

FusionModule500

(Integrated Cooling Solution)

INTRODUCTION

Huawei FusionModule500 is a new-generation edge data center solution, which integrates the UPS, PDU, cooling, monitoring, battery, and fire extinguishing unit(optional) in one cabinet, it can greatly save footprint and build a "One Cabinet One DC" for customers. The core components of the FusionModule500 are pre-tested and pre-installed in the factory, and are plug-and-play on site, enabling rapid deployment of the data center. In addition, with Huawei's edge data center management system, it can realize unified management of multiple sites and significantly improve the O&M efficiency.

APPLICATION SCENARIOS

- Finance, Education, Healthcare, Public Security, SMEs, Retailing & Merchandising, Edge DC, etc.

FEATURES

Simple

- All-in-one design and integrated cooling unit inside, quick deployment within 2 hours
- Fire fighting unit inside*, no need reconstruction

Green

- Highly integrated design, space saving by 50%
- Hot and cold aisle containment to improve the cooling efficiency and reduce noise
- SmartLi inside, smaller size with longer lifecycle

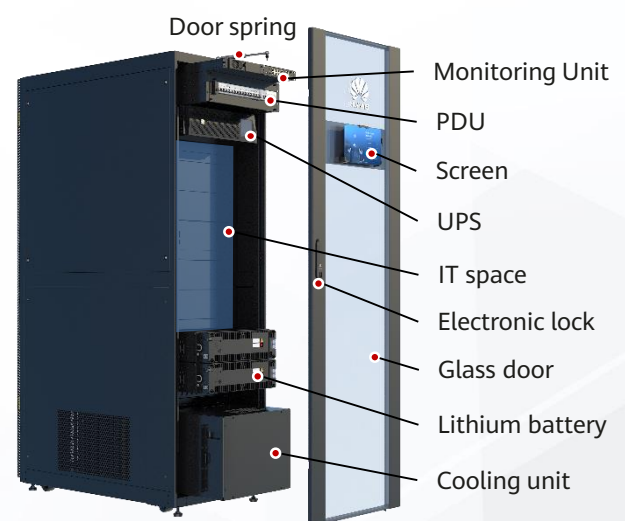
Smart

- Facial recognition, password-free login, and key-free doors opening
- Intelligent O&M, unified management of multiple data centers*

Reliable

- Highly stable LFP battery cell, no fire risk and more reliable
- Automatic door opening prevents overheating

* : Optional



FusionModule500 Architecture

SPECIFICATIONS

Item	Description	Specification
System features	Power system	220/230/240VAC, 1Ph+N+PE, 50/60Hz
	Aisle containment	Cold and hot aisle containment
	Installation mode	Concrete floor or raised floor
	Cable route	From the top
	Humidity and temperature	0°C~40°C, 5~95%
	Altitude	0~1000m (when the altitude is greater than 1000m, the capacity is derated)
	Maximum IT load	3kW
	Total dimensions	600mm × 2000mm × 1100mm (W × H × D)
	Available space	≤23U*
	Protection level	IP20
	Weight	360kg (@3kW, 1h battery backup)
Power system	Input	220/230/240VAC, 1Ph+N+PE, 50/60Hz, 63A
	Output	220VAC
	Capacity	6kVA
	Configuration	Single UPS
	Voltage input range	80~280VAC, 40-70Hz, 1Ph+N+PE
	Power factor	1.0
	Efficiency	Up to 96%
	Battery type	Lithium battery or Lead-acid battery
	Backup time	0.5h~4h*
	SPD	CLASSII/C, In 20kA, I _{max} 40kA, 8/20us
	Maintenance bypass	Standard
	rPDU (optional)	IEC: C13*8
	Cooling system	Cooling capacity
Cooling mode		Direct expansion air-cooled
Air supply		Front air supply and rear air return
Installation		Rack-mounted installation
Dimensions		438mm × 445mm × 900mm (H × W × D)
Fire Extinguishing module	Installation	Rack-mounted
	Gas type and capacity	Perfluorohexanone, 1.25kG
	Dimensions	43.6mm × 442mm × 690mm (H × W × D)
Monitoring system	Function	Remote web page access and unified management of multiple branches*
	Local monitoring	10-inch tablet screen, supporting facial recognition login and keyless door opening
	Standard functions	Smoke sensor, T&H sensor, intelligent lock, 10-inch PAD, SMS/email alarm*, and local app O&M
	Optional functions	Fire extinguishing module, video surveillance, water leakage sensor, and mobile O&M*

Remark:

1. ICT space = 23U is calculated based on 3kW and 1h backup time without fire extinguish module. The actual available space depends on specific configuration.
2. FusionModule500 supports up to 4h battery backup, and the actual backup time depends on the number of battery modules.
3. The cooling capacity is obtained when the indoor dry bulb temperature is 37°C, the indoor wet bulb temperature is 24°C, and the outdoor dry bulb temperature is 35°C. The actual cooling capacity varies depending on the indoor and outdoor ambient temperatures and relative humidity.
4. Unified management of multiple branches requires Huawei intelligent data center management system.
5. Water leakage detection is an optional function, and the dot-type/rope-type detection sensor can be selected.
6. The SMS/email alarm function needs to be used with the SIM card/network. The mobile O&M app needs to be used with Huawei intelligent data center management system.