Prefabricated Data Center

FusionModule1000A Prefabricated All-in-One Data Center

Introduction

Huawei FusionModule1000A is an advanced outdoor and prefabricated all-in-one data center facility solution. The solution provides reliable, stable and green environment for IT equipment. The solution can be applied to multiple industries and scenarios and meet data center's requirements on energy saving and fast deployment.



FusionModule1000A 40ft

Applicable Industry and Scenario

Enterprise: small data center

Government: data center of smart city and safe city

Education: data center of university and science institute

Energy: data center of mining and exploration field

Finance: backup data center

Transportation: power supply for room of airport/railway station/port

Telecom carrier: small IDC, DR DC,edge DC



Features & Value

Simple

- Enclosure, power, cooling, firefighting, DCIM system, server and switch are prefabricated. All faciliites and preinstalled and pretested before delivery
- Produtized solution minimizes the engineering work and the on-site installation of a plug& play data ceter only takes one day.
- Moveable design makes relocation easy and deployment flexibly.

Efficient

- High-efficiency modular UPS, smart in-row cooling, aisle containment, enclosure of low heat transfer coefficient, industry-leading PUE
- Huawei NetEco system centralize the management of multiple sites. 3D visualized management, power&cooling monitoring enable smart O&M
- Efficient O&M anywhere& anytime with PAD and mobile APP

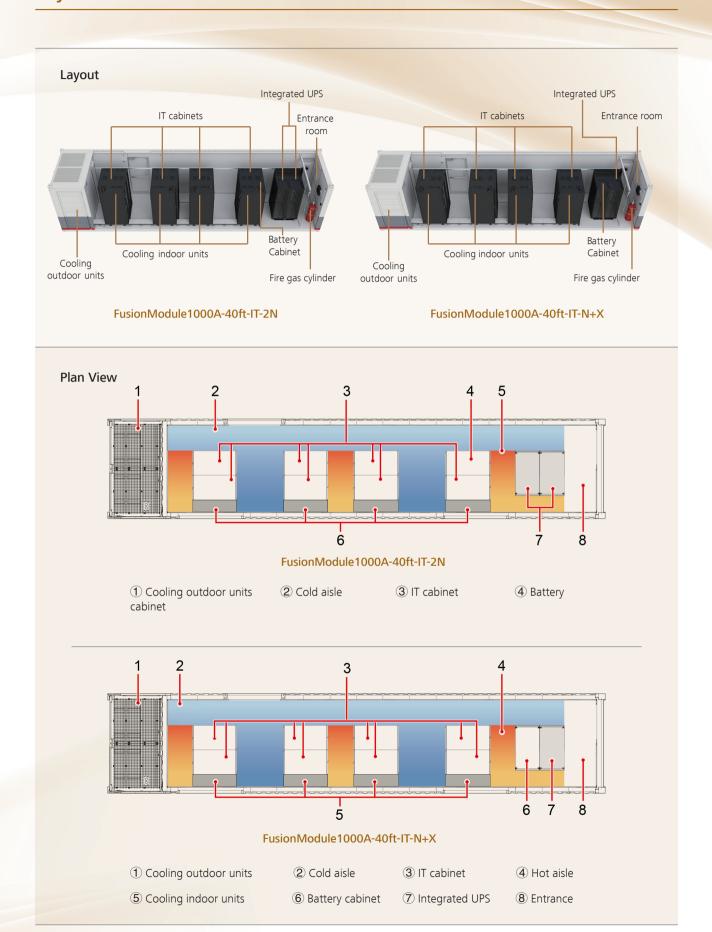
Reliable

- The world's first all-in-one product with Uptime TIER-III Ready Certification
- Durable enclosure with 25-year servive life, IP55 protection (IP65 optional) and GR-63-CORE Zone3 anti-seismic 120min fire-resistance when with customized fire-proof panel, EN 1627~EN 1630 Class 3 anti-theft (optional)
- 3D temperature map eliminate the risk caused by hot spots..Automatic refrigerant detetion provides early-alarm on cooling running.

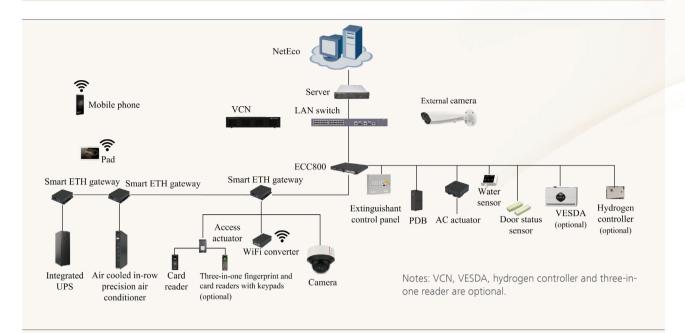


FusionModule1000A Site

Layout



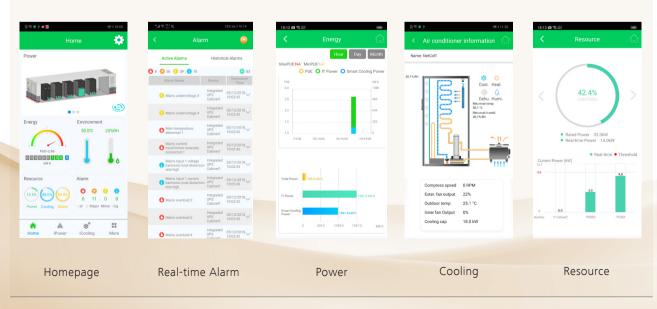
Managment System



Local Display



Mobile Phone APP



Specifications

	System	Sub-item	FusionModule1000A 40ft-IT-N+X-380V	FusionModule1000A 40ft-IT-2N-380V	System
	Power	Total IT load	≤ 54kW ⁽⁸⁾		
		Power density per rack	≤9kW		Fire protection
		Input mode	3Ph+N+PE, 380V /400V/415V AC,50Hz/60Hz		
		UPS model	Integrated modular UPS (with integrated ATS and 25kVA module)	Integrated modular UPS (with integrated MCCB and 25kVA module)	
		UPS capacity	75kVA		Monitoring
		Number of UPS power module	3+1 redundancy	3	
		BAT backup time ^①	7.5min	10min	
		Basic rPDU	Standard		
		Smart rPDU	Optional		Managemen
		Surge protection [®]	Level-3, maximum 40kA 8/20us Level-2, maximum 60kA 8/20us		
	Rack	Rack capacity [®]	8 × 42U IT rack	7 × 42U IT rack	
		Rack distribution	2×9 kW/ Rack+ 6×6 kW/ Rack	4×9 kW/ rack+ 3×6 kW/ rack	Enclosure
		Size $(H \times W \times D)$	600*1100*2000 mm 600*1200*2000mm		Protection
	Cooling	Technology	Air-cooled in-row		
		Sensible cooling capacity	25kW/unit (3+1 redundancy)		Operating Environment
		Coolant	R410A		
		Fan type	EC fan		
		Compressor	DC variable-frequency		
		A/C group control	Support		
		Temp. range	18~27°C		(1) (0) The DAT I
		Humidity range	20%~80%		1 3: The BAT b
		Hot/cold aisle	Hot aisle containment		(2): Surge protect (4)(8): Low-temper
		Humidification	Wet-film humidifie	r	is over 45° C, the coffiecient is 0.89

System	Sub-item	FusionModule1000A 40ft-IT-N+X-380V	FusionModule1000A 40ft-IT-2N-380V	
	Auto fire protection system	Automatic fire detection & suppression system c/w emergency release function		
Fire protection	Alarm	Automatic monitoring and detection, support sound and light alarm		
	Gas	Standard HFC-227ea		
	Module access	IC card reader as default optional three-in-one access control		
	Rack access	Customization [®]		
	Monitoring management	Real-time monitoring of temperature and humidity control, fire control, access control and cooling system		
Monitoring	Local display	PAD		
	Remote O&M	Арр		
	E-mail	Optional		
	SNMP short message	Optional		
	DCIM	NetEco		
Management	Server	Pre-installed		
	Lan switch	Pre-installed		
	External size (H × W × D)mm	2896 × 2438 × 12192		
Enclosure	Aisle width	cold aisle of 1150mm; hot aisle can be extended to 610mm;		
	Dustproof and waterproof	IP55 (optional IP65)		
Protection	Anti-seismic	GR-63-CORE Zone3(Equivalent to Mercalli Intensity 9)		
	Anti-theft	EN 1627~EN 1630 Class 3(optional)		
Operating	Operating humidity (RH)	5%~95%		
Environment	Operating temp. ⁴	-20°C~+55°C	-40°C~+55°C	
	Altitude ^⑤	≤ 4000m		

- $\widehat{\mathbb{ 1}}$ (3): The BAT backup time and rack capacity vary in configuration. Details refer to the Product Overview.
- 2: Surge protection level vary in configuration. Details refer to the Product Overview.
- (④)③: Low-temperature air-conditioner is required for -40°C to -20°C.When the temperature is over 45° C, the IT load will be derated as follows: when 45°C< T ≤ 50°C, the derating cofficeient is 0.89; when 50°C < T ≤ 55°C, the derating coefficient is 0.58.
- ⑤: Power derating is required when the altitude is over 1000m.Details refer to the Product Overview
- **6**: Customerized access control will cause changes to U space and monitoring solution.
- $\ensuremath{{\widehat{\mathcal{T}}}}$ N+X and 2N refers to redundancy level of power system. N+X refers to UPS module redundancy. 2N refers to UPS unit redundancy.

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