

The Eaton Micro Data Center

Single Enclosure Integrated Solution for IT Equipment



Powering Business Worldwide

Eaton's Micro DC – Single Enclosure Solution

A fully-contained environmental solution using Eaton's industry-leading power systems, saving time and cost while maximizing network reliability



The Six Key Benefits of the Eaton Micro Data Center:

- 1 Rapid Deployment
- 2 Environmental Protection
- 3 Remote Access, Operational Security
- 4 High Reliability
- 5 Lower Total Cost of Ownership (TCO)
- 6 Attractive, High-Tech Design

Typical Industries and Applications

The Micro DC is ideal for applications where businesses are looking to grow their on-premise digital infrastructure. Often these need access to low latency and/or high bandwidth, requiring on-site computation. Typical industries and applications include:

- Banks, securities, insurance, telecommunications
- Enterprises and government offices and branch locations
- Energy, chemical industries
- Manufacturing and warehouses
- Highway, rail transit
- Small substation, small power plant
- Internet of Things
- Enterprise edge of cloud computing
- Medical Centers
- Retail
- Education





Rapid Deployment

Eaton's Micro DC Ships complete with easy installation.



Enclosure

- 42U x 600mm x 1200mm
- Fully enclosed design, dust and noise reduction
- IP42 rated
- Load Rating: 1500kg



UPS

- Eaton 9PX on-line UPS
- 3kVA, 6kVA output
- Other models available upon request



Cooling Unit

- Rack-mount, 5RMU
- 3.5kW cooling capacity
- Non-stop cooling operation
- R410A environmentally friendly refrigerant
- Includes external condenser unit



Monitoring

- Rack-mountable, 1U space
- UPS, air conditioning and environmental sensing
- 7" LCD Touch Screen Display
- Remote monitoring



Sensors & Accessories

- Temperature, humidity, smoke, flooding, magnetic door sensors
- Rear fluorescent lighting



Front



Rear



Power Distribution Module

- Rack-mount, occupies 3U space
- Integrated input and output power distribution and lightning protection modules



PDU

- Eaton FlexPDU (Basic, 0U)
- 20 x C13, 4 x C19 standard outlets
- Other models available upon request

Environmental Protection

Integrated cooling & airflow system can be deployed in most in-door applications.

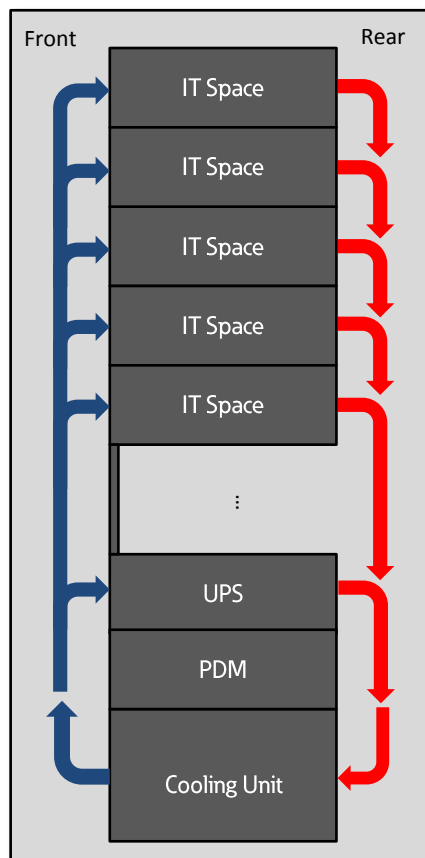
Precision air cooling unit provides:

- Highly reliable, uninterrupted operation
- 5U height, improving IT equipment space availability.
- Max cooling capacity of 3.5kw, air volume 580m³ / h EC compressor design,
- Adjustable cooling capacity
- External compressor, greatly reducing noise.
- R410A refrigerant, energy saving and environmental protection



Contained design provides effective isolation of hot and cold air, improving the cooling efficiency.

- Supports up to 3kW of IT load based on cooling unit capacity
- IP42 rated enclosure suitable for most indoor applications



MDC In-Rack Air-Flow
(Side View)



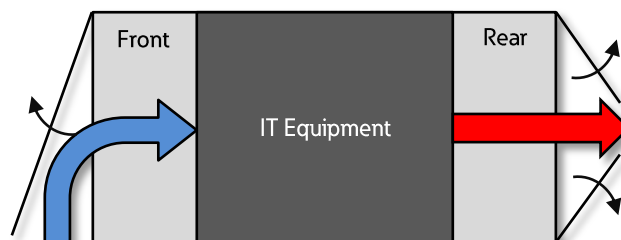
Front
Glass Door



Rear
Metal Double Door

Emergency over-temperature operation

In case of an over-temperature, the electronic doors can automatically release to allow external air to enter the enclosure.





Remote Access, Operational Security

Eaton's Micro DC monitoring system provides greater control and remote access

Monitoring Management System:

- 7" HMI + Remote Access Monitoring
- Real-Time Power, Cooling and Environmental Status Monitoring
- SNMP v1 / v2 communication
- Active and History Event Logs
- Automated Emails during fault events
- Password Protected
- Electronic door release

Network Controller



Cooling Unit



UPS (9PX)

Sensors & Accessories



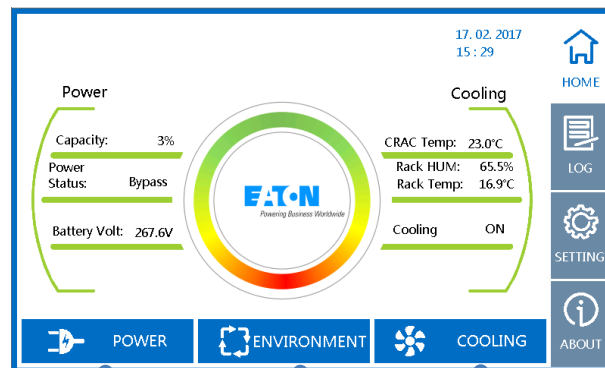
Flooding (1), lighting (1),
Temperature and Humidity (1),
Smoke (1), Doors (2)



G3 Managed PDU
(optional)

LCD Interface

7" HMI Screen

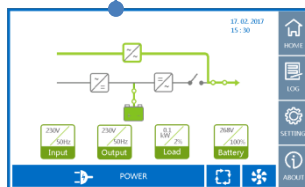


WARNING 02/17/2017 15:27		
Active Events		
ID#	Events	Type
401	Rack2 Door Alarm	Alarm
402	Rack3 Door Alarm	Alarm
403	Rack4 Door Alarm	Alarm
404	CRAC Rack1 Door Alarm	Alarm

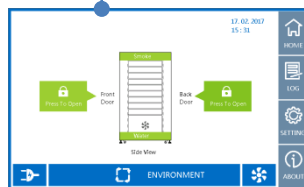
Active Event

USER 02/17/2017 15:47	
Language >	
Clock >	
System Address >	
Control Password Setup >	
HMI IP Setup >	

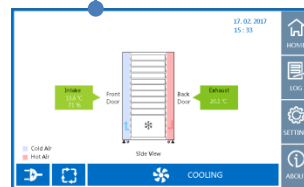
User Settings Menu Page



Power Status

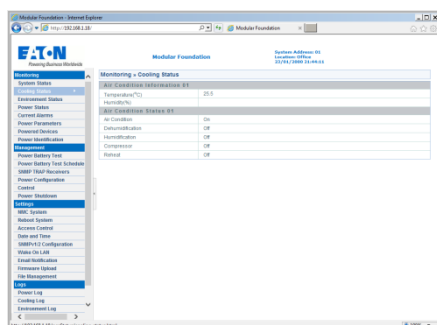


Environment Status

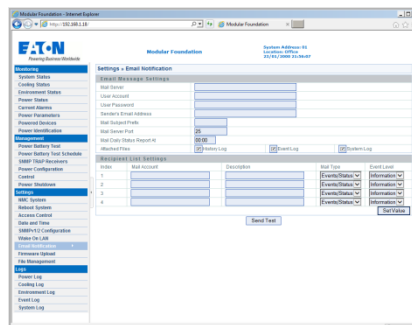


Cooling Status

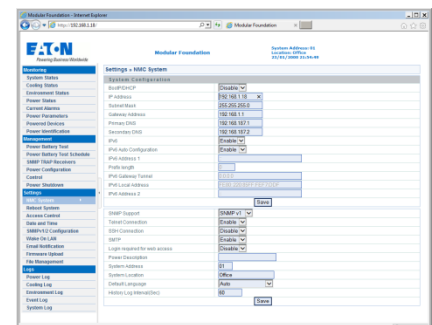
Web Interface



Real-Time Status Monitoring



Mail Setting



System Configuration

4

High Reliability

The Micro DC uses Eaton's premier power system to protect your IT system



UPS (9PX)

Eaton's Premier On-Line UPS Series



Intelligent Power Manager™

Manage your power system through Eaton's Intelligent Power Manager™



2-Year Standard Warranty

Extended Warranty options available



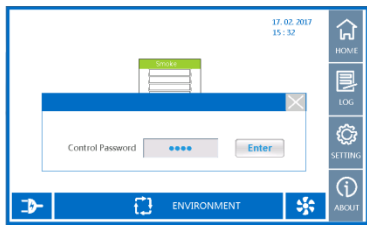
FlexPDU

High quality with locking IEC outlets



Secure Enclosure

Environmentally sealed to protect against temperature, humidity and dust



Electronic Controls

Password protected electronic and physical access

5

Lower Total Cost of Ownership (TCO)

Reduce cost of building a dedicated IT data room with a Micro DC which can be deployed on-site.

6

Attractive, High-Tech Design

Comfortably use in offices or manufacturing environments with a sleek design and easy-access controls.



On-Site Deployment



External Condenser



Eaton's Micro DC Specifications

	Reference Part No.	ETN-MDCS31	ETN-MDCS32N+1	ETN-MDCS32	ETN-MDCS61	ETN-MDCS62N+1	ETN-MDCS62
Part Numbers (for ordering)	Rack System	9006-F0062XS1-00	9006-F0062XS2-00	9006-F0062XS1-00	9006-F0062XS1-00	9006-F0062XS2-00	9006-F0062XS1-00
	UPS	(1) 9PX-3000	(2) 9PX-3000	(2) 9PX-3000	(1) 9PX-6000	(2) 9PX-6000	(2) 9PX-6000
System Ratings	Min/Max IT Load	0.9kW – 3.0kW					
	Input Power	230VAC, 50/60Hz					
	Noise Rating	~50 dB (est.), does not include external condenser					
	PUE	1.2					
	Site Requirements	Elevated floor installation / general ground installation					
	Warranty	2-Year (Standard)					
	Available RMU	31	29	29	30	27	27
UPS	Load	<i>IT Load</i>	<i>IT Load (N+1)</i>	<i>IT Load, + Cooling</i>	<i>IT Load</i>	<i>IT Load (N+1)</i>	<i>IT Load, + Cooling</i>
	Total RMU	2	4 (Total)	4 (Total)	3	6 (Total)	6 (Total)
	Max IT Load	3 kVA					
	Input Ratings	176 – 276V without de-rating, 40-70Hz, 50/60Hz auto-selection, 1.0 PF					
PDM	Power	Mains input and UPS output, lightning protection and maintenance bypass, 3RMU					
PDU	Ratings	FlexPDU (Basic): 0U IN: C20 16A Plug, OUT: 20 x C13, 4 x C19					
	# of PDU's	1	2	1	1	2	1
Enclosure	Dimensions	42U (2000mmH) x 600mmW x 1200mmD					
	IP Rating	IP42, sealed enclosure – intended for indoor use					
	Load Rating	1500kg					
	Internal Lighting	Standard – rear mounted					
	Paint Color	Black (RAL9005)					
	Front Door	Single Glass Door (Standard), Solid steel door (optional)					
	Rear Door	Double Steel Door (Solid)					
Internal Cooling Unit	Type	Rack-mountable, bottom of the enclosure interior, 5RMU with external condenser					
	Total Air Volume	580m ³ /h					
	Input Power	Dedicated UPS: 198 to 253 VAC					
	Cooling Capacity	0.9 – 3.5kW (3.0kW @ external ambient 40°C, internal 24°C)					
	Consumption	< 1.1kW					
	Noise	50dBA					
	Storage Environment	Indoor, clean without dust (< 95% RH, -15°C ~ 45°C)					
External Cooling Unit	Airflow Quantity	1700m ³ /h					
	Refrigerant	R410A					
	Cabling Length	Max. length between indoor and outdoor unit: 20m.					
Monitoring System	Host Monitoring	Rack mount, 1U Height					
	Interface	7-inch Color Touch Screen					
	Remote Monitoring	Web-based Monitoring Software					
	Content	System Power, Cooling, Smoke, Flooding, Door Status					
	Sensors	Flooding (1), Temperature and Humidity (1), Smoke (1), Doors (2)					

Due to continual product improvement, specifications are subject to change without notice



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