YYYY0-0803

X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

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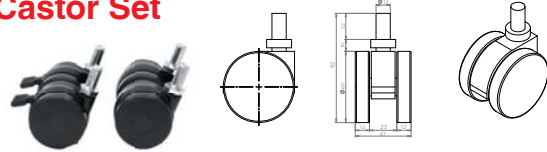
Adjustable Feet



Material Steel and Plastic ABS **Finish** Zinc Plated
Packaging 4 pcs in a box

Maximum Static Load	Set Weight kg	Part No
600 kg / piece	0.35	CCA-0-7014

Castor Set



Material Steel and Plastic ABS **Finish** Zinc Plated
Packaging 2 pcs with stopper and 2 pcs without Stopper in a box

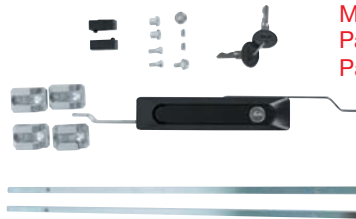
Maximum Static Load	Set Weight kg	Part No
250 kg / piece	0.77	CCA-0-7015

Multi Point Lock for Double Doors



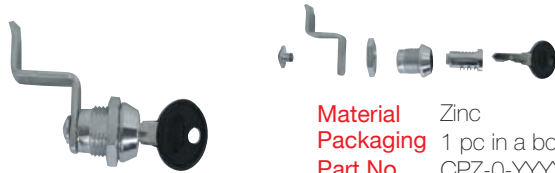
Material Polyamide
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1005

Multi Point Lock for Single Perforated Door



Material Polyamide
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1004

Cylindrical Lock for Rear Metal Solid Panel



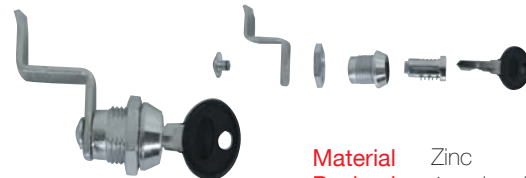
Material Zinc
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1002

Single Point Lock



Material Polyamide
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1003

Cylindrical Lock for Side Panel



Material Zinc
Packaging 1 pc in a box
Part No CPZ-0-YYYY0-1001

Inorax AL-45

Exceptional aesthetic design perfect for high-profile applications and major installations
 Constructed of anodized extruded aluminum
 Maximum durability and strength along with the benefits of lightweight construction

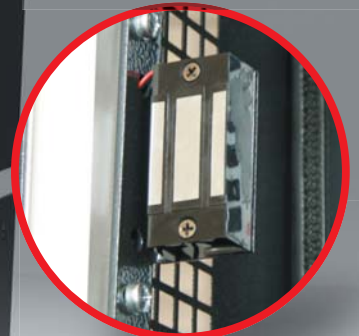


Automatical Door Opening System



if any fire occurs inside the cabinet, the doors are opening automatically

Magnetic Electronic Lock System



IP Protection



Gasketing at doors and joining points



Access security is provided by magnetic lock system supported by electronic key pad

Technical Features

- Material** Frame ; Anodized aluminum extrusion profiles
Other parts : 1,2 and 2 mm steel
- Color** RAL 7035 or RAL 9005
- Compliance** RoHS, UL Certified
- Packaging** Assembled or unassembled
- Maximum Static Load** Up to 1500 kg. (in 800x1000 mm)
- Finish** Frame, doors, side panels, top and bottom covers: Electrostatic Powder Paint
19" mounting rails: Zinc-plated

Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
42U	800	1000	2033	1898	703	950	129-829	135.00	Inorax AL-45

Smart Server Rack

Technical Features

- ✓ H x W x D: 42U x 800mm x 1000mm
- ✓ Steel frame chassis according to 25mm DIN system
- ✓ 1200 kg carrying capacity
- ✓ Depth adjustable 19" mounting rails with U marking
- ✓ Front and rear doors with internal frame and 80% perforation ratio
- ✓ Electronic lock with keypad, integrated to EMMS System
- ✓ Side panels, top and bottom sheets are bolted internally
- ✓ Two-piece top sheet with adjustable cable entry
- ✓ Three-piece bottom sheet with adjustable cable entry
- ✓ Adjustable feet
- ✓ Earthing kit and earthing bar
- ✓ RAL 7035 powder coated

Accessories

- ✓ Four cable management panels with 5 cable guides
- ✓ 1U 19" blank panels
- ✓ Shielded cable channels for data and power cabling
- ✓ 3 pcs of radial fans with 625 m³/h for cooling (N+1 redundancy)
- ✓ Two temperature sensors at upper and lower part of the rack

Power Supply

- ✓ 230V and 400V (three phase) power feed
- ✓ Redundant power feed
- ✓ Cable connections according to DIN VDE 0113



Fan Tray
3 pcs of radial fans with
625 m³/h for cooling (N+1 redundancy)

80% perforation

Electronic cylindric lock
(integrated to EMMS
System)

Cable Hook

UPS

Power Distribution Module

EMS (Environmental Monitoring System)

Keypad with number
combination

Cable management panel
with 5 cable guides

Steel frame

UPS

- ✓ 4 kVA capacity by 30 minutes battery operation
- ✓ 75% capacity of batteries after three years operation
- ✓ 40 pcs 9 AH batteries
- ✓ 8U height
- ✓ Following parameters can be monitored through EMMS System:
 - Current load
 - Current capacity
 - Estimated remaining life of batteries



IP PDU

- ✓ 1U 12 outlet 32A (three phase) PDU
 - Voltage¤t measurement per individual outlet
- ✓ LED display
- ✓ RJ45 connectors for Ethernet
- ✓ Vertical installation possibility
- ✓ Designed for optional input voltage for 230 or 400V
- ✓ Each socket can be switched on and off through EMMS
- ✓ Remote management through SNMP
 - C13, C19, Schuko



EMS (Rack Monitoring) System

- ✓ 1U 19" metal chassis module
- ✓ 12 different sensor inlets
- ✓ RJ45 socket for Ethernet connection
- ✓ Supports following protocols:
 - TC/IP 10/100MBps Ethernet
 - SNMPv2 and SNMPv3
 - IPv4 and IPv6
 - MIB II
 - Telnet
- ✓ Remote firmware update is possible
- ✓ Alerting through emails and syslog
- ✓ Following parameters can be measured through EMS and sensors:
 - Temperature
 - Door Status (open or close)
 - Voltage per individual outlet of IP PDU
 - Current per individual outlet of IP PDU
 - Total fan speed
 - Total supply voltage of rack
 - Current load of UPS and estimated remaining life of the batteries



Power Distribution Module

- ✓ 230V and 400V (three phase) power feed
- ✓ Redundant power feed
- ✓ Cable connections according to DIN VDE 0113



WK4-Anti Theft Cabinet

Canovate WK4- Cabinet is the perfect solution to protect your mission critical equipment from any unauthorized access (theft protection) and vandalism attempt.

WK4 Norm: The experienced thief/intruder should not enter the cabinet for 10 minutes by using saw, axe, accu-drilling machine, hammer and chisel. (DIN V ENV 1630, 1999-04)

Technical Features

- ✓ H x W x D: 42U x 900mm x 1100mm
- ✓ IP54, WK4 certified
- ✓ Steel frame chassis according to 25mm DIN system
- ✓ Double skin front door and side&rear panels
 - Outer skin: 1.5 galvanized steel
 - Inner skin: 0.8 mm special undrillable/armored steel
 - Impact resistant grill structure between inner and outer skin
- ✓ Specially designed 6-point WK4 locking mechanism
- ✓ 1200 kg carrying capacity
- ✓ Depth adjustable 19" mounting rails with U markings
- ✓ Electronic lock with keypad, integrated to monitoring System
- ✓ Shielded cable channels for data and power cabling
- ✓ Side panels, top and bottom sheets are bolted internally
- ✓ Adjustable feet
- ✓ Earthing kit and earthing bar
- ✓ RAL 7035 powder coated



Steel Profile construction with hook type WK4 locking system



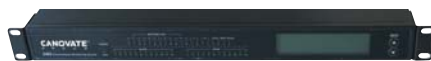
WK4 Electronic lock system with keypad



6-point WK4 locking system for best security



UPS



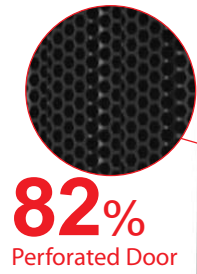
EMS (Environmental Monitoring System)



Intelligent patch panel

inorax-AL High End Server Rack Cabinet

- ✓ New engineered and aesthetic design perfect for high-air inlet in major applications
- ✓ Constructed of anodized extruded aluminum
- ✓ Maximum durability and strength along with the benefits of lightweight construction
- ✓ Ultimate cable management capabilities with modular vertical type and roof type cable organisers
- ✓ More secure with special locking system



Technical Features

Material	Frame ; Anodized aluminum extrusion profiles Other parts : 1,2 and 2 mm steel
Color	RAL 7035 or RAL 9005
Compliance	RoHS, UL Certified
Packaging	Assembled or unassembled
Maximum Static Load	Up to 1500 kg. (in 600x1000 mm)
Finish	Frame, doors, side panels, top and bottom covers, Electrostatic Powder Paint, 19" mounting rails: Zinc-plated

Standard Configuration:

- ✓ Perforated curved front door, Free Air Ratio (FAR): 82%
- ✓ Perforated double rear doors, Free Air Ratio (FAR): 82%
- ✓ Front & rear doors with swing handle Multi point-espagnolette
- ✓ Split side panels with special locks
- ✓ Internal top sheet with 3 cable entry and fan cut-outs
- ✓ Roof type cable channels
- ✓ Modular adjustable vertical cable organizer
- ✓ 2 Pairs of depth adjustable heavy duty 19" Mounting Rails
- ✓ 2 Pairs of Adjustable Feet and castor
- ✓ Color RAL 7035 or RAL 9005
- ✓ RoHS compliant, UL and Gost-R Certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg
42U	600	1000	2033	1898	503	950	129 - 829	106,48
42U	600	1200	2033	1898	503	1150	129 - 1029	124,82
42U	800	1000	2033	1898	703	950	129 - 829	117,28
42U	800	1200	2033	1898	703	1150	129 - 1029	135,40
47U	600	1000	2255	2120	503	950	129 - 829	116,18
47U	600	1200	2255	2120	503	1150	129 - 1029	133,97
47U	800	1000	2255	2120	703	950	129 - 829	126,71
47U	800	1200	2255	2120	703	1150	129 - 1029	144,31

Seismic Rack Cabinet

Canovate seismic cabinets are designed and manufactured according to structural performance criteria set by Bell Core NEBS requirements for installation in Earthquake Risk Zone 4 areas. Most of the accessories can be mounted within seismic cabinets. Use of a floor anchor kit is highly recommended. This Cabinet Provides easy access to equipment via a removable roof, sides and front/rear doors

Technical Features

Material Frame ; Anodized aluminum extrusion profiles
Other parts : 1,2 and 2 mm steel

Color RAL 7035 or RAL 9005

Maximum Static Load Up to 2000 kg.

Finish Doors, side panels, top and bottom covers: Electrostatic Powder Paint, 19" mounting rails: Zinc-plated

Related Accessories Rack Monitoring System
Power Distribution Units
Integral Console



Standard Configuration:

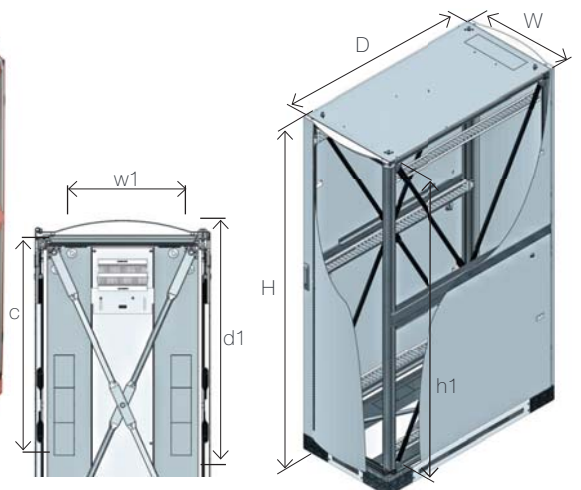
- ✓ Aluminum Frame Structure with 2000kg carrying capacity
- ✓ Steel reinforced cross-bars in each side of the cabinet including top and bottom
- ✓ Chassis is designed to bolt direct into floor with seismic rated fasteners
- ✓ Perforated front and rear doors
- ✓ Solid Side Panels
- ✓ Internal top sheet
- ✓ 2 Pairs of depth adjustable 19" Mounting Rails
- ✓ 2 Pairs of Adjustable Feet
- ✓ Front Door with Swinghandle Multi point-Espagnolette
- ✓ Zone 4, ULand Gost-R Certified, RoHS and TS EN 61587-1 compliant



Stabilizator for raised floor



Stabilizator for ceiling



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Part No
42U	600	1000	2033	1898	503	950	129-829	CPB-X-4260A
42U	600	1200	2033	1898	503	1150	129-1029	CPB-X-4262A
42U	800	800	2033	1898	703	750	129-629	CPB-X-4288A
42U	800	1000	2033	1898	703	950	129-829	CPB-X-4280A
42U	800	1200	2033	1898	703	1150	129-1029	CPB-X-4282A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

ETSI Rack

Canovate ETSI racks are designed to meet the standards of European Telecommunication Standards Institute (ETSI) which defines cabinets for Telecom use based on metric norm. ETSI racks are used by fixed line and GSM operators to store Alcatel, Cisco etc switches for the backbone. Our ETSI racks have a special lock that ensures 300mm depth criteria, which is a vital factor to choose the right ETSI rack.

Technical Features

Material 1,2 mm steel

Compliances RoHS, UL Certified

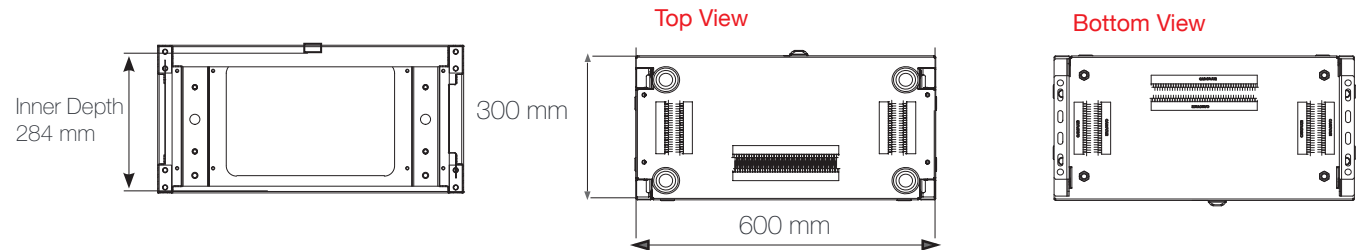
Color RAL 7035 or RAL 9005

Maximum Static Load Up to 600 kg.

Finish Doors, side panels, top and bottom covers: Electrostatic Powder Paint, ETSI mounting rails: Zinc-plated

Standard Configuration:

- ✓ **Dimensions**
Height: 2200 mm
Depth: 300mm or 600 mm
Width: 600 mm
- ✓ The latch release side panels can either be opened or removed for cabling access.
- ✓ Cable entry access panels at top and bottom
- ✓ Cabinets can be bayed together side by side or back to back
- ✓ Versatile cable management facilities
- ✓ Easily customized to individual requirements
- ✓ All-Around accessibility



Order Information

Depth mm	Without Front Door	With Fully Perforated Front Door	With Fully Perforated Double Front Door	Steel Frame
300	CSE-X-4763A1	CSE-X-4763A3	CSE-X-4763A4	CSE-X-4763A5
600	CSE-X-4766A1	CSE-X-4766A3	CSE-X-4766A4	CSE-X-4766A5

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black



19" Open Frame Racks

Canovate Open Frame Racks are designed for a professional cable management in protected datacenter rooms. Special cabling sections on the left and right side provide a flexible and proper cable management

Technical Features

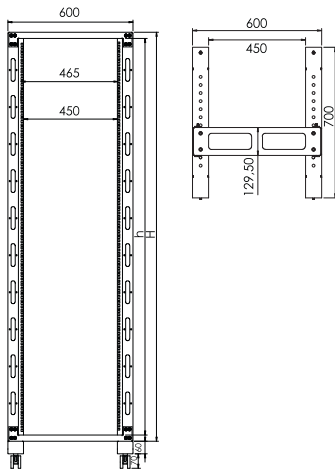
- Material** 1,5 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 600 kg.
- Finish** Frame: Electrostatic Powder Paint

Standard Configuration:

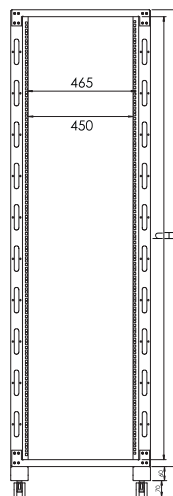
- ✓ Superior design for complex cable management
- ✓ 19" universal hole pattern for front and side mounting of equipment
- ✓ Easy cable management through large cut outs on the frame and cable conducts by cable clamps can be mountable on all faces
- ✓ Base openings ready for individual positioning of the frame
- ✓ Base equipped with feet (standard) or castors (optional)
- ✓ Flat pack delivery available



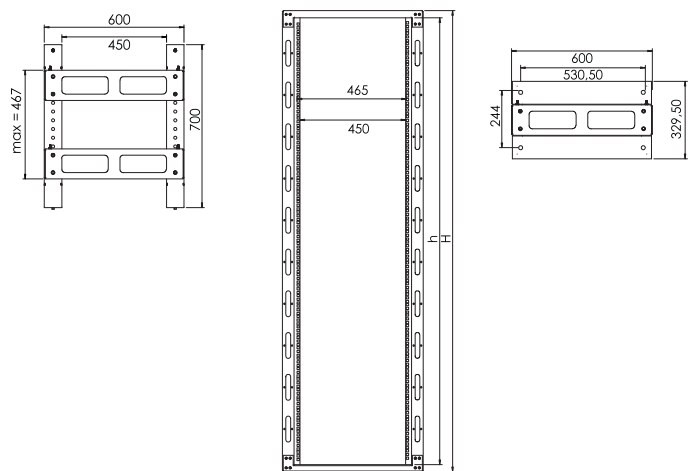
Single Frame



Double Frame



Double Frame



Order Information

Height U	Single Frame Open Rack	Double Frame Open Rack	Fixed Frame Open Rack
26 U	CSL-X-26YYA1	CSL-X-26YYA2	CSL-X-26YYA3
42 U	CSL-X-42YYA1	CSL-X-42YYA2	CSL-X-42YYA3
47 U	CSL-X-47YYA1	CSL-X-47YYA2	CSL-X-47YYA3

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

Industrial Cabinet

Canovate Industrial Cabinets are designed to meet the highest criterias required for electrical and automation control applications. Cabinets have a steel frame based construction and gasketing to ensure IP 55 protection for electrical equipments inside the rack.

Technical Features

Material Sheet steel enclosure frame

Plates : 1,5 mm, Door : 2,0 mm, Mounting Plate :3,0 mm

Dimensions Width : 600 mm Height : 2000 mm Depth : 600 mm

Finish Enclosure frame : Dipcoat primed Door, roof and rear panel : Dipcoat-Primed, Powder-coated in textured RAL 7035 on the outside Mounting plate and gland plates: Zinc-Plated

Color RAL 7035

Standard Configuration:

- ✓ Steel frame structure with 900 kg carrying capacity
- ✓ Two stage front door structure for user and administrator access
- ✓ Swinghandle single point-espagnolette lock on the administrator door
- ✓ Solid side panels with locks
- ✓ Solid rear panel
- ✓ Depth-adjustable mounting plate with cross channels
- ✓ External top cover with cable access and ventilation
- ✓ 100 mm ventilated plinth
- ✓ 2 Pairs of adjustable feet
- ✓ RoHS compliant, UL and GOST-R Certificated
- ✓ Approvals : VDE 6312 ÜG
- ✓ Protection Category :IP 55



Two stage front door

Thermal Cabinet-IP54

Canovate Thermal Cabinet is an ideal solution for electrical or IT applications with a high load of internally generated heat. The solution is based on the aluminum frame cabinet and the rack is IP54 protected to increase the cooling efficiency of the AC unit installed on the front door.

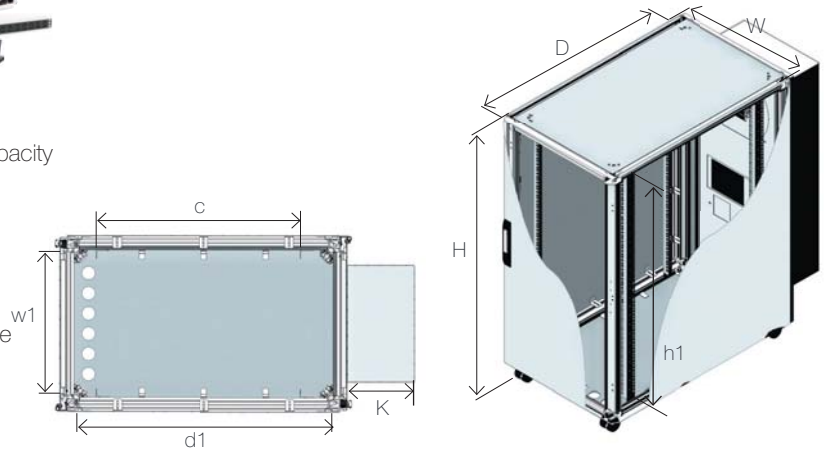
Technical Features

- Material** Frame ; Anodized aluminum extrusion profiles.
Other parts : 1,2 and 2 mm steel
- Color** RAL 7035 or RAL 9005
- Compliance** RoHS, UL Certified
- Packaging** Assembled or unassembled
- Maximum Static Load** Up to 2000 kg.
- Finish** Doors, side panels, top and bottom covers: Electrostatic Powder Paint, 19" mounting rails: Zinc-plated
- Related Accessories** Rack Monitoring System
Power Distribution Units
Integral Console



Standard Configuration:

- ✓ Aluminum Frame Structure with 1500 kg carrying capacity
- ✓ Solid front door with build in AC unit
- ✓ Solid Side Panels
- ✓ Solid Rear Panel
- ✓ External top sheet
- ✓ 2 Pairs of depth adjustable 19" Mounting Rails
- ✓ 2 Pairs of Adjustable Feet
- ✓ Front Door with Swinghandle Multi point-Espagnolette
- ✓ IP54 protected with special gasketing
- ✓ RoHS compliant, UL and Gost-R Certified
- ✓ *Optional Double Skin*



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Depth of Air Condition (K)	Part No
24U	600	1000	1155	1020	503	950	129-729	235	CPJ-X-2460A
42U	600	1000	2033	2095	503	950	129-729	235	CPJ-X-4260A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

Packaging Options

Assembled Packaging

- ✓ Damage-free transport
- ✓ Ready for installation
- ✓ Fixed on the pallet with metal brackets
- ✓ Full cover cardboard
- ✓ Steel strip secured by polypropylene straps
- ✓ Environment friendly (100% recycled) packaging material

Flatpack Cabinet Packaging

- ✓ Saves %60 warehouse space and transport cost
- ✓ Damage-free transportation
- ✓ Ready for installation
- ✓ 6 pieces on a pallet
- ✓ Full cover cardboard
- ✓ Steel strip secured by polypropylene straps
- ✓ Environment friendly (100% recycled) packaging material





Wallmount Cabinets

Canovate Wallmount cabinets are designed to ensure professional cable management and easy access inside the cabinet for installers. We are offering a wide range of wallmount enclosures for every type of application to be required in small and medium scale networks.

Wallmount Cabinets

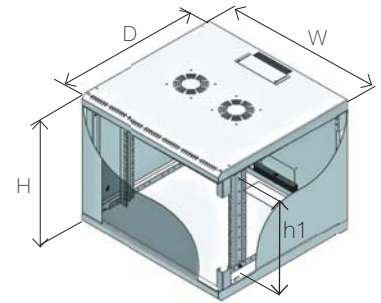
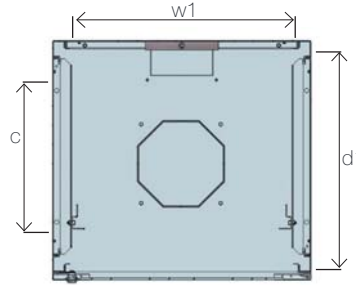
Single Wallmount Cabinet with Fixed Side Panels

Technical Features

- Material** 1,2 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 100 kg.
- Finish** Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame
- ✓ Glass door with cylindrical lock
- ✓ Fixed side panels
- ✓ 1 Pair of heavy duty 19" mounting rails
- ✓ Color RAL 7035 , RAL 9005
- ✓ RoHS compliant, UL and Gost-R Certified
- ✓ Flatpack option available



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
6	600	400	366	266	510	360	110-305	21,36	WSF-X-0664A
6	600	560	366	266	510	520	110-465	24,26	WSF-X-0665A
9	600	400	488	408	510	360	110-305	24,62	WSF-X-0964A
9	600	560	488	408	510	520	110-465	27,82	WSF-X-0965A
12	600	400	621	541	510	360	110-305	28,01	WSF-X-1264A
12	600	560	621	541	510	520	110-465	31,65	WSF-X-1265A
15	600	400	755	674	510	360	110-305	31,4	WSF-X-1564A
15	600	560	755	674	510	520	110-465	35,49	WSF-X-1565A
18	600	400	888	808	510	360	110-305	34,81	WSF-X-1864A
18	600	560	888	808	510	520	110-465	39,33	WSF-X-1865A
21	600	400	1022	942	510	360	110-305	38,2	WSF-X-2164A
21	600	560	1022	942	510	520	110-465	43,16	WSF-X-2165A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

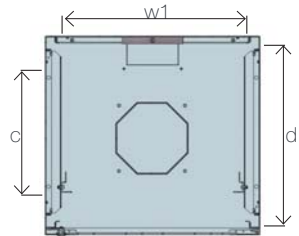
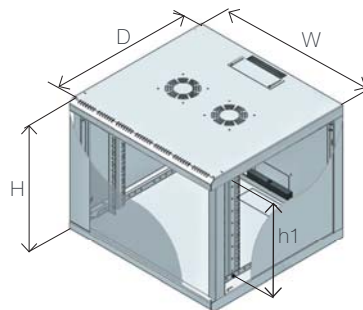
Single Wallmount Cabinet with Openable Side Panels From Outside

Technical Features

- Material** 1,2 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 100 kg.
- Finish** Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame
- ✓ Glass door with cylindrical lock
- ✓ Openable side panels with cylindrical lock
- ✓ 1 Pair of heavy duty 19" mounting rails
- ✓ RoHS compliant, UL and Gost-R Certified
- ✓ Flatpack option available
- ✓ Color RAL 7035 or RAL 9005



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
6	600	400	366	266	510	360	110-305	22,25	WSO-X-0664A
6	600	560	366	266	510	520	110-465	25,27	WSO-X-0665A
9	600	400	488	408	510	360	110-305	25,6	WSO-X-0964A
9	600	560	488	408	510	520	110-465	28,93	WSO-X-0965A
12	600	400	621	541	510	360	110-305	29,13	WSO-X-1264A
12	600	560	621	541	510	520	110-465	32,92	WSO-X-1265A
15	600	400	755	674	510	360	110-305	32,66	WSO-X-1564A
15	600	560	755	674	510	520	110-465	36,91	WSO-X-1565A
18	600	400	888	808	510	360	110-305	36,2	WSO-X-1864A
18	600	560	888	808	510	520	110-465	40,9	WSO-X-1865A
21	600	400	1022	942	510	360	110-305	39,73	WSO-X-2164A
21	600	560	1022	942	510	520	110-465	44,89	WSO-X-2165A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

Wallmount Cabinets

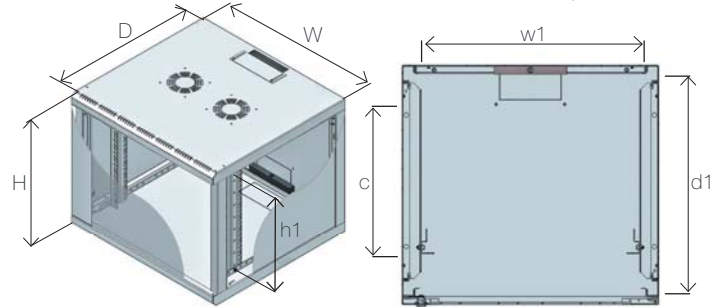
Eco Single Wallmount

Technical Features

- Material** 1,2 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 70 kg.
- Finish** Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame
- ✓ Glass door with cylindrical lock
- ✓ Openable side panels from inside for security
- ✓ 1 Pair of heavy duty 19" mounting rails
- ✓ Flatpack option available
- ✓ RoHS compliant, UL and Gost-R Certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
6	600	400	366	266	510	360	110-305	21,36	WS2N-X-0664A
6	600	560	366	266	510	520	110-465	24,26	WS2N-X-0665A
9	600	400	488	408	510	360	110-305	24,62	WS2N-X-0964A
9	600	560	488	408	510	520	110-465	27,82	WS2N-X-0965A
12	600	400	621	541	510	360	110-305	28,01	WS2N-X-1264A
12	600	560	621	541	510	520	110-465	31,65	WS2N-X-1265A
15	600	400	755	674	510	360	110-305	31,4	WS2N-X-1564A
15	600	560	755	674	510	520	110-465	35,49	WS2N-X-1565A
18	600	400	888	808	510	360	110-305	34,81	WS2N-X-1864A
18	600	560	888	808	510	520	110-465	39,33	WS2N-X-1865A
21	600	400	1022	942	510	360	110-305	38,2	WS2N-X-2164A
21	600	560	1022	942	510	520	110-465	43,16	WS2N-X-2165A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

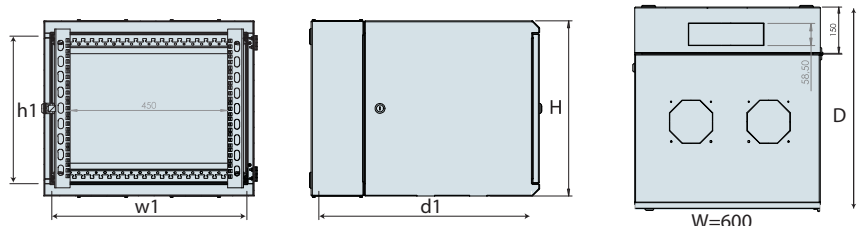
Double Section Wallmount Cabinet

Technical Features

- Material** 1,5 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 100 kg.
- Finish** Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame
- ✓ Glass door with cylindrical lock
- ✓ Accessible from rear side with double hinged design
- ✓ 1 Pair of heavy duty 19" Mounting Rails
- ✓ RoHS compliant, UL and Gost-R Certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
6	600	300+150	366	266	530	260+120	110-205	20,23	WKD-X-0664A
6	600	500+150	366	266	530	460+120	110-405	22,4	WKD-X-0666A
9	600	300+150	500	400	530	260+120	110-205	29,93	WKD-X-0964A
9	600	500+150	500	400	530	460+120	110-405	32,44	WKD-X-0966A
12	600	300+150	632	532	530	260+120	110-205	38,67	WKD-X-1264A
12	600	500+150	632	532	530	460+120	110-405	42,87	WKD-X-1266A
15	600	300+150	766	666	530	260+120	110-205	46,34	WKD-X-1564A
15	600	500+150	766	666	530	460+120	110-405	52,61	WKD-X-1566A
18	600	300+150	900	800	530	260+120	110-205	55,46	WKD-X-1864A
18	600	500+150	900	800	530	460+120	110-405	62,9	WKD-X-1866A
21	600	300+150	1034	934	530	260+120	110-205	64,67	WKD-X-2164A
21	600	500+150	1034	934	530	460+120	110-405	72,43	WKD-X-2166A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

Wallmount Cabinets

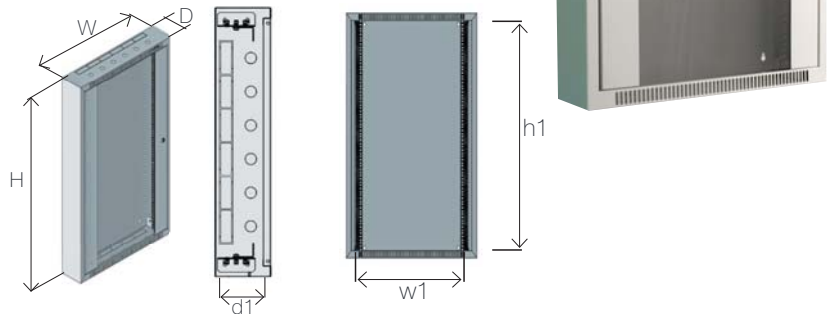
Slim Line Wallmount Cabinet

Technical Features

- Material** 1,2 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 75 kg.
- Finish** Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame
- ✓ Glass door with cylindrical lock
- ✓ Slim line solution for restricted areas
- ✓ 1 Pair of heavy duty 19" mounting rails
- ✓ RoHS compliant, UL and Gost-R certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	Weight kg	Part No
12	600	150	599	534	525	113	12,3	WKF-X-1261A
15	600	150	733	667	525	113	14,6	WKF-X-1561A
24	600	125	1133	1067	525	85	20,7	WKF-X-2461A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

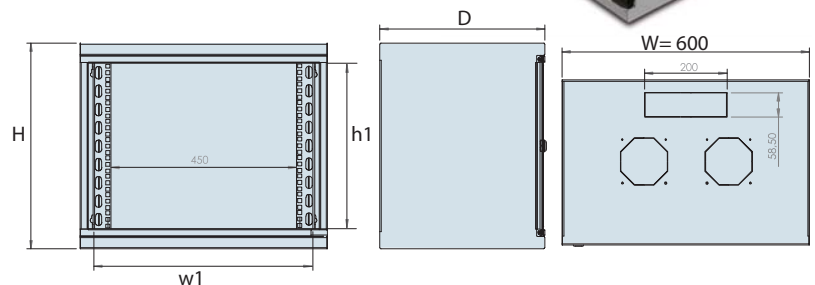
Single Wallmount Cabinet

Technical Features

- Material** 1,5 mm steel
- Color** RAL 7035 or RAL 9005
- Maximum Static Load** Up to 75 kg.
- Finish** Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame monoblock chassis
- ✓ Glass door with cylindrical lock
- ✓ 1 Pair of heavy duty 19" mounting rails
- ✓ IP Protection can be applied as an option
- ✓ RoHS compliant, UL and Gost-R certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	19" Rails Adjustable Depth Range (c)	Weight kg	Part No
6	600	500	366	266	530	450	110-405	21,34	WKF-X-0665A
9	600	500	500	400	530	450	110-405	25,68	WKF-X-0965A
12	600	500	632	532	530	450	110-405	28,46	WKF-X-1265A
15	600	500	766	666	530	450	110-405	32,86	WKF-X-1565A
18	600	500	900	800	530	450	110-405	36,59	WKF-X-1865A
21	600	500	1034	934	530	450	110-405	42,6	WKF-X-2165A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

Wallmount Cabinets

19" SOHO Cabinet

Technical Features

Material 1,2 mm steel

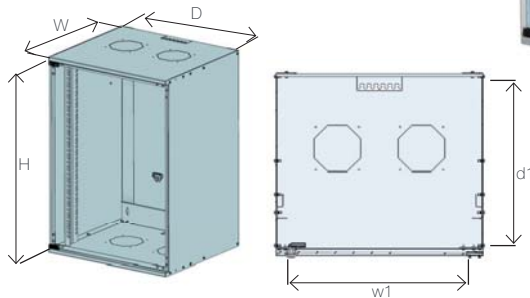
Color RAL 7035 or RAL 9005

Maximum Static Load Up to 50 kg.

Finish Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel frame
- ✓ Glass door with cylindrical lock
- ✓ 1 Pair of heavy duty 19" mounting rails
- ✓ Flatpack option available
- ✓ Low cost alternative
- ✓ RoHS compliant, UL and Gost-R certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	Weight kg	Part No
6	316	310	350	275	478	422	5,89	WCS-X-0654A
9	500	450	469	408	478	422	7,97	WCS-X-0954A
12	500	450	603	543	478	422	10,05	WCS-X-1254A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

10" SOHO Cabinet

Technical Features

Material 1,2 mm steel

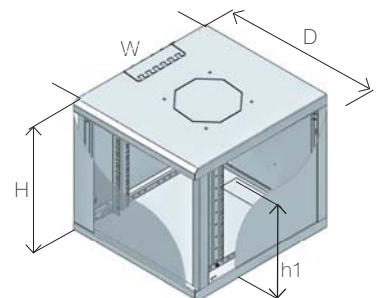
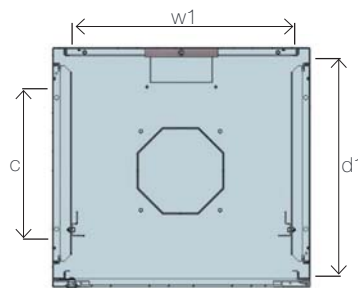
Color RAL 7035 or RAL 9005

Maximum Static Load Up to 50 kg.

Finish Electrostatic Powder Paint

Standard Configuration:

- ✓ Steel Frame
- ✓ Glass door with cylindrical lock
- ✓ Openable side panels
- ✓ 1 Pair of heavy duty 10" mounting rails
- ✓ RoHS compliant, UL and Gost-R certificated



Order Information

Height U	Outer Width (W) mm	Outer Depth (D) mm	Outer Height (H) mm	Inner Height (h1) mm	Inner Width (w1) mm	Inner Depth (d1) mm	Weight kg	Part No
6	316	310	350	177			17	WCT-X-0633A

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black



Accessories

Canovate offers a wide range of accessories to provide the best cable management and installation options for the complex requirements of IT users. Canovate believes that a proper and safe cabling is a real challenge for the installers and thus we try to offer the best variety to satisfy all their requirements

Accessories

19" Cantilever Shelf



Material 1,5 mm Steel **Maximum Static Load** 15-25 kg
Finish Electrostatic Powder Paint **Packaging** Bubble Nylon

H (U)	D (mm)	W (mm)	Inner W (mm)	Weight kg	Part No
1U	150	483	437	0,84	CCA-X-1001
2U	250	483	437	1,58	CCA-X-1002
2U	400	483	437	2,43	CCA-X-1003

19" Heavy Duty Fixed Shelf



Material 1,5 mm Steel **Maximum Static Load** 100 kg
Finish Electrostatic Powder Paint **Packaging** One piece in a box

H (U)	D (mm)	W (mm)	Inner W (mm)	Weight kg	Part No
1U	400	483	435	2,95	CCA-X-1008
1U	600	483	435	3,95	CCA-X-1009
1U	800	483	435	4,95	CCA-X-1010
1U	1000	483	435	5,95	CCA-X-1011

19" Drawer



Material 1,5 mm Steel **Maximum Static Load** 35 kg
Finish Electrostatic Powder Paint **Packaging** Bubble Nylon

H (U)	D (mm)	W (mm)	Inner W (mm)	Weight kg	Part No
2U	500	483	435	6,36	CCA-X-1016
3U	500	483	435	9,54	CCA-X-1017

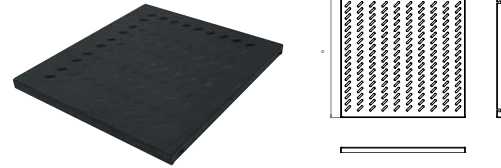
19" 1U Fan Module



Fan Speed 2700 - 3100 rpm **Packaging** One piece in a box
Material 1,5 mm Steel **Finish** Electrostatic Powder Paint
Air Flow 95 -115 CFM **Noise** 44 - 49 dB (A)
Operating Voltage AC 220 - 240 Volts 50/60 Hz
Standards Conforms to IEC 297-1

H (U)	D (mm)	W (mm)	Number of Fans	Weight kg	Part No
1U	258	483	3	4,19	CCA-X-2001

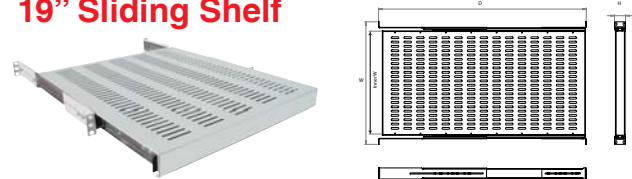
19" Fixed Shelf



Material 1,0 mm Steel **Finish** Electrostatic Powder Paint
Maximum Static Load 50 kg **Packaging** One piece in a box

H (U)	D (mm)	W (mm)	Inner W (mm)	Weight kg	Part No
1U	400	465	465	1,22	CCA-X-1004
1U	600	465	465	1,83	CCA-X-1005
1U	800	465	465	2,44	CCA-X-1006
1U	1000	465	465	3,05	CCA-X-1007

19" Sliding Shelf



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint
Maximum Static Load 35 kg **Packaging** One piece in a box

H (U)	D (mm)	W (mm)	Inner W (mm)	Weight kg	Part No
1U	400	483	435		CCA-X-1012
1U	600	483	435	3,56	CCA-X-1013
1U	800	483	435		CCA-X-1014
1U	1000	483	435		CCA-X-1015

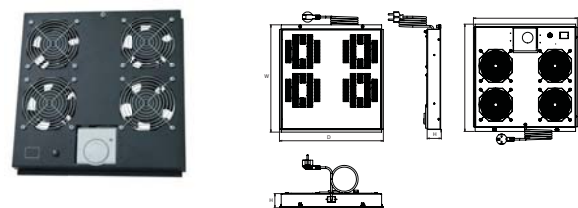
Fan Module for Wall Mount Enclosures



Material 0,8 mm Steel
Finish Electrostatic Powder Paint **Air Flow** 95 -115 CFM
Operating Voltage AC 220 - 240 Volts 50/60 Hz
Noise 44 - 49 dB (A) **Standards** Conforms to IEC 297-1
Packaging One piece in a box **Fan Speed** 2700 - 3100 rpm

H (mm)	D (mm)	W (mm)	Number of Fans	Weight kg	Part No
39	135	326	1	1,27	CWA-X-2001
39	135	326	2	1,80	CWA-X-2002

Fan Module for inorax-ST series



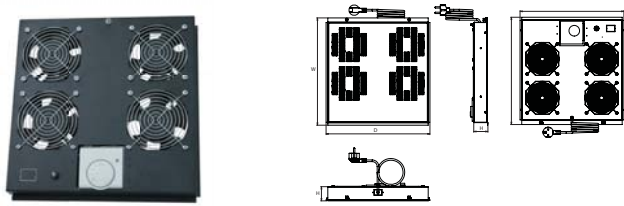
Material 0,8 mm Steel **Fan Speed** 2700 - 3100 rpm
Air Flow 95 -115 CFM **Finish** Electrostatic Powder Paint
Operating Voltage AC 220 - 240 Volts 50/60 Hz
Noise 44 - 49 dB (A) **Packaging** One piece in a box
Standards Conforms to IEC 297-1

H (mm)	D (mm)	W (mm)	Number of Fans	Weight kg	Part No
47	375	363	2	2,90	CSA-X-2001
47	375	363	4	3,95	CSA-X-2002

* X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Accessories

Fan Module for inorax-AI Series



Operating Voltage AC 220 - 240 Volts 50/60 Hz
Standards Conforms to IEC 297-1 **Finish** Electrostatic Powder Paint
Material 1,5 mm Steel **Air Flow** 95 - 115 CFM **Noise** 44 - 49 dB (A)
Fan Speed 2700 - 3100 rpm **Packaging** One piece in a box

H (mm)	D (mm)	W (mm)	Number of Fans	Weight kg	Part No
47	375	363	2	3,76	CPA-X-2001
47	375	363	4	4,81	CPA-X-2002
47	510	363	6	6,74	CPA-X-2003

19" 1U Plastic Blanking Panel



Material Plastic ABS **Packaging** One piece in a box

H (U)	W (mm)	D (mm)	Weight kg	Part No
1U	6	6	0,08	CCA-X-4001

19" Plastic Cable Organizer



Material 1,5 mm Steel, Plastic
Packaging One piece in a box **Finish** Electrostatic Powder Paint

H (U)	W (mm)	D (mm)	Weight kg	Part No
1U	483	80	0,49	CCA-0-5001

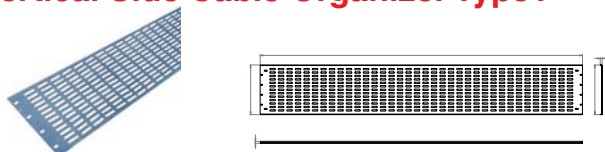
19" Covered Cable Organizer



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint
Packaging One piece in a box

H (U)	W (mm)	Weight kg	Part No
1U	483	0,6	CCA-X-5004

Vertical Side Cable Organizer Type1



Material 1,5 mm Steel **Finish** Zinc Plated
Packaging 2 pieces in Bubble Nylon

H (U)	H (mm)	D (mm)	W (mm)	Weight kg	Part No
26U	1246	10	260	3,20	CCA-0-5011
32U	1510	10	260	3,86	CCA-0-5012
36U	1686	10	260	4,36	CCA-0-5013
39U	1820	10	260	4,74	CCA-0-5014
42U	1950	10	260	5,11	CCA-0-5015
47U	2170	10	260	5,74	CCA-0-5016

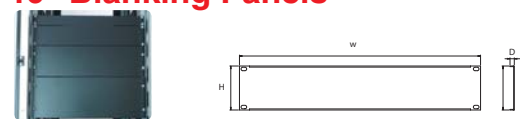
Plinth for inorax



Material 2 mm Steel **Packaging** One piece in a box
Finish Electrostatic Powder Paint

H (mm)	D (mm)	W (mm)	Weight kg	Part No
90	600	600	5,95	CCA-X-3001
90	600	800	7,10	CCA-X-3002
90	600	1000	7,96	CCA-X-3003
90	600	1100	8,83	CCA-X-3004
90	600	1200	9,71	CCA-X-3005
90	800	800	7,27	CCA-X-3006
90	800	1000	8,14	CCA-X-3007
90	800	1100	9,01	CCA-X-3008
90	800	1200	9,89	CCA-X-3009

19" Blanking Panels



Material 1,2 mm Steel **Finish** Electrostatic Powder Paint
Packaging One piece in a box

H (U)	W (mm)	D (mm)	Weight kg	Part No
1U	483	9	0,26	CCA-X-4002
2U	483	9	0,46	CCA-X-4003
4U	483	9	0,86	CCA-X-4004

19" Ventilated Blanking Panels



Material 1,2 mm Steel **Finish** Electrostatic Powder Paint
Packaging One piece in a box

H (U)	W (mm)	D (mm)	Weight kg	Part No
1U	483	9	0,24	CCA-X-4005
2U	483	9	0,42	CCA-X-4006

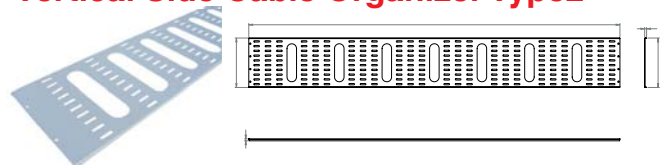
Cable Hook



Material Steel **Finish** Zinc Plated **Packaging** 1 Pc in a Nylon

H (mm)	W (mm)	D (mm)	Weight kg	Part No
100	60	100	0,09	CCA-0-5002
170	60	80	0,10	CCA-0-5003

Vertical Side Cable Organizer Type2



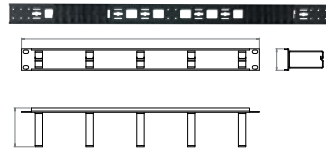
Material 1,5 mm Steel **Finish** Electrostatic Powder Paint
Packaging 2 pieces in a box

H (U)	H (mm)	D (mm)	W (mm)	Weight kg	Part No
26U	1246	10	260	3,00	CCA-X-5017
32U	1510	10	260	3,61	CCA-X-5018
36U	1686	10	260	4,01	CCA-X-5019
39U	1820	10	260	4,44	CCA-X-5020
42U	1950	10	260	4,79	CCA-X-5021
47U	2170	10	260	5,38	CCA-X-5022

* X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Accessories

Modular Adjustable Vertical Cable Organizer Type1



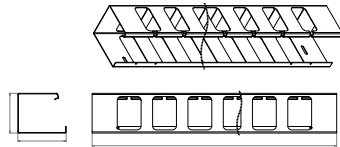
Material 1,5 mm Steel **Finish** Electrostatic Powder Paint
Packaging 1 piece in a box **Module Capacity** Max 10 pieces
Mounting Back Plane

H (U)	D (mm)	W (mm)	Weight kg	Part No
42U	13	120	2,83	CCA-X-5023
47U	13	120	3,17	CCA-X-5024

Module

H (mm)	D (mm)	W (mm)	Weight kg	Part No
150	70	90	0,42	CCA-X-5025

Vertical Cable Organizer



Material 1,5 mm Steel
Packaging 2 pieces in a box **Finish** Electrostatic Powder Paint

H (U)	D (mm)	W (mm)	Weight kg	Part No
26U	92	100	3,80	CCA-X-5005
32U	92	100	4,10	CCA-X-5006
36U	92	100	4,70	CCA-X-5007
39U	92	100	5,10	CCA-X-5008
42U	92	100	5,50	CCA-X-5009
47U	92	100	6,20	CCA-X-5010

19" 1U Light



Material Anodized Aluminum Extrusion **Power Consumption** 11W
Packaging One piece in a box **Finish** Electrostatic Powder Paint
Voltage AC 220 - 240 Volts 50/60 Hz

Length (U)	D (mm)	W (mm)	Weight kg	Part No
400	15	24	0,25	CCA-0-7025

Cable Clamp for C-Rail



Material Steel
Finish Zinc Plated
Packaging 5 Pieces in a box

Cable Diameter mm	Weight kg	Part No
8 - 12	0,042	CCA-0-5041
11 - 18	0,048	CCA-0-5042
12 - 23	0,054	CCA-0-5043

19" Cable Entry



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint
Packaging One piece in a box

H (U)	D (mm)	W (mm)	Weight kg	Part No
1U	9	483	0,16	CCA-X-5029
2U	9	483	0,25	CCA-X-5030

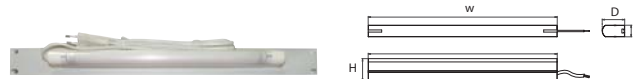
19" Cable Entry with Brush



Material 1,5 mm Steel, Brush **Finish** Electrostatic Powder Paint
Packaging One piece in a box

H (U)	D (mm)	W (mm)	Weight kg	Part No
1U	10	483	0,2	CCA-X-5031
2U	10	483	0,3	CCA-X-5032

19" 1U Light



Material 1,2 mm Steel **Finish** Electrostatic Powder Paint
Packaging One piece in a box **Power** 11W
Voltage AC 220 - 240 Volts 50/60 Hz

H (U)	D (mm)	W (mm)	Weight kg	Part No
1U	53	483	0,5	CCA-X-7001

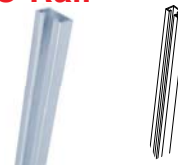
Cable Clamp Rail



Material 1,5 mm Steel **Finish** Zinc Plated
Packaging One piece in a box

Length (mm)	H (mm)	W (mm)	Weight kg	Part No
600	64	15	0,36	CCA-0-5033
800	64	15	0,48	CCA-0-5034
1000	64	15	0,60	CCA-0-5035
1200	64	15	0,72	CCA-0-5036

C-Rail



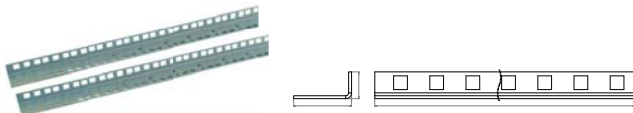
Material Anodized Aluminum Profile
Finish Anodization
Packaging One piece in a box

Length (mm)	H (mm)	W (mm)	Weight kg	Part No
600	20	34	0,30	CCA-0-5037
800	20	34	0,39	CCA-0-5038
1000	20	34	0,49	CCA-0-5039
1200	20	34	0,59	CCA-0-5040

* X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Accessories

Chassis Rail



Material 2 mm Steel **Finish** Zinc Plated

Packaging 2 pieces in a box

Length (mm)	H (mm)	W (mm)	Weight kg	Part No
600	1,9	3,3	0,47	CCA-0-7002
800	1,9	3,3	0,63	CCA-0-7003
1000	1,9	3,3	0,79	CCA-0-7004

Integral Console + KVM



Integral console controls computers and servers inside cabinets or server room with one LCD monitor, keyboard and mouse. This prevents unnecessary costs and saves space.

Sliding rail mount reduces occupied space inside cabinets. 8 or

16 computers can be connected. Daisy chain structure provides 3 level cascade connection and controllability up to 999 computers.

Technical Specifications

17"/19" TFT LCD Display

8/16 Port KVM Switch

On Screen Display

Hot Key Function

Hot Plug Function

LCD Panel Size	Connection Type	8 Port	Part 16 Port
17"	USB	CCA-O-8001	CCA-O-8005
17"	PS/2	CCA-O-8002	CCA-O-8006
19"	USB	CCA-O-8003	CCA-O-8007
19"	PS/2	CCA-O-8004	CCA-O-8008

Baying Kit for inorax-Al Series



Material 2 mm Galvanized Steel

Packaging 4 pieces in a set

H (mm)	D (mm)	W (mm)	Weight kg	Part No
10	66	50	0,055	CPA-0-7001

Stabilizer for Ceiling

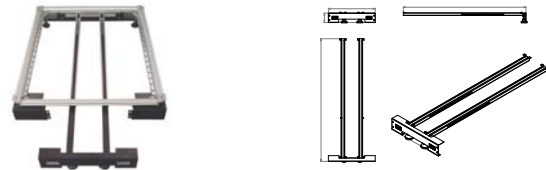


Material 1,5 mm Steel **Finish** Zinc Plated

Set Kit includes 4 pcs vertical profiles and 2 pcs ceiling fixing profiles, bolts

Cabinet D (mm)	H (mm)	Part No
300 (ETSI)	1000	CCA-0-7005
600	1000	CCA-0-7006
800	1000	CCA-0-7007
1000	1000	CCA-0-7008
1200	1000	CCA-0-7009

Sliding Anti-Swing Stabilizer



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 piece in a set

H (mm)	D (mm)	W (mm)	Weight kg	Part No
90	600	1000	9,47	CPA-X-3019
90	600	1100	10,50	CPA-X-3020
90	600	1200	11,64	CPA-X-3021
90	800	800	11,70	CPA-X-3022
90	800	1000	12,63	CPA-X-3023
90	800	1100	14,01	CPA-X-3024
90	800	1200	15,28	CPA-X-3025

Earthing Kit



Material Copper **Finish** PVC Jacket

Packaging One set in a box **Packaging** 4 pcs

Length (mm)	Cross Section	Weight kg	Part No
300	2,5	0,08 kg	CCA-0-7017

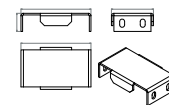
Earthing Bar



Material Copper **Finish** PVC Jacket **Packaging** One set in a box

Length (mm)	Cross Section	Weight kg	Part No
490	2,5	0,3 kg	CCA-0-7019

Baying Kit for inorax Series

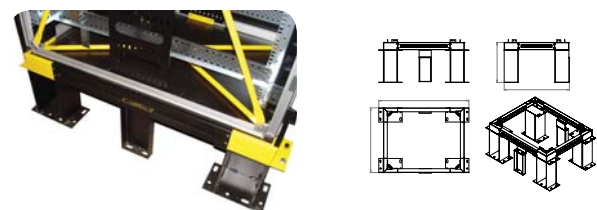


Material 2 mm Galvanized Steel

Packaging 4 pieces in a set

H (mm)	D (mm)	W (mm)	Weight kg	Part No
23	86	52	0,125	CSA-0-7001

Stabilizer for raised floor



Material 3 mm Steel **Finish** Electrostatic Powder Paint

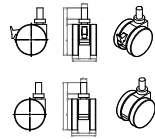
Set Kit includes 4 or 6 pcs anchor sets

Raised Floor H	Cabinet D	# of Anchors	Set Weight kg	Part No
300	< 800	4	44,68	CCA-X-7010
300	> 800	6	67,02	CCA-X-7011
600	< 800	4	89,36	CCA-X-7012
600	> 800	6	134,04	CCA-X-7013

* X : Color code = 7: RAL 7035 (Grey); 9: RAL 9005 (Black)

Accessories

Heavy Duty Castor Set

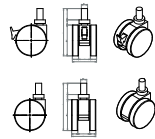


Material Steel and Plastic ABS **Finish** Zinc Plated

Packaging 2 pcs with stopper and 2 pcs without stopper in a box

Maximum Static Load	Set Weight kg	Part No
600 kg / piece	0.77	CCA-0-7016

Castor Set

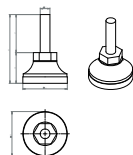


Material Steel and Plastic ABS **Finish** Zinc Plated

Packaging 2 pcs with stopper and 2 pcs without stopper in a box

Maximum Static Load	Set Weight kg	Part No
250 kg / piece	0.77	CCA-0-7015

Adjustable Feet



Material Steel and Plastic ABS **Finish** Zinc Plated

Packaging 4 pcs in a box

Maximum Static Load	Set Weight kg	Part No
600 kg / piece	0.35	CCA-0-7014

Cage Nut & Bolt & Plastic Cup Washer Set



Material Steel **Diameter** 6 mm (M6) **Finish** Zinc Plated

One Set Includes 20 pieces of M6x15 Screw, M6 Nut, M6 Polyamid Washer

Quantity in a set	Set Weight kg	Part No
20	0,10	CCA-0-7018

Separator for Bayed Cabinets

Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

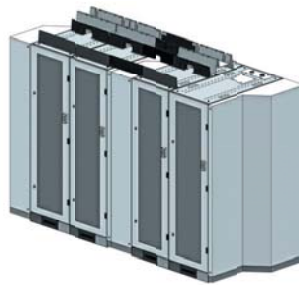
For Inorax Series

H (mm)	D (mm)	Part No
42U	1000	CSA-X-8003
42U	1200	CSA-X-8004
47U	1000	CSA-X-8005
47U	1200	CSA-X-8006

For Inorax-Al Series

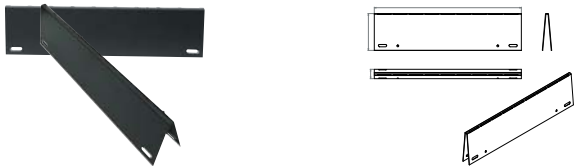
H (mm)	D (mm)	Part No
42U	1000	CPA-X-8003
42U	1200	CPA-X-8004
47U	1000	CPA-X-8005
47U	1200	CPA-X-8006

Accessories



Canovate recommends to use special cable channel systems on top of the cabinets, where you don't have any raised floor or cable tray systems in your datacenters. This system is especially a very cost effective solution for datacenters with cold aisle containment systems and inrow front coolers, where you don't need a raised floor. These channel system helps to guide, route and manage any copper or fiber cable directly through the top cover inside the rack.

Data Cable Gate Shield

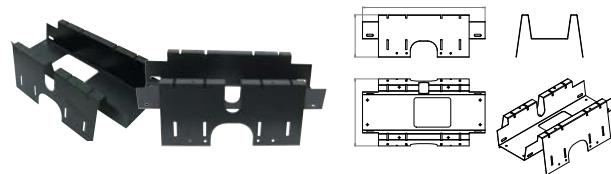


Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

W (mm)	D (mm)	H (mm)	Weight kg	Part No
500	75	125	1,50	CPA-X-6008

Power Cable Gate

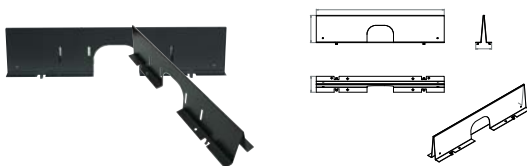


Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

W (mm)	D (mm)	H (mm)	Weight kg	Part No
500	275	175	3,15 kg	CPA-X-6001

Data Cable Shield with Double Side Entry



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

Cabinet W(mm)	W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	580	100	125	1,82	CPA-X-6006
800	735	100	125	2,31	CPA-X-6007

Data Cable Gate Shield with Double Side Entry



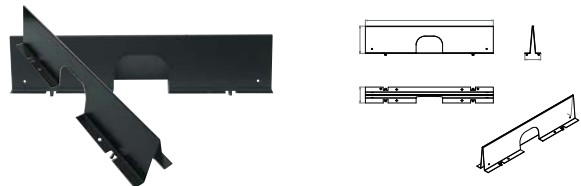
Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

W (mm)	D (mm)	H (mm)	Weight kg	Part No
500	275	175	1,31	CPA-X-6009

X (Color code): 7:RAL 7035 Light Grey, 9:RAL 9005 Black

Data Cable Shield with One Side Entry

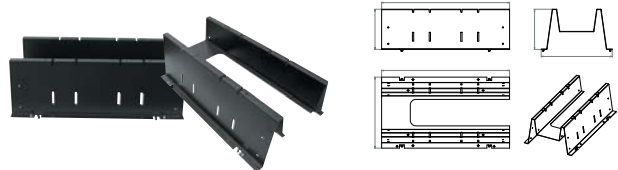


Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

Cabinet W(mm)	W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	580	125	100	1,87	CPA-X-6010
800	735	125	100	2,75	CPA-X-6011

Power Cable Inlet



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

Cabinet W(mm)	W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	580	340	185	4,84	CPA-X-6002
800	735	340	185	6,15	CPA-X-6003

Power Cable Channel



Material 1,5 mm Steel **Finish** Electrostatic Powder Paint

Packaging 1 pc in a box

Cabinet W(mm)	W (mm)	D (mm)	H (mm)	Weight kg	Part No
600	580	340	185	5,03	CPA-X-6004
800	735	340	185	6,35	CPA-X-6005

inorax Outdoor Enclosures



inorax Outdoor Enclosures
Protected like a bunker for all harsh environments

inorax Outdoor Enclosures

Outdoor enclosures and climate control components do withstand even the toughest environmental (sunlight, rain, flood, humidity, dust, so on) conditions. From basic requirements such as humidity, temperature fluctuations and sunlight, to extreme conditions such as seawater resistance or vibration-earthquake resistance, through to protection against vandalism, Canovate has the answer. In this way, we ensure that there are no limits to our customers' applications including DSLAM, MSAN, VDSL, 3G and 4G GSM networks, railway, energy and traffic monitoring and transmission applications. Canovate aluminum, stainless steel and galvanized steel based outdoor cabinets offer maximum protection against environmental impacts, vandalism, EMC and extreme thermal conditions. Canovate Outdoor Climate Control solutions provide everything you need to protect your electronic equipment investment. All weather-tested enclosure air conditioners, heat exchangers, fans, and heaters are especially designed for extreme outdoor conditions to ensure constant interior temperature performance.

Double Layer Aluminum



Highlights

- IP 55 protection
- Solid extruded aluminum profile construction- Completely Weld free structure
- Double layer doors and panels with natural ventilation system and integrated isolation material
- Double layer construction (sandwich technology) ensures maximum heat dissipation by low influence of sun irradiation and offers maximum sealing effect
- Special sun reflecting and anti-graffiti outdoor paint ensures up to 6 °C temperature isolation
- Indoor paint ensures humidity absorbance by collecting humidity created by active devices on the surface of the inner roof
- Ventilated roof top ensures maximum ventilation through creating a chimney effect
- Special bumps on all doors and panels disables advertisement material posting on surfaces adversely effecting the appropriate ventilation required for heat exchangers and AC units
- Anti-vandal design
- External access totally impossible provided by hidden hinges
- Robust stainless steel locking system
- Maximum protection against environmental impacts, vandalism, EMC and extreme thermal effects
- 19" mounting rails for active equipment
- Separate battery, 19", MDF and other sections according to customized requirements
- Laptop shelves on doors
- Customer-specific solutions for installation and future expansions
- Fully integrated heat exchangers, air-conditioning and internal heating are available upon request

Double Layer Stainless/Galvanized Steel



Highlights

- IP 55 protection
- Resistant construction against corrosion and harsh conditions
- Double layer doors and panels with isolation material inside
- Double layer construction with special isolation material (sandwich technology) ensures maximum heat dissipation by low influence of sun irradiation and offers maximum sealing effect
- Special outdoor paint resistant to adverse weather conditions
- Separate battery, 19", MDF and other sections according to customized requirements
- Anti-vandal design
- Robust stainless steel locking system
- Maximum protection against environmental impacts, vandalism, EMC and extreme thermal effects
- 19" mounting rails for active equipment
- Customer-specific solutions for installation and future expansions
- Fully integrated heat exchangers, air-conditioning and internal heating are available upon request

inorax Outdoor Enclosures

inorax-09 Outdoor Cabinet

Technical Features

Material

Frame : Extruded aluminum,
Doors and panels: Double layer aluminum/stainless steel/galvanized steel
Material thickness can be up to 4 mm

Protection Level IP55

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required
DIN 50939 chromating

Technical Specifications 3 sections: 19" Systems + MDF+ Power, 3 doors Top Mounted Heat Exchanger

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Related Accessories Rack Monitoring System
Power Distribution Units



Order Information

Height mm	Width mm	Depth mm	Part No
1700	1155	414	OAD-7-1001

Minimum Order Quantity:50 Pcs.



MDF Section



Top Mountable Heat exchanger



Power Box Section

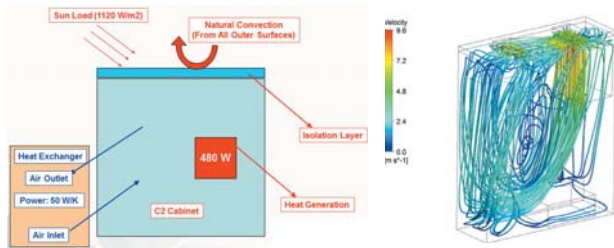


19" Active Equipment Section

Thermal Test

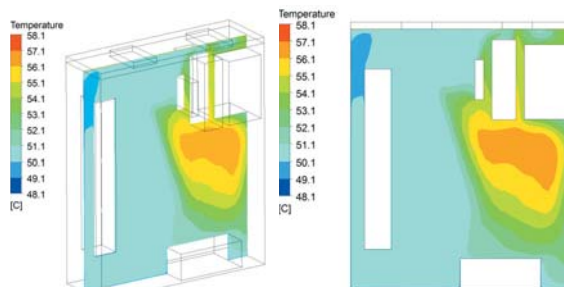
Thermal study for extreme climatic conditions are done in approved laboratories

Boundary Conditions



Streamlines, coloured with flow velocity

Temperature Distributions



inorax Outdoor Enclosures

inorax-10 Outdoor Cabinet

Technical Features

Material

Frame : Extruded aluminum,
Doors and panels: Double layer aluminum/stainless steel/galvanized steel
Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required
DIN 50939 chromating **Protection Level** IP55

Technical Specifications 4 sections: 2x 19" Systems + MDF+Battery,
7 doors Heat exchangers & AC units can be mounted on the doors

Order Information

Height mm	Width mm	Depth mm	Part No
1500	1900	900	OAD-7-1002

Minimum Order Quantity:50 Pcs.



inorax-11 Outdoor Cabinet

Technical Features

Material

Frame : Extruded aluminum
Doors and panels: Double layer aluminum/stainless steel/galvanized steel
Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required
DIN 50939 chromating **Protection Level** IP55

Technical Specifications 3 sections: 19" Systems + MDF+Battery, 4 doors Heat exchangers & AC units can be mounted on the doors

Related Accessories Rack Monitoring System
Power Distribution Units



Order Information

Height mm	Width mm	Depth mm	Part No
1500	1600	900	OAD-7-1003
1390	1250	805	OAD-7-1004

Minimum Order Quantity:50 Pcs.



Side View



inorax Outdoor Enclosures

inorax-18 Outdoor Cabinet

Technical Features

Material

Frame : Extruded aluminum
 Doors and panels: Double layer aluminum/stainless steel/galvanized steel
 Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required DIN 50939 chromating **Protection Level** IP55

Technical Specifications 7 sections: 19" Systems + MDF+ Power Distribution + Power meter + Fans+ 2 x Battery,
 Access is available from front, side, rear and top

Order Information

Height mm	Width mm	Depth mm	Part No
1620	920	450	OAD-7-1005

Minimum Order Quantity:50 Pcs.



inorax-19 Outdoor Cabinet

Technical Features

Material

Frame : Extruded aluminum,
 Doors and panels: Double layer aluminum/stainless steel/galvanized steel
 Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required DIN 50939 chromating **Protection Level** IP55

Technical Specifications 7 sections: 19" Systems+Battery+ MDF+ Power Distribution + Power meter+ Fan+ Cable Storage
 Access is available from front, side, rear and top, cable storage at the bottom

Order Information

Height mm	Width mm	Depth mm	Part No
830	536	260	OAD-7-1006

Minimum Order Quantity:50 Pcs.



inorax Outdoor Enclosures

inorax-20 Outdoor Cabinet

Technical Features

Material

Frame : Extruded aluminum,
Doors and panels: Double layer aluminum/stainless steel/galvanized steel
Material thickness can be up to 4 mm

Protection Level IP55

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required
DIN 50939 chromating

Technical Specifications 3 sections: 19" Systems + MDF+ Power, 4 doors, Door Mounted Heat Exchanger

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Related Accessories Rack Monitoring System
Power Distribution Units



Order Information

Height mm	Width mm	Depth mm	Part No
1475	1687	566	OAD-7-1007



inorax-13 Outdoor Cabinet

Technical Features

Material

Frame : Aluminum/ Stainless Steel/ Galvanized steel
Doors and Panels:Double layer aluminum/stainless steel/galvanized steel
Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity&sun reflecting epoxy polyester outdoor paint, if required
DIN 50939 chromating

Protection Level IP55

Technical Specifications 4 sections: 2x 19" Systems + MDF+ Battery, 5 doors Heat exchangers & AC units can be mounted on the doors

Related Accessories Rack Monitoring System
Power Distribution Units



Order Information

Height mm	Width mm	Depth mm	Part No
1650	1774	790	OGD-7-1001

Minimum Order Quantity:50 Pcs.



inorax Outdoor Enclosures

inorax-14 Outdoor Cabinet

Technical Features

Material

Frame : Aluminum/ Stainless Steel/ Galvanized steel
 Doors and Panels: Double layer aluminum/stainless steel/galvanized steel
 Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity & sun reflecting epoxy polyester outdoor paint, if required DIN 50939 chromating

Protection Level IP55

Technical Specifications 4 sections: 2x 19" Systems + MDF+ Battery, 5 doors Heat exchangers & AC units can be mounted on the doors

Related Accessories Rack Monitoring System
 Power Distribution Units



Order Information

Height mm	Width mm	Depth mm	Part No
1650	1190	690	OGD-7-1002

Minimum Order Quantity: 50 Pcs.



inorax-21 Outdoor Cabinet

This outdoor cabinet is an ideal solution for Power and Gsm based applications

Technical Features

Material

Frame : Aluminum/ Stainless Steel/ Galvanized steel
 Doors and Panels: Double layer aluminum/stainless steel/galvanized steel
 Material thickness can be up to 4 mm

Tests ETS 300019 and IEC 68-2-57 (Earthquake, shock, vibration, transportation tests), EN 60529 and IEC5291 (IP 55 dust and waterproof tests), EN 60950 (Electrical and mechanical safety tests)

Finish Antigravity & sun reflecting epoxy polyester outdoor paint, if required DIN 50939 chromating

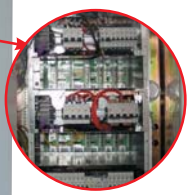
Protection Level IP55

Related Accessories Roxtec Special Cable inlet optional
 Earthing bar
 Depth adjustable 19" mounting rails and 2 sets of vertical organizer
 AC units can be mounted on the doors

Order Information

Height	Width mm	Depth mm	Part No
39U	600	900	OAD-7-1008

Minimum Order Quantity: 50 Pcs.



Internal Cabling and Assembly



Roxtec Cable Inlet

inorax Outdoor Enclosures

inorax-16 Outdoor Cabinet

This outdoor cabinet is an ideal small size solution for any 19" active equipment installation and a perfect fiber cross connect cabinet for FTTX applications.

Technical Features

Material Single layer galvanized steel - 2 mm **Protection Level** IP65

Plinth 250 mm (H) plinth is included in standard configuration

Finish Epoxy polyester outdoor paint, RAL 7035

Related Accessories Rack Monitoring System
Power Distribution Units



Highlights

- ✓ Weather-proof outdoor cabinet for installation of 19" active equipment and optical distribution modules
- ✓ Assembly of modular optical building blocks like splice, patch and splitter modules
- ✓ Provides a secure anchor for incoming loose tube cables within the cabinet
- ✓ Easy installation and removal
- ✓ Doors are protected from external access through hidden hinges
- ✓ High resistivity against corrosion
- ✓ 1 pair of 19 inch mounting rails (Optional 2 pairs)
- ✓ Single front door
- ✓ CNC controlled polyurethane (PUR) gasketing is available for all of the complete openable surfaces of the outdoor to provide IP65 protection degree, which is complying with the EN60529 standard
- ✓ 1,5 mm mounting plate for cable management on the back side
- ✓ C-rail for fixing cables on the back side

Optional:

- Mounting brackets for wall applications
- Ventilation unit on top (IP55 protection)
- Double front door
- Aluminum/Stainless steel material

Order Information

Height U	Height mm	Width mm	Depth mm	Weight kg	Part No
12U	912	620	450	53.00	OGS-7-1002
16U	1090	620	600	64.00	OGS-7-1003
24U	1200	620	600	82.00	OGS-7-1004

Minimum Order Quantity:10 Pcs.



Ventilation Unit Option
Top cover
designed for air circulation



Double front door option

inorax Outdoor Enclosures

inorax-17 Outdoor Cabinet SMC/Polycarbonate Cabinet

An ultimate solution for outdoor copper cable connection and distribution applications. Special glass fiber reinforced polycarbonate structure makes this cabinet an ideal solution for cross-connect applications of Telecom and Cable TV companies. The structure is a blend of low weight and high mechanical strength and its functional design gives extra advantages both for installation and cable management.

Technical Features

Material Glass fiber reinforced polycarbonate **Protection Level** IP55
Related Accessories Rack Monitoring System
 Power Distribution Units



Highlights

- ✓ Weather-proof outdoor cabinet for cross connect applications
- ✓ Double door access with 2400 pairs capacity (Krone Type)
- ✓ Front and rear door
- ✓ Locking systems: 3 points , 2 vertical bars, 1 lock
- ✓ Easy to install on a pedestal with bottom cable entries
- ✓ Impact resistant
- ✓ 4 Vertical mounting rails
- ✓ RAL7038

Order Information

Height mm	Width mm	Depth mm	Weigth kg	Part No
998	757	310	50	OPS-7-1001

Minimum Order Quantity:50 Pcs.



inorax-23 Outdoor SMC/Polycarbonate Cabinet

An ultimate solution for outdoor fiber cable connection and also distribution applications. Special glass fiber reinforced polycarbonate structure makes this cabinet an ideal solution for cross-connect applications of Telecom and Cable TV companies. The structure is a blend of low weight and high mechanical strength and its functional design gives extra advantages both for installation and cable management.

Technical Features

Material Glass fiber reinforced polycarbonate **Protection Level** IP54
Related Accessories Rack Monitoring System
 Power Distribution Units



Highlights

- ✓ Weather-proof outdoor cabinet for cross connect applications
- ✓ Double front door
- ✓ Door hinges circular type-stainless steel
- ✓ Locking systems: Latch-Type Cylindrical Lock 3 points, 2 vertical bars, 1 lock
- ✓ Professional cable management with sufficient number of entry holes (Suitable sized grommets or poke-out or punch-through) for incoming feeder cables and distributions cables
- ✓ Plinth with 4 entry panels on the front and back for fixing and management
- ✓ Cable Clamps to secure up to 18 mm diameter FOC.
- ✓ Impact resistant
- ✓ 4 Vertical mounting rails
- ✓ RAL7035

Order Information

Height mm	Width mm	Depth mm	Weigth kg	Part No
1100	1500	320	50	OPS-7-1002

Minimum Order Quantity:50 Pcs.



inorax Outdoor Enclosures

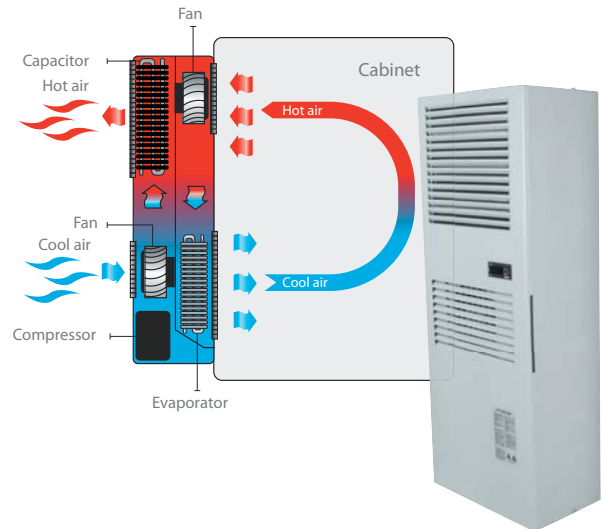
Thermal Management

Air conditioner

Ensures that the proper interior temperature is maintained inside your enclosure. Conveniently mounted on the front or rear door with adjustable internal, mid, or external mounting capability. These reliable products give you the flexibility you need to meet the stringent requirements for your unique outdoor application

Technical specifications

- ✓ Refrigeration capacity: 300W - 3500W
- ✓ Noise level: 65 dB, according to ETS300753 Class 4.1
- ✓ IP54 protection
- ✓ Feeding: AC
- ✓ Designed to ease regular maintenance
- ✓ Quick-removable front casing
- ✓ Components designed for quick cleaning and maintenance
- ✓ Easy filter replacement
- ✓ Lower maintenance costs
- ✓ CE approved

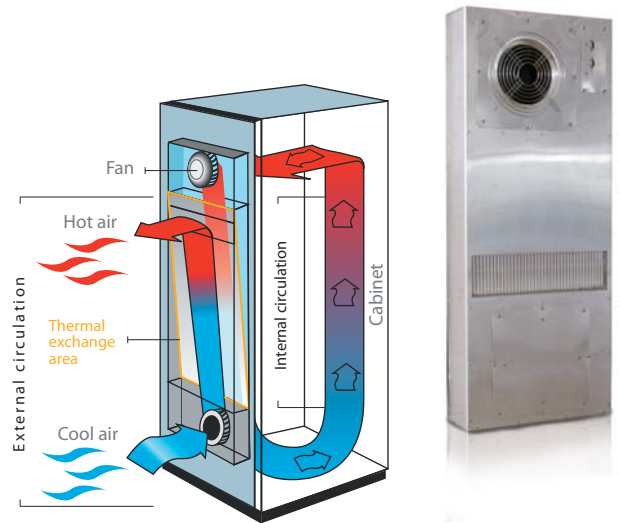


Air to Air heat exchangers

Outdoor Air to Air heat exchangers ensure that the proper interior temperature is maintained inside your enclosure. Conveniently mounted on the front or rear door with adjustable internal, mid, or external mounting capability. These reliable products give you the flexibility you need to meet the stringent requirements for your unique outdoor application. Closed-loop cooling maintains a clean, sealed internal environment to insure optimum performance and maximum life of the enclosed electronics, while protecting against the intrusion of airborne contaminants and humidity.

Technical specifications

- ✓ Capacity: 30W/K to 120W/K
- ✓ IP54 protection
- ✓ Noise level: 75 dB according ETS300753 Class 4.1 E
- ✓ Feeding: 48V DC ,
- ✓ Closed Loop Cooling for Controlled Environments
- ✓ Efficiently Coated Aluminum Heat-Transfer Core- Cross Flow Type
- ✓ Speed controlled fans
- ✓ CE approved

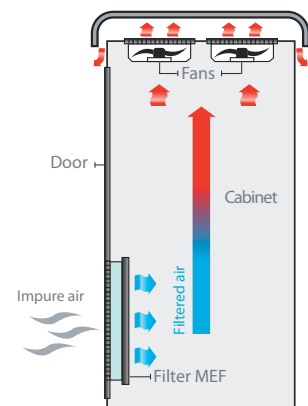


Direct Air Cooling-Membrane Filter & Fan system

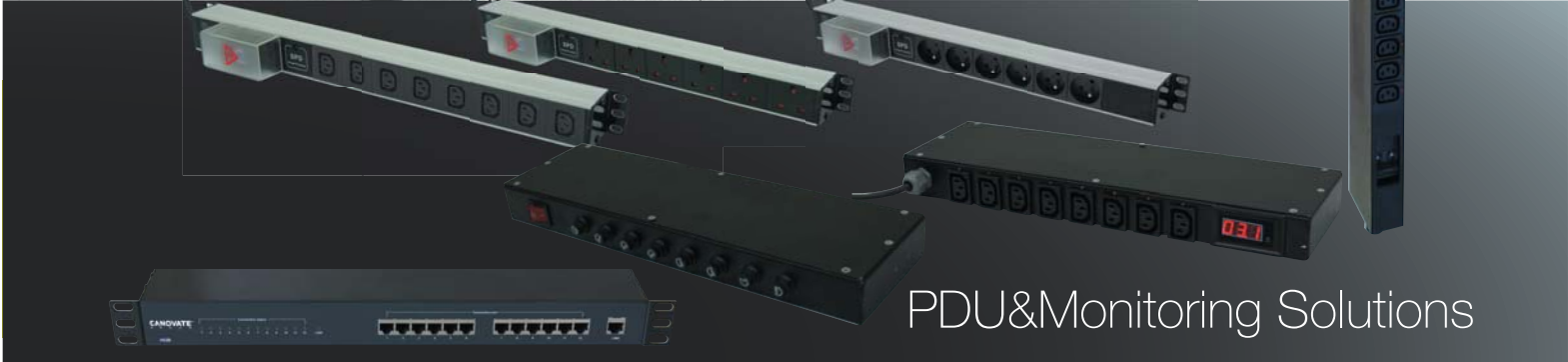
Unlike bulky heat exchangers and air-conditioning systems, Direct Air Cooling (DAC) systems with Membrane Cooling Filters have fewer mechanical parts. They are also easier to incorporate into cabinet designs, and require less maintenance. These cooling filters reduce ongoing operating costs, because they use less energy than mechanical systems; and reduce overall cabinet size to save space. Reliable protection of system electronics requires highly efficient filtering of ambient air to remove submicron particles and aerosols while also preventing water ingress into the cabinet. This is best achieved by using membrane filter, which provides 99% particle filtration efficiency at the 0.3um level yet still allows high airflows. Not only do membrane filters eliminate costly failures caused by corrosion and other pollutants, but they are also maintenance free and have longer lifetimes than non-membrane alternatives. Membrane filters have been specifically developed for outdoor cooling and protection under extreme environmental and climatic conditions.

Highlights

- ✓ Nominal dimension: 500 x 500 x 40mm
- ✓ Humidity resistance
- ✓ Classification EN779-F9
- ✓ Initial charge loss 15MMca



PDU Solutions



PDU&Monitoring Solutions

Canovate offers a full range of PDU's from basic and metered ones to IP PDU's with per socket switching capability and wireless sensor connectivity. Our PDU's can be used in the most complex ISP and Colocation datacenter applications and provide you the opportunity to control, monitor your energy consumption and help you to make the correct billing to your customers.

PDU Solutions

BASIC PDU

Density Single-power inlet; 7-12 outlets (Schuko-C13) per rack-mount 1.5U enclosure Max 36 outlet for vertical 0U models

Power 250VAC, 50/60 Hz, 16 or 32-Amp power inlet options. Single or 3 phase option

IEC C13 TYPE

Product Code	Product Description
PB-C06-010-116-W	1U 19" Aluminum 6 way with circuit breaker
PB-C06-100-116-W	1U 19" Aluminum 6 way with on/off switch (*)
PB-C08-010-116-W	1U 19" Aluminum 8 way with circuit breaker
PB-C08-100-116-W	1U 19" Aluminum 8 way with on/off switch (*)
PB-C12-010-116-W	1U Vertical Aluminum 12 way with circuit breaker
PB-C16-010-132	1,5U Vertical Aluminum 16 way with circuit breaker
PB-C18-010-132	1,5U Vertical Aluminum 18 way with circuit breaker



GERMAN TYPE (SCHUKO)

Product Code	Product Description
PB-S04-100-116-W	1U 19" Aluminum 4 way with on/off switch (*)
PB-S04-010-116-W	1U 19" Aluminum 4 way with circuit breaker
PB-S06-100-116-W	1U 19" Aluminum 6 way with on/off switch (*)
PB-S06-010-116-W	1U 19" Aluminum 6 way with circuit breaker
PB-S08-000-116-W	1U 19" Aluminum 8 way (*)
PB-S08-010-116-W	1U Vertical Aluminum 8 way with circuit breaker
PB-S08-100-116-W	1U 19" Aluminum 8 way with on/off switch (*)
PB-S12-010-116	1,5U Vertical Aluminum 12 way with circuit breaker
PB-S16-000-132	1,5U Vertical Aluminum 16 way (*)
PB-S16-010-132	1,5U Vertical Aluminum 16 way with circuit breaker
PB-S18-010-132	1,5U Vertical Aluminum 18 way with circuit breaker



UK TYPE

Product Code	Product Description
PB-U05-100-113-W	1U 19" Aluminum 5 way with on/off switch (*)
PB-U05-010-113-W	1U 19" Aluminum 5 way with circuit breaker
PB-U07-100-113	1,5U 19" Aluminum 7 way with on/off switch (*)
PB-U08-100-113	1,5U 19" Aluminum 8 way with on/off switch (*)
PB-U08-010-113	1,5U 19" Aluminum 8 way with circuit breaker
PB-U12-100-113	1,5U Vertical Aluminum 12 way with on/off switch (*)
PB-U12-010-113	1,5U Vertical Aluminum 12 way with circuit breaker
PB-U16-010-132	1,5U Vertical Aluminum 16 way with circuit breaker
PB-U18-010-132	1,5U Vertical Aluminum 18 way with circuit breaker



FRENCH TYPE

Product Code	Product Description
PB-F06-100-116-W	1U 19" Aluminum 6 way with on/off switch (*)
PB-F06-010-116-W	1U 19" Aluminum 6 way with circuit breaker
PB-F08-100-116-W	1U 19" Aluminum 8 way with on/off switch (*)
PB-F08-010-116	1,5U 19" Aluminum 8 way with circuit breaker
PB-F09-000-116-W	1U 19" Aluminum 9 way (*)
PB-F12-010-116	1,5U Vertical Aluminum 12 way with circuit breaker
PB-F16-010-132	1,5U Vertical Aluminum 16 way with circuit breaker



UNIVERSAL TYPE

Product Code	Product Description
PB-E06-100-116	1U 19" Aluminum 6 way with on/off switch (*)
PB-E06-010-116	1U 19" Aluminum 6 way with circuit breaker
PB-E08-100-116	1U 19" Aluminum 8 way with circuit breaker
PB-E08-010-116	1U 19" Aluminum 8 way with on/off switch (*)



Minimum Order Quantity: 30 Pcs.

For other options please contact to your sales representative
Canovate can make changes without notification

*Protection should be located in power distribution panel for the models without circuit breakers

PDU Solutions

Metered PDU

Density Single-power inlet; 6-11 (Schuko-C13) outlets per rack-mount 1.5U enclosure Max 32 outlet for vertical 0U models

Power 250VAC, 50/60 Hz, 16 or 32-Amp power inlet options.

Input Current Monitor Precisely measure the aggregate current (in amps) of power inlet. On-site verification of the input current with the LED digital display. (Optional voltage monitor)



Numeric Led display with ampermeter module Measures current between 0 and 30 A

Product Description	Schuko Type	UK Type	IEC C13 Type
1U 19" Aluminum 6 way with Ampermeter (*)	PA-S06-000-116	PA-U06-000-116	PA-C06-000-116
1,5U Vertical Aluminum 12 way with Ampermeter (*)	PA-S12-000-116	PA-U12-000-116	PA-C12-000-116
1,5U Vertical Aluminum 16 way with Ampermeter (*)	PA-S16-000-132	PA-U16-000-132	PA-C16-000-132
1,5U Vertical Aluminum 18 way with Ampermeter (*)	PA-S18-000-132	PA-U18-000-132	PA-C18-000-132

Minimum Order Quantity:30 Pcs.

*Protection should be located in power distribution panel for the models without circuit breakers

PROTECTED PDU

Density Single-power inlet; 5-10 (Schuko-C13) outlets per rack-mount 1.5U enclosure, Max 32 outlet for vertical 0U models

Power 250VAC, 50/60 Hz, 16 or 32-Amp power inlet options.

Protection Surge & spike protection, Circuit breaker, optional ON/OFF switch

Product Description	Schuko Type	UK Type	IEC C13 Type
1U 19" Aluminum 5 way with Ampermeter, SP (*)	PA-S05-001-116		PA-C05-001-116
1U 19" Aluminum 5 way with Ampermeter, CB	PA-S05-010-116	PA-U05-010-116	PA-C05-010-116
1U 19" Aluminum 4 way with Ampermeter, CB+SP	PA-S04-011-116		PA-C04-011-116
1,5U Vertical Aluminum 11 way with Ampermeter, SP (*)	PA-S11-001-116	PA-U11-001-116	PA-C11-001-116
1,5U Vertical Aluminum 11 way with Ampermeter, CB	PA-S11-010-116	PA-U11-010-116	PA-C11-010-116
1,5U Vertical Aluminum 10 way with Ampermeter, CB+SP	PA-S10-011-116	PA-U10-011-116	PA-C10-011-116
1,5U Vertical Aluminum 15 way with Ampermeter, SP (*)	PA-S15-001-132	PA-U15-001-132	PA-C15-001-132
1,5U Vertical Aluminum 15 way with Ampermeter, CB	PA-S15-010-132	PA-U15-010-132	PA-C15-010-132
1,5U Vertical Aluminum 14 way with Ampermeter CB+SP	PA-S14-011-132	PA-U14-011-132	PA-C14-011-132
1,5U Vertical Aluminum 17 way with Ampermeter, SP (*)	PA-S17-001-132	PA-U17-001-132	PA-C17-001-132
1,5U Vertical Aluminum 17 way with Ampermeter, CB	PA-S17-010-132	PA-U17-010-132	PA-C17-010-132
1,5U Vertical Aluminum 16 way with Ampermeter CB+SP	PA-S16-011-132	PA-U16-011-132	PA-C16-011-132

SP : Surge Protector CB : Circuit Breaker

*Protection should be located in power distribution panel for the models without circuit breakers

Minimum Order Quantity:30 Pcs.

PDU Solutions

Modular PDU

Canovate Modular PDU offers flexibility to design your own PDU that exactly meet your needs. The special light weighted housing design is the key to modularity. Also the wide range of modules, which enable users to mix and match socket styles, let you arrange the socket density in your applications. In addition to product choice and configuration flexibility the modules are also hot swappable. That means you can disconnect, change or swap any of the modules that is installed without stopping the whole PDU. Just detach devices that is connected to the module, remove the original and snap-in the replacement.

Main Unit

Density Single power inlet; 6xSlots for hot swappable modules.

Power 250VAC, 50/60 Hz, 32-Amp power inlet options.

Protection Circuit breaker on master module (5 slots stay to be configurable, if used)

Modules Hot swappable modules

Density Configurable with 3 way UK, 4 way Schuko, 5 way C13 outlets

Power 250VAC, 50/60 Hz, 16A

Product Code	Product Description
PM-002	Aluminum Housing with 2 Module Capacity
PM-004	Aluminum Housing with 4 Module Capacity
PM-006	Aluminum Housing with 6 Module Capacity

Product Code	Product Description
PQ-B02-010-116	Master Circuit Breaker Module
PQ-U03-000-116	3 way UK module
PQ-S04-000-116	4 way Schuko module
PQ-C05-000-116	5 way IEC module

Minimum Order Quantity:30 Pcs.

Master Circuit Breaker Module



4 way Schuko module



5 way IEC module



3 way UK module



Single Input



Extendable PDU

Extendable PDU is the most suitable solution to the users who want to control and maximize the space efficiency in the rack. The special design that is composed of two parts; the control unit and extension units, offers maximum modularity. PDU provides 28 outputs by connecting 4 extension units to one control unit. The control unit is zero-U rack mountable. You can install to the side or back of the rack without sacrificing any "U" space in the rack. Also the extension bars can be install to the frame of the rack.

Main unit

Density IEC 309 power inlet; 4xC19 cable outlets

Power 250VAC, 50/60 Hz, 32-Amp power inlet options.

Protection 2 poles Circuit breaker for each expansion unit

Expansion unit

Hot swappable expansion units with LED indicator

Density 1xC20 inlet for main unit connection, 7xC13 outlets

Power 250VAC, 50/60 Hz, 16A

Product Code	Product Description
PE-040-020-132	Control Unit with 4 Branch
PF-C07-000-116	Extension Unit with 7 C13 Sockets

Minimum Order Quantity:30 Pcs.

For other options please contact to your sales representative



Control Unit



Extension Unit



PDU Solutions

PDP Power Distribution Panel

Can be configured for AC or DC power distribution
 General protection with optional VMR, leakage relay, surge arrester and signalization auxiliary contact.

Function Protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in Telecom Network and IT systems.

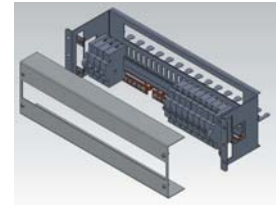
Power up to 4 kVA DC 7.3 kVA AC

Material 3U steel enclosure, neutral and grounding bars.

Applications Telco applications

Product Code	Product Description
PDP-AXX-010-132	230 V VAC, 32 A, 10 ports output PDP
PDP-DXX-010-163	-48 VDC, 63 A, 10 ports output PDP (*)

(*) Maximum 63 A



DC PDU

Density Double DC power inputs, 16 electrical connector type output, 2U enclosure

Power 32 to 76VDC input, 16- 32- 64 Ampere power output options. Max. 120 A.

Material 2U steel enclosure, plexiglass cover and internal separators. Viewable gap on the protection cover of breakers, Main bus bar for distribution to electrical connector contacts, Colored line outs and sequence numbers

Applications Telco applications, base stations

Product Code	Product Description
PDC-K10-010-132	-48 VDC, 32 A, 10 ports output PDU



High Protection PDU

Canovate offers a power distribution unit for both power protection and distribution for rack-mounted servers.

High Protection PDU provides twelve IEC C13 output receptacles that distribute power.

High Protection PDU also consumes rack U-space with 1U or ZeroU mounting options. The product has height of 4.4 cm which is suitable for both zero-U and 1U rack mount option.

Highlights

- Designed to fit into rack cabinets
- Circuit breaker protected
- 12 IEC 320 outputs
- Surge and spike protection on modular based

Specification

- Single input - 12 C13 outputs
- 16 A current capacity
- 230 V output sockets
- Dual Circuit breaker, each controls six outputs
- Input frequency 50/60 Hz
- Surge suppression clamping level 275 to 320V RMS
- Surge current 10,000 A
- Spike Protection 500 joules, 10x1000 usec

Product Code	Product Description
PH-C12-022-116-001	16 A , 12 C13 outputs



Masked Circuit Breaker

Minimum Order Quantity:30 Pcs.

PDU Solutions

Metered High Protection PDU

Canovate offers a power distribution unit with power protection and power metering capability for rack-mounted server's power distributions. High Protection PDU provides eight IEC C13 output receptacles that distribute power.

High Protection PDU consumes 1U from Rack's U-space. The product has height of 4.45 cm which is suitable for both zero-U and 1U rack mount option.

Highlights

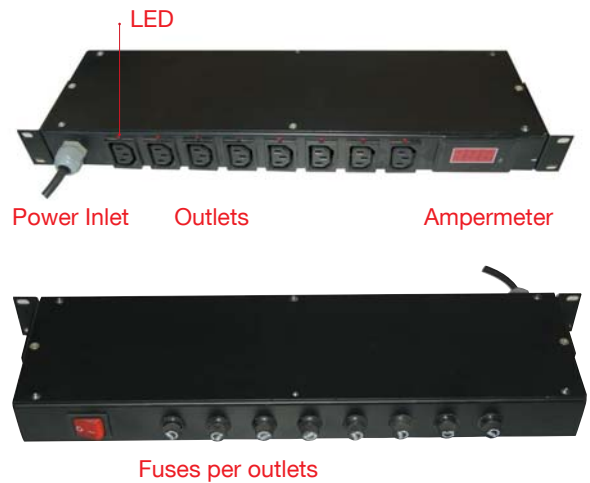
Designed to fit into 19" rack cabinets
Fuses protection for each outlets (2A)
8 IEC 320 C13 outputs with led indicators

Specification

Single input - 8C13 outputs
16 A Total input current capacity
230 V output sockets
Fuses for each outlets
Input frequency 50/60 Hz
Ampermeter

Product Code	Product Description
PH-C08-080-116-L	16 A , 8C13 outputs fuse protection on each outlets

* Canovate can make changes without notification



Minimum Order Quantity:30 Pcs.

AC Socket/Outlet Types

IEC320 C13



Multi Universal Type



IEC320 C19



CEE 7/5 (French)



BS1363 (UK)



CEE 7/4 (German/Schuko)



AC Plug/Inlet Types

IEC320 C14



BS1363 (UK)



IEC320 C20



IEC-60309 1P+N+E (Commando)



Single Phase

CEE 7/7 (German&French Schuko)



IEC-60309 3P+N+E (Commando)



Three Phase

PDU Solutions

IP PDU

IP PDU is a simple solution where reliable power distribution for home and office applications is needed, in addition to the branch circuit protection. IP PDU also provides power control and environmental monitoring using internet connection. There won't be any problem like disconnection of server, switch-lock or router-lock especially in IT center. Reset your routers with remote control. You can control your home appliances by your mobile phone or any internet connection. You can also reset ATM units remotely



Metered IP PDU

Density 8-12 (C13) outlets per rack mount 19" 1U horizontal, 24 outlets (3x16 C13 and 3x2 C19) per 0U vertical models

Power 230VAC, 50/60 Hz, 16 or 32-Amp power inlet options.

Protection 2 poles circuit breaker

Metering Volt and Amperemeter display, temperature and humidity sensor connectivity, RMS current and active power measurement for inlet

Monitoring Optional rack and room environmental monitoring system connectivity support to enhance monitoring capabilities such as room temperature, room humidity, Smoke, noisy, PIR, LPG, NLG gas, water leakage, air flow, door and frame camera.

Management IP based WEB Access, http, SMTP, SNMP, SNTP protocol Support, e-mail sending feature

Options Environmental monitoring integration

LED indicator per Outlet

Product Code	Product Description
PS-S10-000-116	IP-PDU 10 way Schuko Sockets

Switched and Outlet Level Monitored IP PDUs

Smart Switched PDU's become integral parts of modern datacenter environment to control your energy consumption, to control&monitor your active devices remotely and to monitor all environmental factors, which will affect the performance of your datacenter.

Switch POPS (Per Outlet Power Sensing) units monitor, control and manage servers (Blade servers) and IT equipment and the equipment cabinet infrastructure that houses them POPS Power information per individual outlet includes: current load (A), voltage (V), power (kW), apparent power (VA), crest factor, and power factor. Using grouping technology, power information is available per device, groups of devices (application), individual Cabinet PDU or cabinet. kW and kW-hour power information that can be utilized for billing your customers in Colocation datacenters and to take power reports for controlling your energy consumption

Density 8-12 (C13) outlets per rack mount 19" 1U horizontal, 24 outlets (3x16 C13 and 3x2 C19) per Zero U vertical models

Power 230VAC, 50/60 Hz, 16 or 32-Amp power inlet options.

Protection 2 poles circuit breaker

Metering Volt and Amperemeter display, temperature and humidity sensor connectivity, RMS current and active power measurement for inlet RMS current, active power measurement per outlet including preset condition control

Monitoring Optional rack and room environment monitoring system connectivity support to enhance monitoring capabilities such as room temperature, room humidity, Smoke, noisy, PIR, LPG, NLG gas, water leakage, air flow, door and frame camera

Management IP based WEB Access and outlet level control, http, SMTP, SNMP, SNTP protocol Support, e-mail sending feature, Outlet grouping

Options Environmental monitoring integration with wireless sensors

LED indicator per Outlet

Product Code	Product Description
PP-C24-020-116	IP-PDU 24 way IEC C13 Sockets

Minimum Order Quantity: 30 Pcs.

* For other options please contact to your sales representative

* Canovate can make changes without notification



Sensor Connections Camera Connection Ethernet Connection

PDU Solutions

EMS Environmental Monitoring System

Advanced technology, excellent performance, strong functions, safe and reliable. Real-time monitoring of micro environment within the cabinet through LAN or WAN. Intelligent remote monitoring system combines complete software technique of embedded system, long-distance monitoring technique based on SNMP, network node technique of sensors, power distribution technique, modularized structure technique and other advanced techniques to precisely monitor the micro environment within one or several cabinets.

Three levels of monitoring is possible:

- ✓ Product Centered
- ✓ Cabinet Centered
- ✓ Room Centered

EMS Master



EMS Slave



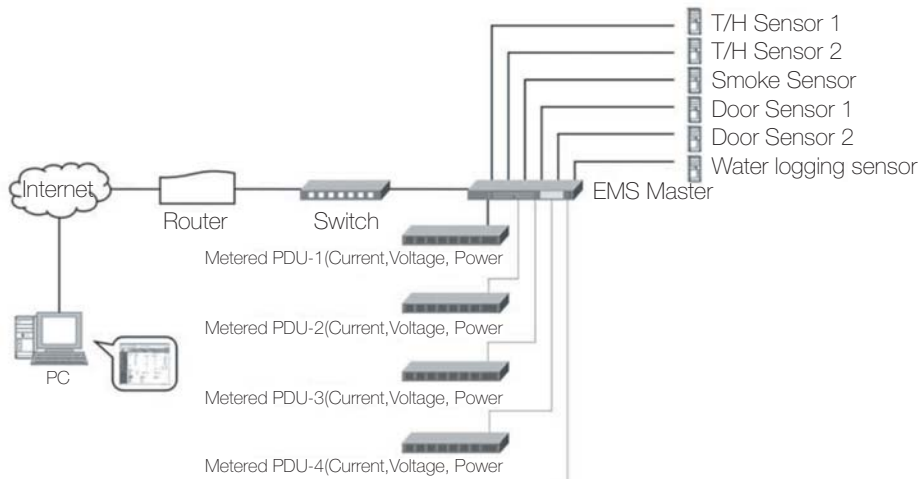
EMS Hub



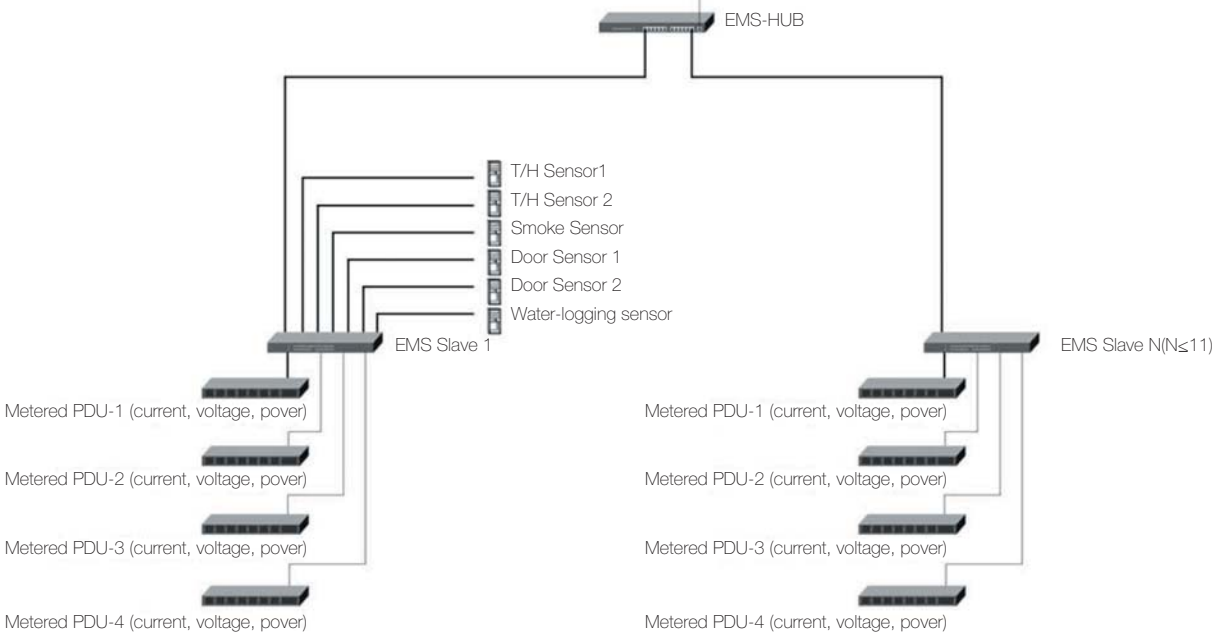
Power Distribution Unit



Application of EMS Master standalone configuration



Application of EMS Master and Slave configuration



PDU Solutions

EMS-Environmental Monitoring System Master

The EMS master can be applied alone. Master unit can support up to 11 slaves by using EMS HUB. EMS can timely monitor the micro environment of one cabinet from long distance.

Creative Concept

Three levels of monitoring is introduced including power monitoring Product Centered, Cabinet Centered and Room Centered



Specifications of EMS Master

	Parameter	Specification
Power input	Rated input voltage	110/220 VAC 50/60 Hz
	Input standard	IEC320 C14x2
	Cable length	3m
Signal input	Serial port for the voltage/current of Metered PDU	RJ45x4
	Serial port for power measurement	RJ45x4
	Serial port for UPS signal input	RJ45x4
Daisy-chain port	LINK	RJ45x4
Upgrade port	PORT	RJ45x4
Network port	Internet	RJ45x4
Sensor port	Temperature/Humidity sensor port	RJ11x2
	Door sensor port	RJ11x2
	Smog sensor port	RJ11x1
	Water-logging sensor port	RJ11x1
Demension	LxWxH	483x132x44 mm
Mounting method	Horizontal installation	1U
Case color	Color	Black

Order Code : SM_EMS_MS

EMS-Environmental Monitoring System Slave

EMS slave collects all the environment signals of a cabinet. The same with EMS master, one EMS slave can connect 4 Metered PDU, 2 T/H sensors, 2 door sensors, 1 smog sensor and 1 water sensor. EMS slave can not be applied alone; it can only be used with the Master through HUB. EMS slave is a passive device which supply power through master device connection by its link cable

Order Code : SM_EMS_SL



EMS-Environmental Monitoring System HUB

EMS HUB is a passive unit with multi-port on it which is specially used for the daisy-chain of Canovate EMS, NPM or CPDU-Cabinet PDU. Through RJ45, HUB connects the slaves and masters of EMS, NPM or CPDU.

Characteristics: Based on the passive HUB technique, EMS-HUB has one LINK port and 12 transfer port. It can connect 1 Master and 11 Slave, and ensure neither defective Slave will affect the communication of other Slaves with the Master.

EMS-HUB has indicators which clearly show the connection states.

Application:

EMS-HUB can be applied to Canovate EMS, NPM and CPDU products

Specifications of EMS Slave

	Parameter	Specification
Product Type		Passive HUB
Link port		RJ45x1
Transfer port		RJ45x12
Connection state	Link port	LEDx1, green
	Transfer port	LEDx12, green
Working environment		-20°C ~ 70°C
Dimension		LxWxH: 483x68x44
Mounting method		Horizontal installation, 1U
Case color		Black

Order Code : SM_EMS_HB



Temperature&Humidity Sensor
Order Code : SM-EMS-TH



Door Sensor
Order Code : SM-EMS-MD



Smoke Sensor
Order Code : SM-EMS-SM



Water Sensor
Order Code : SM-EMS-WL

PDU Solutions

CPDU- Metered Cabinet/Rack PDU with MPD function module

CPDU is designed to be used with EMS system to complete Cabinet Management Solution. It can also be used alone as a basic rack pdu

Feature

Hot Swappable, replaceable structure ensures Metered PDU system operation with no power failure in case of metering system failure.

MPD functional module is a hot swappable energy meter with communication interface.

Intelligent MPD with RS485 port is available in two types; SAVM (current/voltage display and data collection function module) and SAVPEM (current/voltage/power/energy display and data collection function module).

Application:

Intelligent MPD functional module is applicable to Metered PDU of EMS system.

Advanced MPD functional module is applicable to basic PDU.

Main function:

SAVM-current/voltage display and data collection function module can display the load current, input voltage through LED display. RJ 45 port can output the signal of load current, input voltage of Metered PDU to the EMS monitoring system.

SAVPEM-current/voltage/power/energy display and data collection function module can display the load current, input voltage, load power and energy consumption through LCD display. RJ 45 port can output the signal of load current, input voltage, load power can energy consumption of Metered PDU to the EMS monitoring system.



Specifications

Item	Performance parameter	
Power input	Rated input voltage	110/220 VAC 50/60 Hz
	Input standard	IEC320 C14x2
	Cable length	3M
Signal input	Serial port for the voltage/current of Metered PDU	RJ45x4
	Serial port for power measure signal	RJ45x4
	Serial port for UPS signal	RJ45x4
Daisy-chain port	LINK	RJ45x4
Upgrade port	PORT	RJ45x4
Network port	Internet	RJ45x4
Sensor port	Temperature/Humidity sensor port	RJ11x2
	Door sensor port	RJ11x2
	Smog sensor port	RJ11x1
	Water-logging sensor port	RJ11x1
Demension	LxWxH	483x132x44 mm
Mounting methot	Horizontal installation	1U
Case color	Color	Black

Quality Certificates

BUREAU VERITAS
Certification

Certification
Awarded to

CANOVATE ELEKTRONİK ENDÜSTRİ VE TİCARET A.Ş.
ALEMDAĞ MERKEZ MAH. TURGUT ÖZAL CAD. NO: 4
ÇEKMEKÖY, İSTANBUL, TURKEY

Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standards

ISO 9001:2008
Scope of supply

DESIGN, MANUFACTURING, SALES AND AFTER SALES SUPPORT OF DATACENTER SOLUTIONS/SYSTEM ROOM HARDWARE, FIBER OPTIC TRANSMISSION AND ACCESS SYSTEMS, FTTX SOLUTIONS, FIBER OPTIC PATCH PANELS, OUTDOOR CABINETS, 19" FLOOR STANDING CABINETS, 19" WALL MOUNT CABINETS, 19" CABINET ACCESSORIES, SUBRACKS, SMART POWER DISTRIBUTION UNITS, COOLING SYSTEMS, ENVIRONMENTAL MONITORING SYSTEMS

SALES AND AFTER SALES SUPPORT OF IP KVM SYSTEMS, STRUCTURED CABLING PRODUCTS, UPS, RF CABLE AND ACCESSORIES

Original Approval Date: 05 JULY 2010
Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: 04 JULY 2013
To check this certificate validity please call +90 216 518 40 30
Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

Certificate Number : TR31241 Date : 05 JULY 2010

MAHMUT GENÇ
Certification Manager

UKAS
008

Bureau Veritas Global Hizmetleri Ltd.Şti.
Yıldırımcazı Sanayi Çukukları, Çarşamba İş Merkezi, No:3 Kat:1, 34854, Kağıthane, İstanbul, TÜRKİYE

BUREAU VERITAS
Certification

Certification
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MAHMUT GENÇ
Certification Manager

DAR
Deutscher Akkreditierungs Rat

Bureau Veritas Global Hizmetleri Ltd.Şti.
Yıldırımcazı Sanayi Çukukları, Çarşamba İş Merkezi, No:3 Kat:1, 34854, Kağıthane, İstanbul, TÜRKİYE

BUREAU VERITAS
Certification

Kalite Sistem Belgesi
Awarded to

CANOVATE ELEKTRONİK ENDÜSTRİ VE TİCARET A.Ş.
ALEMDAĞ MERKEZ MAH. TURGUT ÖZAL CAD. NO: 4
ÇEKMEKÖY, İSTANBUL, TÜRKİYE

Bureau Veritas yukarıda adı geçen kuruluşun, Kalite Yönetim Sisteminin aşağıda detayları belirtilen Kalite Standartı gerekliliklerine uygunluğunu değerlendirmiş olup, onaylamaktadır

Kalite Standartı

ISO 9001:2008
Kapsam

KOMPLE VERİ MERKEZLERİ/SİSTEM ODASI DONANIMLARI, FİBER OPTİK ERİŞİM VE TRANSMİSYON SİSTEMLERİ, FTTX ÇÖZÜMLERİ, FİBER OPTİK PATCH PANNELER, DİŞ ORTAM KABİNLERİ, 19"KABİNLER, DUVAR TİPİ KABİNLER VE AKSESUARLARI, AKILLI PRİZ GRUPLARI, SİSTEM ODASI SOĞUTMA SİSTEMLERİ, ORTAM İZLEME SİSTEMLERİ TASARIMI, ÜRETİMİ VE SATIŞI İP KVM SİSTEMLERİ, YAPISAL KABLOLAMA ÜRÜNLERİ, KESİNTİSİZ GÜÇ KAYNAKLARI, RF KABLO VE AKSESUARLARI SATIŞI VE SATIŞ SONRASI DESTEĞİ

Original Onay Tarihi: 05 TEMMUZ 2010
04 TEMMUZ 2013 tarihine kadar geçerli olan bu sertifikamın, geçerliliği Bureau Veritas tarafından periyodik olarak kontrol edilmektedir. Bu sertifikayı kullanarak, Bureau Veritas'a bilgi olan yüklenicilerimize yerine getirildiği sürece geçerlidir. Belge kapsamı, ISO 9001:2008 gerekliliklerinin uygulanabilirliği ve sertifikasyon geçerliliği için +90 216 518 40 30 telefon numarasından teyid edebilirsiniz.

Sertifika Numarası : TR31241 Tarih : 05 TEMMUZ 2010

MAHMUT GENÇ
Belgeleme Müdürü

TÜRKAK
T.C. Kalite Yönetim Sistemi
TS EN ISO/IEC 17021
AR-0031/17B

Bureau Veritas Global Hizmetleri Ltd.Şti.
Yıldırımcazı Sanayi Çukukları, Çarşamba İş Merkezi, No:3 Kat:1, 34854, Kağıthane, İstanbul, TÜRKİYE

Certificate of Compliance Page 1 of 2

Certificate Number: 160507 - E303940
Report Reference: E303940, May 5th, 2006
Issue Date: 2010 May 16

UL Underwriters Laboratories Inc.

Issued to: CANOVATE ELEKTRONİK ENDÜSTRİ TIC A S
TURGUT ÖZAL BULVARI 4
34794 TURKEY

This is to certify that representative samples of **Enclosure and Racks System**
Information Technology & Communication (ITC) Equipment Cabinet, Model CAN-FS-428X, where X can be 6, 8 or 1
See Addendum for Model Differences

Have been investigated by Underwriters Laboratories Inc.® (UL) or any authorized licensee of UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1- Safety of Information Technology Equipment - Part 1: General Requirements
CSA-C22.2 No. 60950-1-03 - Safety of Information Technology Equipment - Part 1: General Requirements

Additional Information: Not Applicable

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service inserting the appropriate requirements for US and Canada.
The UL Listing Mark for the US and Canada generally includes: the UL in a circle, symbolized with "C" and "US" identifiers; a circle with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

Issued by: **Wendrosen Alamyeha**
Wendrosen Alamyeha, Project Engineer
UL International Italia Srl
Any information and documentation bearing UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.
For questions in Italy, you may call 02 578 844104.

Reviewed by: **Martin Brooks**
Martin Brooks, Staff Engineer
UL International Italia Srl

Quality Certificates



RoHS CONFIRMATION OF COMPLIANCE

We hereby certify that the components and the materials supplied by CANOVATE do not contain any of the following substances forbidden by the Directive 2002/95 of the European Parliament and of the Council on the restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment:

1. Hazardous Substances

All components do not contain lead, mercury, hexavalent chromium, PBB and/or PBDE in a concentration higher than 0.1% or cadmium in a concentration higher than 0.01% in homogenous materials (Lead in electronic ceramic parts (e.g. piezoelectronic devices) and Lead in high melting temperature type solders (i.e. tin-lead solder alloys containing more than 85% lead) are exempt).

2. Lead Free Soldering

All components, except for BGA packages and PCBs, do not contain more than 0.1% lead in solders.

3. Lead as an alloying element

All mechanical components, parts & assemblies do not contain lead as an alloying element in steel above 0,35% lead by weight, aluminum do not contain above 0,4% lead by weight and as a copper alloy do not contain above 4% lead by weight.

We hereby confirm that the above information provided in this document is true and accurate.

Name of undersigned: Nihal Güler

Title: Q.A.M

Date: 25.11.2008

Signature
CANOVATE
ELECTRONİK ENDÜSTRİ VE TİCARET A.Ş.
Merkez Mahallesi, Turgut Özal Cad. No:4
Alemdar - İstanbul
Atılma No: 1518922
Atılma Tarihi: 02.08.2008

CANOVATE ELEKTRONİK ENDÜSTRİ VE TİCARET A.Ş. TURGUT ÖZAL BULVARI NO:4 ALEMDAR İSTANBUL TÜRKİYE TR-34394



TEST HOUSE CERTIFICATE

CERTIFICATE NUMBER: TH07001 **CLIENT:** Canovate Elektronik Endüstri Ticaret A.Ş.
PROJECT NUMBER: 07P10004 Merkez Mahallesi, Turgut Özal Cad. No:4,
CLIENT'S ORDER NUMBER: Order dated 15.01.2007 Alemdar - İSTANBUL

TEST ITEM: Electric box
MANUFACTURER: Canovate Elektronik Endüstri Ticaret A.Ş.
Merkez Mahallesi, Turgut Özal Cad. No:4,
Alemdar - İSTANBUL

TEST LABORATORY: ESİM Test Hizmetleri A.Ş.
İmes Sanayi Sitesi C Blok 308. Sok. No:46
Y. Dudullu İSTANBUL

MODELS: CAN-FS-O-1264 12U (533,4mm), 600*450
(identical models are as attached)

ELECTRICAL RATINGS: -

NUMBER OF ITEMS TESTED: 1

SERIAL NUMBER: Not serialised

TEST SPECIFICATION / ISSUE: IP 6X test acc to EN 60529 clause 13.4 and 13.6,
IP X5 test acc to EN 60529 clause 14.2.5

DATE OF TEST: 16.10.2006

RESULT OF TEST: Assessment was based on review of testing carried by ESİM Test Hizmetleri A.Ş. All test results were compliant, refer to ESİM IP Test Report Number L06001-657-1-1 for full details.
Test item complies with IP65.

Approved by:
Seyda Dağdelen
Technical Coordinator

Date of issued: 16.01.2007

**СИСТЕМА СЕРТИФИКАЦИИ ГОСТ Р
ГОССТАНДАРТ РОССИИ**

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ РОСС ТРА.В68.В00309
Срок действия с 29.10.2009 по 28.10.2012
8861293

ОРГАН ПО СЕРТИФИКАЦИИ: пер. № РОСС RU.0001.11AB68.
ООО "ПРОММАШ ТЕСТ", Восточная ул., д.2, г. Мытищи, Мытищинский район, Московская область,
141009, тел. +7 (495) 782-17-08/ 775-48-45.

ПРОДУКЦИЯ
Никельсодержащие распределительные щиты с автоматикой у.т.м. "CANOVATE",
модели: CAN-FS, CAN-RLYS, CAN-ETSI, CAN-SWM, CAN-DWM, CAN-SLD,
CAN-SOHO, CAN-SLF, CAN-PNL, CAN-ORG, CAN-ACS, CAN-ODF.
Серийный выпуск. код ОК 005 (ОКП): 34 3400

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ НОРМАТИВНЫХ ДОКУМЕНТОВ
ГОСТ Р 51321.1-2007; ГОСТ Р 51778-2001 код ТН ВЭД России: 8537 10 000 0

ИЗГОТОВИТЕЛЬ: * CANOVATE ELEKTRONİK ENDÜSTRİ TİCARET A.Ş. * Адрес: Alemdag Merkez Mah. Turgut Özal Cad. No.4 Çekmeköy -İSTANBUL, Турция. Телефон: (+90 216)484 22 22, факс: (+90 216) 484 05 06.

СЕРТИФИКАТ ВЫДАН: * CANOVATE ELEKTRONİK ENDÜSTRİ TİCARET A.Ş. * Адрес: Alemdag Merkez Mah. Turgut Özal Cad. No.4 Çekmeköy -İSTANBUL, Турция. Телефон: (+90 216)484 22 22, факс: (+90 216) 484 05 06.

НА ОСНОВАНИИ протокола сертификационных испытаний № 128С17-09 от 29.10.2009 г. Испытательная лаборатория "ИЛ БТ" на базе ООО "Испытательная лаборатория электротехнической продукции "ЭМС", пер. № РОСС RU.0001.21ML31 от 09.10.2008, адрес: 141400, М.О., г. Химки, ул. Ленинградская, 29

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Сертификат системы менеджмента качества ISO 9001:2000 № 010722 от 25.08.2008 г., выданный ОС "Bureau Veritas Certification". Место нанесения знака соответствия по ГОСТ Р 50460-92 наносится на корпус изделия и (или) в виде идентификационного кода.

Руководитель органа: А.А. Румянцева
Эксперт: В.Н. Матвеев

Система имеет юридическую силу на всей территории Российской Федерации

TSE

**TÜRK STANDARLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS**

Markanın Tanımı: Description of the Mark
TSE **TSE**

BELGE NUMARASI : 14.10.02756-14072
REFERENCE NUMBER OF LICENCE : 120912010
BELGENİN İLK VERİŞİ TARİHİ : 120912011
DATE OF FIRST ISSUE OF LICENCE : 120912011
BELGENİN SON GEÇERLİLİK TARİHİ :
LICENCE VALID DATE :
BELGE SAHİBİ KURULUŞUN ADI : CANOVATE ELEKTRONİK ENDÜSTRİ VE TİCARET ANONİM ŞİRKETİ
NAME OF THE LICENCE HOLDER :
BELGE SAHİBİ KURULUŞUN ADRESİ : MERKEZ MAH TURGUT ÖZAL BULVARI NO:4 ALEMDAG - İSTANBUL / TÜRKİYE
ADDRESS OF THE LICENCE HOLDER :
ÜRETİM YERİ ADI : CANOVATE ELEKTRONİK ENDÜSTRİ VE TİCARET ANONİM ŞİRKETİ
NAME OF THE MANUFACTURER :
ÜRETİM YERİ ADRESİ : MERKEZ MAH TURGUT ÖZAL BULVARI NO:4 ALEMDAG İSTANBUL TÜRKİYE
ADDRESS OF THE MANUFACTURING PLACE :
İPTAL EDİLEN BELGE NUMARASI (varsa) :
INDICATION OF SUPERSEDED LICENCE (if any) :
TESİSİLLİ TİCARİ MARKASI : "CANOVATE" MARKALI
(REGISTERED TRADE MARK) :
İLGİLİ TÜRK STANDARTI : TS EN 61587-1:2008
RELATED TURKISH STANDARD : TS EN 61587-1:2008

BELGE KAPSAMI :
TS EN 61587-1
EKİMLİ TİP, TİCARİ MODEL CAN-FSX, KLİMATİK SINIF: C1, ENDÜSTRİYEL ORTAM SINIFI: A1, STATİK MEKANİK YÜK SINIFI: SL7, DİNAMİK YÜK SINIDI: DL4, DARBE SINIFI: K1, İP20, ELEKTRONİK DONANIMLAR (ÇİN MEKANİK YAPILAR/KABİNLER)

ERİM İNAN ÇAKIR
BAKINA BAKTÖRÜ
BELGELENDİRME MÜDÜRÜ

T.C.
TÜRKİYE
RESMİ MÜHÜR
T.C. İÇİŞLERİ BAKANLIĞI
T.C. İÇİŞLERİ BAKANLIĞI
T.C. İÇİŞLERİ BAKANLIĞI

Yürürlükte bulunan ve "Emlakat Yeterlilik Belgesi" 15.04.2007 tarihinden itibaren uygulanmaktadır.
*Bu belge, belgelemlenen ürünün, ürünün yerinin, Enstitümüzün belirlediği şartları karşıladığını da gösterir.
TÜRK STANDARLARI ENSTİTÜSÜ (MERKEZİ ANKARA) * TSE ERİM BELGELENDİRME MERKEZİ Hacıosman Cad. No:12
Bakırköy / Çarşıbaşı / Kat: 312 41960000312-419 06 06 * Faks: 312 41967120312-419 06 17 * web: www.tse.org.tr * e-mail: iletme@tse.org.tr

Quality Certificates



TEST REPORT/TEST RAPORU
IEC 60950-1 and/or EN 60950-1/IEC60950-1 ve/veya EN 60950-1
Information technology equipment – Safety –
Part 1: General requirements
Bilgi teknolojisi Cihazları – Güvenlik
Bölüm 1: Genel Kurallar

Report reference No / Rapor referans No: LVD-Canovate-2009 395
 Tested by / Test eden: Engin URULU
 Approved by / Onaylayan: Sedat ESER
 Date of issue / Yayın Tarihi: April 2009

Testing Laboratory Name / Test Laboratuvarı: Esim Test Hizmetleri A.Ş.
 Address / adres: İMES Sanayi Sitesi C Blok 308. Sok. No:46
 34775 Y.Dudullu - İstanbul/Turkey
 Testing location: CBTL CCATL SMT TMP
 Address / adres: Same as above/ yukarıdaki gibi
 Applicant's Name / Başvuru: Canovate Elektronik Endüstri Tic. A. Ş.
 Address / adres: Merkez Mah. Turgut Özal Bulvarı No 4
 34794 Alentepe – İstanbul/Turkey

Test specification / Test özelliği
 Standard / Standart: IEC 60950-1:2005 (2nd Edition / 2. basım) and/or / ve/veya EN 60950-1:2005
 Test procedure / Test prosedürü: CB scheme / CB planı
 Non-standard test method / Standart olmayan test metodu: N/A / Uygulanmaz

Test Report Form No / Test Rapor Form No: IECEN60950_1C
 TRF originator / Düzenleyen: SOS Fimko Ltd
 Master TRF / Ana TRF: Dated / 2007-06 tarihli

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TRF No: IECEN60950_1C

ESİM
 Test Hizmetleri Sanayi ve Ticaret A.Ş.
 Sanayi Sitesi C Blok No:46
 34775 Y.Dudullu - İstanbul
 Tel: +90 212 543 007 8067



Test item description / Test ögesi: Outdoor Cabinet / Bina dışı Kabin
 Trademark / Ticari marka: Canovate
 Manufacturer / Üretici: Canovate Elektronik Endüstri Tic. A. Ş.
 Model and/or type reference / Model ve/veya tip referansı: TIPS DSLAM Outdoor Cabinet
 Rating(s) / Beyan değerleri:

TRF No: IECEN60950_1C

ESİM
 Test Hizmetleri Sanayi ve Ticaret A.Ş.
 Sanayi Sitesi C Blok No:46
 34775 Y.Dudullu - İstanbul
 Tel: +90 212 543 007 8067

TSE
TSE DENEY LABORATUVARI MERKEZİ BAŞKANLIĞI
Elektroteknik ve Makine Laboratuvar Grup Başkanlığı (Gehuz)
Elektroteknik Laboratuvarı Müdürlüğü
 Adres: TSE Deneysel Laboratuvar Merkezi Başkanlığı H Blok Çayyera Tesisleri Yarı Geceheri KOCATEPE
 Tel: +90 312 443 07 51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100
 HEADSHIP OF TEST LABORATORIES CENTRE ELECTROTECHNICAL LABORATORY
 DIRECTORATE OF ELECTROTECHNICAL LABORATORY
 Adres: TSE Deneysel Laboratuvar Merkezi Başkanlığı H Blok Çayyera Tesisleri Yarı Geceheri KOCATEPE
 Tel: +90 312 443 07 51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100

MUAYENE VE DENEY RAPORU
TEST REPORT

16.10.05
60260
09-09

Deney Talep Eden: CANOVATE ELEKTRONİK ENDÜSTRİ VE TİC. A.Ş.
 (A/B/Adres/Şehir vb.) Alentepe Merkez Mah. Turgut Özal Cad. No:4 Ümraniye-İSTANBUL
 Müşteri (İsim/Adres/Şehir vb.)
 Deney Talep Tarihi/No: 18.08.2009 / 27594
 Order Date / No
 Numunenin Tanımı: DİŞ ORTAM KABİNE, DSLAM, TIPS, ..., 1.00 adet
 (Çin, Marka, Tip, Tm, Model vb.)
 Sample Description (Tm, Marka, Model vb.)
 Numunenin Alındığı Tarih: 18.09.2009
 Sample Receipt Date: Numune, müşteri tarafından alınmıştır
 Deneylerin Yapıldığı Tarih: 24.08.2009 - 04.09.2009
 Date of Test
 Uygulanan Standard / Metod: İlgili standartlar miteknik sayfalarla verilmiştir.
 Applied Standard/Method
 Raporun Sayfa Sayısı: 2
 Number of pages of the report
 Açıklamalar: Remark

Yukarıda tanımlanan numune için laboratuvarımızda yapılan muayene ve deneylerden elde edilen sonuçlar miteknik sayfalarla verilmiştir.
 The testing and/or measurement results are given on the following pages which are part of this report.

Bu rapor ilgili firmamız özel talebine istinaden düzenlenmiş olup, Standartlara Uygunluk Belgesi niteliğinde değildir. Ayrıca ilan ve reklam için de kullanılamaz.
 This report was prepared referring to the private demand of the related firm, can not be used as a Conformity For Standards Document and can not be used for announcement and advertisement.

Mühür:

Deney Sorumlusu: Bilent ŞENTÜRK
 Person in charge of test
 Kontrol Eden: Hilmi AKDOĞAN
 Reviewer
 Laboratuvar Müdürü: Ahmet Turan HOCAOĞLU
 Head of Laboratory

DENEY LAB. MERKEZİ BAŞKANLIĞI ELEKTROTEKNİK LABORATUVARI
 HEADSHIP OF TSE TEST LABORATORIES CENTRE ELECTROTECHNICAL LABORATORY
 60260/09-09
 16.10.05

MUAYENE - DENEY SONUÇLARI TEST RESULTS
 DENEYLERİN YAPILDIĞI ORTAM ŞARTLARI (İlgili deneyde aksi belirtilmemişse)
 ENVIRONMENTAL CONDITIONS (If it is not on the related test)
 Sıcaklık/Temperature: 23±2C Nem/Humidity: %47±3 Basınç/Atmos Pressure: 1015±2

ÇEVRE ŞARTLARINA DAYANIKLILIK
Çalışma Sırasında İstenecek ve Nem Şartlarına Dayanım (ETS 300019-2-4 Class 4.1E)
Aranan/Requirement-Test:
 IEC 60068-2-56 'ya göre +30±2 °C ve %93 bağıl nemde 10 gün beklentilerden sonra en az 1 saat toplanmaya bırakılır. Numune gözle ve çalıştırılarak muayene edildiğinde elektriksel ve mekanik kusur olmamalı ve numune normal fonksiyonlarını yerine getirebilmelidir.
 Gürülen-Ölçülen/ Performance-Result:
 Gözle yapılan muayene sonucunda numunenin aranan şartları sağladığı görülmüştür.
 Deney sonucu: --

Cihaz Resmi:

SONUÇ:
 Özel deney incelemesi amacıyla laboratuvarımıza gönderilen DSLAM Dış Ortam Kabini TIPS numunesi üzerinde talep edilen deney yapılmıştır.

16.00.00 F.045/25.11.2008-2 2/2