

MICRO DATA CENTER

Solutions





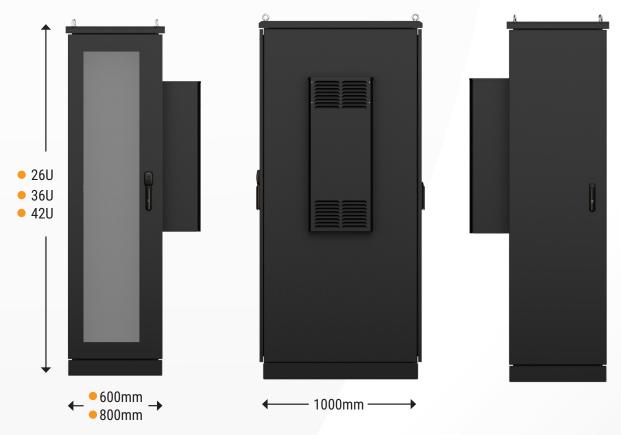
Micro Data Center are used in small businesses or temporary deployments where traditional facilities or the installation of modular data centers are out of the question. It combines energy, environment monitoring, air conditioning, fire extinguishing and environmental monitoring solutions.

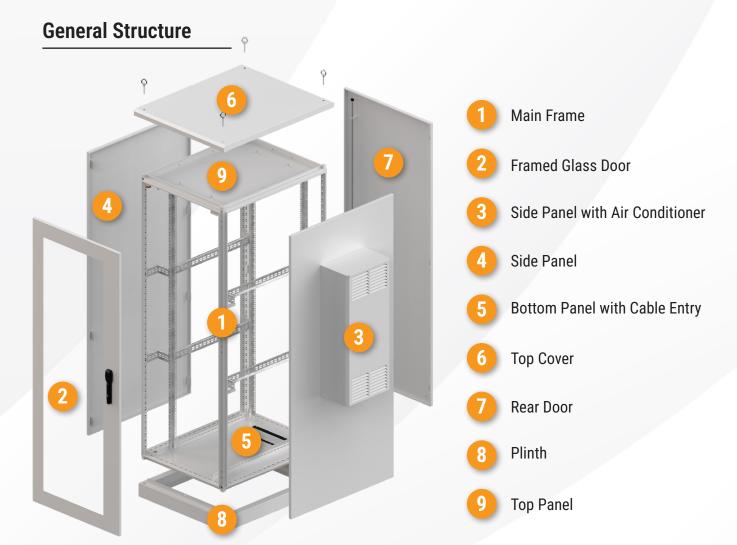
Width Options	Capacity Options	Color Options
• 600mm • 800mm	26U	RAL7035 Light Grey
	36U	RAL9005 Black
	42U	

Cooling Options

- Side Panel Mounted Cooling Unit
- Roof Mounted Cooling Unit

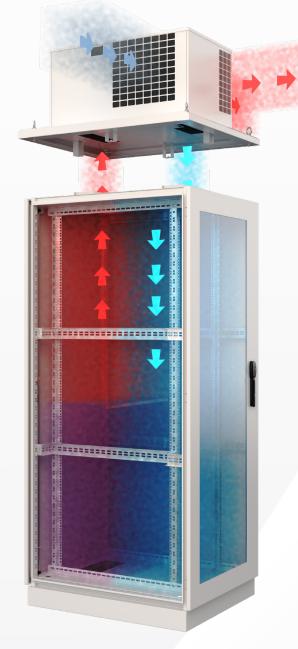








Roof Mounted Cooling Unit Options





T-500 (450W)

Suitable for : W600, W800 MicroDC Cabinets

Product Page





T-1000 (1000W)

Suitable for : W600, W800 MicroDC Cabinets

Product Page





T-2000 (1700W)

Suitable for : W600, W800 MicroDC Cabinets

Product Page



Features

- Top Mount / Top Type
- Digital Smart Controller
- A Class Equipment
- · Large Space Between Fins of Condanser Unit
- · Openable cover, Easy Maintenance
- Smart digital display and Smart electronic control
- Remote control with Ethernet and RS485 Communication
- · Door switch connection
- Fault warning system/dry contact; faults can be read on PLC or 220 V output
- Three-sensor protection; Advance information feature for maintenance
- Steel out body, modern design. Painted or Stainless or (optional)



T-3000 (2700W)

Suitable for : W600, W800 MicroDC Cabinets

Product Page





T-4000 (3700W)

Suitable for : W600, W800 MicroDC Cabinets





Side Panel Mounted Cooling Unit Options





0-500 (450W)

Suitable for: 26U, 36U, 42U MicroDC Cabinets

Product Page





0-1000 (1000W)

Suitable for: 26U, 36U, 42U MicroDC Cabinets

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0-2000 (1700W)

Suitable for: 26U, 36U, 42U MicroDC Cabinets

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0-3000 (2700W)

Suitable for: 26U, 36U, 42U MicroDC Cabinets

Product Page





0-4000 (3700W)

Suitable for: 36U, 42U MicroDC Cabinets

Product Page



Features

- Wall Mount / Outdoor Type
- **Digital Smart Controller**
- A Class Equipment
- Large Space Between Fins of Condanser Unit
- Special design suitable for outdoor conditions
- Smart digital display and Smart electronic control
- Remote control with Ethernet and RS485 Communication
- Door switch connection
- Fault warning system/dry contact; faults can be read on PLC or 220 V output

Front Door Locking System



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Applications

- · Rack cabinets
- Server rooms
- Telecomunication
- Kiosks
- GSM network cabinets

Features

- · Integrated RFID reader.
- · Ability to work mechanically in case of power outage
- · Capable to inform door and handle status
- · LEDindicators both on lock and reader
- Supports RS485 protocol for other protocols please contact to Essentra
- Can be control a swinghandle (3101,3102,3103and 3104) other than itself
- 12VDCworking voltage
- LEDindicators

Materials

- Body: Polyamide DIN-EN ISO 1043-1 PA6 GFR30
- Handle: Polyamide DIN-EN ISO 1043-1 PA6 GFR30
- Cam : Steel

Electrical Spesifications

Operating Voltage: 12VDC Operating Temperature: +60/ -10 C Nominal Operating Current:

Standby: 6mA

Lock/ Unlock: 75mA Max. Curent: 400mA PIN Connections;

PIN 1- GND

PIN 2- + 12V

PIN3- N/A

PIN 4- Door Position Sensor

PIN 5- Control Signal

PIN 6- Handle Position Sensor



Lock Warning Signs				
Signal 1	S	While opening the lock	LED 1 blinks fast.	
Signal 2	S	While closing the lock	LED 2 blinks fast.	
Signal 3	0	When the lock is open	Both LEDs blink fast.	
Signal 4		When the han- dle is open	Both LEDs not lit	
Signal 5	0	Error	Both LEDs blink slow.	
Signal 6	0	Ready	Both LEDs are lit.	

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Rear Door Locking System

Applications

- · Rack cabinets
- Server rooms
- Telecomunication
- Kiosks
- · GSM network cabinets

Features

- LED indicators
- · Compatible with access control systems.
- Ability to work mechanically in case of power outage.
- Elegant design.
- · Capable to inform door and handle status
- 12 VDC working voltage

Materials

Body : Polyamide DIN-EN ISO

1043-1 PA6 GFR 30

Handle: Polyamide DIN-EN ISO

1043-1 PA6 GFR 30

• Cam : Steel

Electrical Spesifications

Electrical Specifications: Operating Voltage: 12 VDC

Operating Temperature: +60/ -10 C

Nominal Operating Current:

Standby: 6mA

Lock / Unlock: 75mA Max. Curent: 400mA

PIN Connections;

PIN 1- GND

PIN 2- + 12V

PIN 3- N/A

PIN 4- Door Position Sensor

PIN 5- Control Signal

PIN 6- Handle Position Sensor









Cabinet Acccess Management

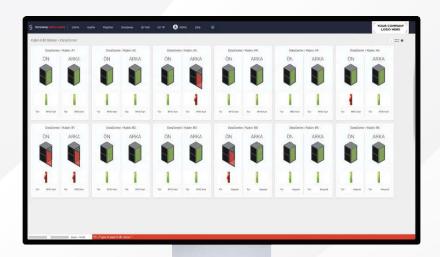


Features

- It provides remote monitoring / management of cabinet doors with its rack mounted control unit.
- It provides monitoring of cabins on a single screen.
- It allows people to define access authorization based on cabin, even on the basis of front-back cabin door.
- It provides reporting of information such as who opened the cabins and how long they remained open.
- Allows alerts to be sent in unusual situations.
- It allows the optional remote door to be opened.
- It allows users and their privileges in locks to be copied to other locks.

What Can Be Done?

- You can authorize the cabinets separately located in the data center.
- · You can ensure that the access rights of the
- · cabinets in the field can be managed centrally.
- You can see the door open/closed status and lock lever positions of your cabinets instantly.
- By getting historical reports through
- Sensaway management software; you can access information such as who opened the cabinets, by what method and for how long.
- You can manage user operations (add, move, delete users)
- You can receive notifications for entries or vandalism attempts outside the time you set
- Optionally, you can open the door remotely







Environment Monitoring Module



It offers rack mount, desktop and wall mount supported solutons for small envronments such as cabinets and electrical panels. Practical and economical solution with POE connection for critical envronments.

Inputs

- Digital Sensor Inputs: PFor Temperature, Temperature / Humidity, Air Quality sensors.
- Dry Contact Sensor Inputs: For Door Open/Close, Flood, Smoke, PIR, Earthquake, Shake Detector and any device

Product Page



Environmental Parameters



AIR QUALITY

[CO, H2, CH4, Etanol, Izo-butan, 1-10 ppm] It enables to evaluate the change of ambient air quality with the effect of smoke or pollutant gases with a sensitivity of 0-100. The recommended ideal range is rated as 70-100.



SMOKE DETECTORS

It detects and informs the smoke caused by fire or cigarette in the environment.

Climatic Parameters



TEMPERATURE SENSOR

It measures the ambient temperature in working range of -40 °C to +80 °C , by 0,5 °C precision and 0.1 resolution.



TEMPERATURE-HUMIDITY SENSOR

It measures; the environment temperature between -40 °C and +80 °C with 0.5 °C precision and 0.1 resolution; and measures the environment humidity between %0 and %100 RH with 1.8 % accuracy and I resolution.



POINT TYPE WATER LEAKAGE SENSOR

It is used for the detection of point water leaks that may occur on the floor of the environment.

Contact Type: NO (Normally Open)



CABLE TYPE WATER LEAKAGE SENSOR

It is used for local detection of water leaks that may occur on the ground. Options for 1, 2, 5 meters are available

Contact type: NO (Normally Open)



INDUSTRIAL TEMPERATURE SENSOR

Thanks to Thermo-couple sensor, to enable us measuring the range of -270°C ile +1260 °C in industrial



AIR FLOWING SENSOR

t is the sensor that detects whether there is air flow in system such as comes from air conditioning, rentilation systems.



INDUSTRIAL DOOR SENSOR

It has a sensing distance of 7,62cm, although it is recommended for room doors. Controls whether the environment,

room doors. Controls whether the environme media or cabinet doors are open / closed.



CABINET DOOR SENSOR

It is recommended for Rack Cabinet doors, it has mounting aparatus and 1 meter cable.



VOLTAGE / FREQUENCY MEASUREMENT

Energetic Parameters

Between 0 and 285 VAC interval, 1% precision (Network/UPS) Between 0 and 100 Hz interval, 1 Hz. precision (Network/UPS)



GROUNDING VOLTAGE MEASUREMENT

It provides a reference value in terms of grounding quality, by measuring Earth - Neutral Voltage between 0 and 30 VAC with 2% accuracy in the range.



EARTQUAKE SENSOR

it detects earthquake motion in tremors at the acceleration value specified in TSE standards. Outputs can be taken for indoor gas and electricity cut-off or audiovisual siren during an earthquake



DRY CONTACT

it provides the integration of alarm status of devices such as UPS, air conditioner, generator, fire extinguishing systems, which provide dry contact output to the



ENERGY ON / OFF SENSOR

You can monitor the instanteneous status of your energy On / Off



ENERGY ON / NO & ON / OFF CONTROLLER

You can monitor the instanteneous status of your energy On / Off status as well as remotely turn On / Off any device connected to the control unit.



Features

- Advanced DSP and 3-Level technology
- Output power factor 1.0
- Active power factor correction (APFC),input power factor up to 0.99
- High efficiency 95% (up to 98%in ECO mode)
- · Advanced digital parallel technology
- Wide input voltage range (110 288 Vac) and frequency range (40 70Hz)
- 50 / 60 Hz frequency auto sensing
- Two modes of frequency conversion:50Hz input / 60Hz output or 60Hz input / 50Hz output
- Hot-swappable battery
- Flexible battery configuration (settable 16 20 pcs batteries)
- Digitally controlled charger
- High charging current available (Max.12 A)
- Charging voltage and current configured by demands
- Linear debating in low voltage input reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic floating / equalizing charge control, charger dormancy control, increasing battery life by 50%
- Ability to switch on the UPSwith batteries
- · Settable delayed start time when mains power is restored, reducing the impact on power grid or generator
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration
- Advanced multi-platform communications: RS232,USB,RS485,SNMP and dry contacts communication interfaces
- · Effective software and hardware protection function, robust and self-diagnostic function, and abundant event log for check
- Available Options
- RS232and smart card slot included
- Optional parallel function, battery temperature compensation, SNMPcard, USB,
- RS485card, dry contacts, EMD, and SMS alarms





Aeresol Fire Extinguisher System







Features

- The aerosol fire extinguishers are used effectively in the following fire classes in a closed environment.
- Class A Fires: Fires of solid organic materials such as wood, coal, paper, grass, textile products, plastics and similar products.
- Class B Fires: Fires of liquid combustible materials such as gasoline, diesel oil, fuel oil, mineral oils, paint, varnish, thinner, alcohol, acetone, glue.
- Class C Fires: Fires of combustible gases such as LPG (liquefied petroleum gas), propane, natural gas, methane, hydrogen, acetl, jlene and fires of gaseous material liquefied under pressure.
- Fires in electrical and electronic equipment, transformers, electrical distribution SI,Jstems and panels, computer and data processing SI,Jstem cabinets, telecommunication devices.





Model	HFX-100
Compound	K (Potassium Nitrate Based)
Gross Weight	1330 gr. ±%4
Compound Weight	100 gr.
Dimensions (mm)	80 (W) x 80 (L) x 113 (H)
Discharge Time	4-6 Seconds
Activation Method	Electrical, Thermal (Optional)
Suitable Fire Classes	NFPA 10: A, B, C (Electrical Equipment)





Model	HFX-200
Compound	K (Potassium Nitrate Based)
Gross Weight	1760 gr. ±%4
Compound Weight	200 gr.
Dimensions (mm)	80 (W) x 80 (L) x 147 (H)
Discharge Time	4-6 Seconds
Activation Method	Electrical, Thermal (Optional)
Suitable Fire Classes	NFPA 10: A, B, C (Electrical Equipment) EN 2: A, B, C, F

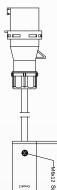




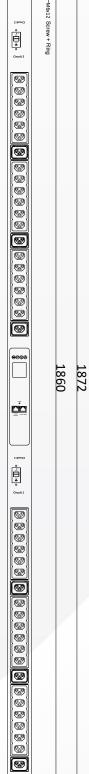
Model	HFX-500
Compound	K (Potassium Nitrate Based)
Gross Weight	3980 gr. ±%3
Compound Weight	500 gr.
Dimensions (mm)	100 (W) x 100 (L) x 243 (H)
Discharge Time	5-7 Seconds
Activation Method	Electrical, Thermal (Optional)
Suitable Fire Classes	NFPA 10: A, B, C (Electrical Equipment) EN 2: A, B, C, F



itrotel Manufacturing **Smart PDU**







FEATURES CONTROL OF THE PROPERTY OF THE PROPER		
Technology	IML Lite (Per Inlet Metering)	
Energy Metering	Voltage(V), Current(A), Active Power(kW), Real Power (KVA), Power Factor, kWh	
Metering per Input Line	Yes (Branch Circuit and Total Current) Accuracy 1%	
Metering per Output Receptacle	No	
Remote Outlet Switching	No	
Ethernet Port	10/100Mbps Ethernet	
Networking Protocols	DHCP, IPv4 and IPv6, DNS, http / https, SSHv.2, SNMP v1 / v2c / v3, SNMP TRAPS / SETS / GETS, SMTP, Modbus , Telnet, TCP, RADIUS, Syslog, TLS 1.2, SNTP, ARP, ICMP, ICMPv6, UDP, NDP	
PDU Cascading	No	
Power Share	No	
Network Controller	4 Digital-7 Segment Display LED	
Residual Current Monitoring	No	
USB Ports	No	
Environmental Sensors	All in one Temperature and Humidity sensor with 2 digital inputs (for connect air flow, door sensor, water leak, smoke detector and Vibration sensor) plug and play bus allows to connect 8 EMD devices in one PDU	
INPUT		
Plug	IEC60309 3P+N+E 6h 32A 380-415V	
Lead Length	3 meter	
Cable Type	H07RN-F5G4.0 mm ²	
Max. Input Load	32A	
Rated Input Voltage	380-415V three phase	
Frequency	50-60Hz	
Power Capacity	22.1kW	
	OUTPUT	
Rated Output Voltage	190-250V Single phase	
Output Types	24 IEX (C13/C19) combo (Max rate 16A) EN61984+UL498 certified	
Overload Protection	(6) 1 Pole Carling 16A L31-X1-00-445-H62-D3	
	CHASSIS	
Dimensions (W x D x H)	1662 x 55 x 55.4 mm	
Color	RAL 9004 black powder coat	
Mounting Options	4 mounting options (see page 2)	
Required Torque for Mounting Screws	≥2.54N·m (25.9kgf-cm or 22.4 in-lbs)	
	OPERATING ENVIRONMENT	
Temperature Range	0º to 60º C (30º to 140º F)	
Humidity	0 - 95 %	
Elevation	0 - 4000 Meters	
CONFORMANCE		
IEC 62368-1 (Third Edition)		
ROHS GHEME TÜVRheinland		

