

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.

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: on-site data center of mining and exploration

Finance: backup data center

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

Telecom carrier: small IT room, small IDC, DR equipment room

Features & Value

Simple

- Enclosure, power, cooling, firefighting and DCIM system are prefabricated. All facilities are pre-installed and pre-tested before delivery. It minimizes the engineering work and the on-site installation only takes one day.
- Moveable design make relocation easy and deployment flexibly.

Efficient

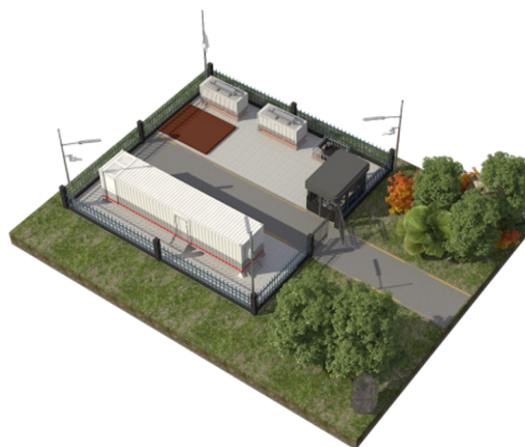
- High-efficiency modular UPS, in-row inverter A/C, aisle containment, enclosure of low heat transfer coefficient, industry-leading PUE
- Huawei NetEco system (optional) centralize the management of multiple sites.
- O&M anytime and anywhere with mobile APP

Reliable

- 2N scenario meets Uptime Tier III requirement
- IP55 protection (IP65 optional) and GR-63-CORE Zone3 anti-seismic
- Durable enclosure, 120min fire-resistance when painted with customized coating, EN 1627~EN 1630 Class 3 anti-theft, multiple access control and video surveillance protect the asset



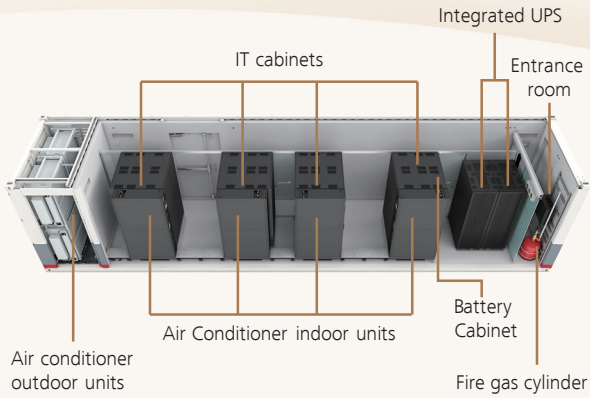
FusionModule1000A 40ft



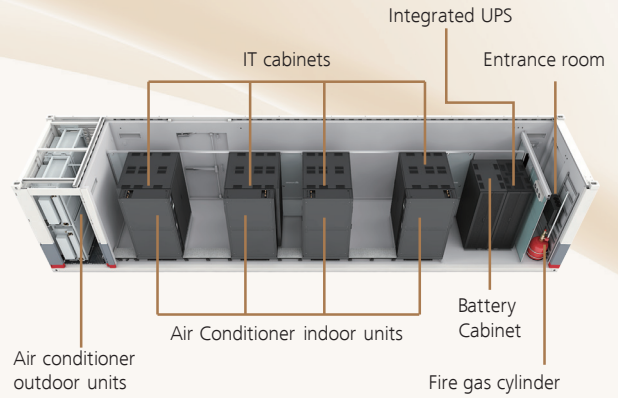
FusionModule1000A Site Scenery

Layout

Layout

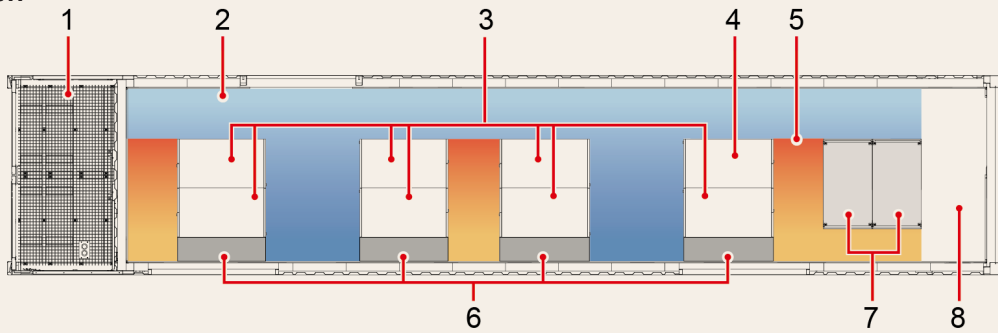


FusionModule 1000A-40ft-IT-2N



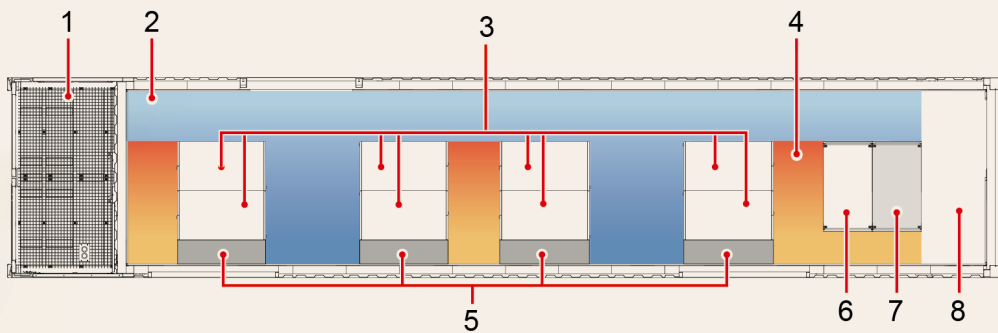
FusionModule 1000A-40ft-IT-N+X

Plan View



FusionModule 1000A-40ft-IT-2N

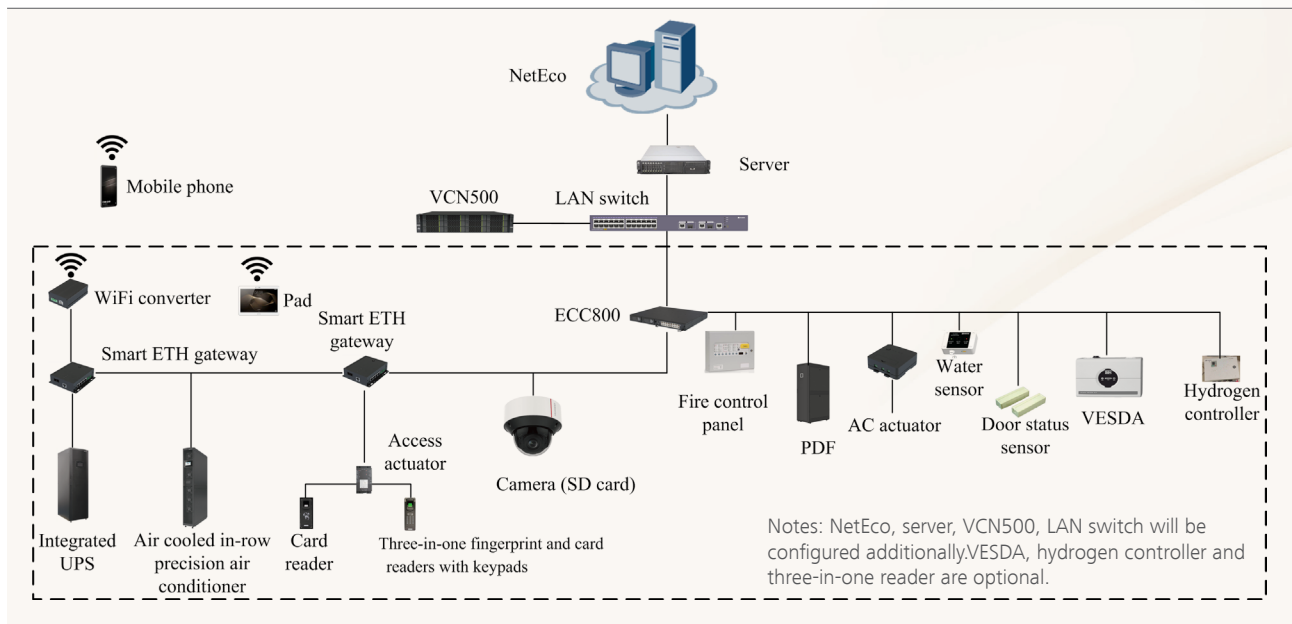
- ① A/C outdoor units ② Cold aisle ③ IT cabinet ④ Battery cabinet
- ⑤ Hot aisle ⑥ A/C indoor units ⑦ Integrated UPS ⑧ Entrance room



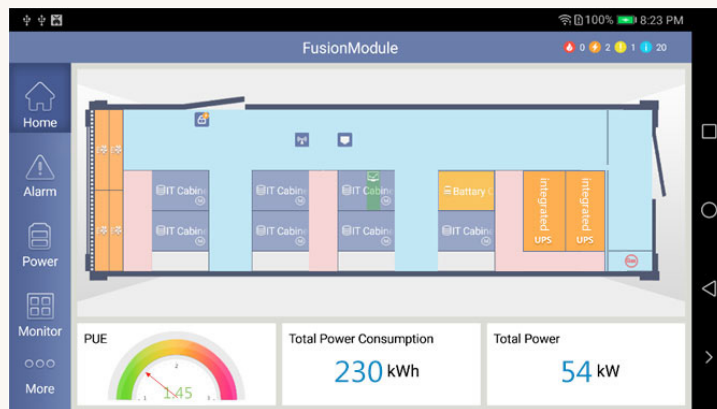
FusionModule 1000A-40ft-IT-N+X

- ① A/C outdoor units ② Cold aisle ③ IT cabinet ④ Hot aisle
- ⑤ A/C indoor units ⑥ Battery cabinet ⑦ Integrated UPS ⑧ Entrance room

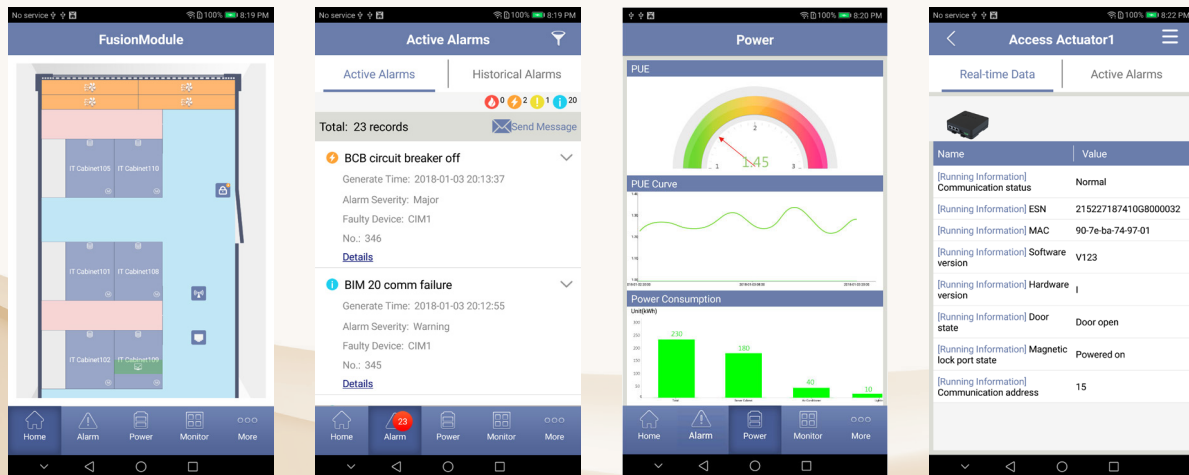
Management System



Display PAD



Mobile Phone APP



Homepage

Real-time Alarm

Power

Monitor

Specifications

System	Sub-item	FusionModule 1000A 40ft-IT-N+X-380V ^⑦	FusionModule 1000A 40ft-IT-2N-380V ^⑦	System	Sub-item	FusionModule 1000A 40ft-IT-N+X-380V ^⑦	FusionModule 1000A 40ft-IT-2N-380V ^⑦
Power	Total IT load	≤ 54kW		Fire protection	Auto fire protection system	Automatic fire detection & suppression system c/w emergency release function	
	Power density per rack	≤ 9kW			Alarm	Automatic monitoring and detection, support sound and light alarm	
	Input mode	2x320A input, 3Ph+N+PE, 380V /400V/415V AC, 50Hz/60Hz			Gas	Standard HFC-227ea optional NOVEC1230	
	UPS model	Integrated modular UPS (with integrated ATS and 25kVA module)	Integrated modular UPS (with integrated MCCB and 25kVA module)		Module access	IC card reader as default optional three-in-one access control	
	UPS capacity	75kVA		Rack access	Customization ^⑥		
	Number of UPS power module	3+1 redundancy	3		Monitoring management	Real-time monitoring of temperature and humidity control, fire control, access control and cooling system	
	BAT backup time ^①	7.5min	10min		In-module display	PAD	
	rPDU	1) Power density of 6kW/rack: basic type, full-height rPDU A route: IEC320 20 × C13+2 × C19 B route: IEC320 20 × C13+2 × C19 2) Power density of 9kW/rack: basic type, half-height rPDU A route: (IEC320 9 × C13+3 × C19) x2 B route: (IEC320 9 × C13+3 × C19) x2			Remote O&M	App	
	Surge protection ^②	Level-3, maximum 40kA 8/20us Level-2, maximum 60kA 8/20us			E-mail	Customization	
Rack	Rack capacity ^③	8 × 42U IT rack	7 × 42U IT rack		SNMP short message	Customization	
	Rack Distribution	2 × 9kW/ Rack+6 × 6kW/ Rack	4 × 9kW/ rack+3 × 6kW/ rack		External size (H × W × D)mm	2896 × 2438 × 12192	
	Size (H × W × D)	600*1100*2000 mm 600*1200*2000mm			Aisle width	Long aisle of 650-750mm; cold aisle of 1150mm; hot aisle can be extended to 610mm;	
Cooling	A/C type	Air-cooled in-row PAC		Enclosure	Dustproof and waterproof	IP55 (optional IP65)	
	Sensible cooling capacity	25kW/unit (3+1 redundancy)			Protection	Anti-seismic	GR-63-CORE Zone3
	Coolant	R410A		Anti-theft	Meet requirements of EN 1627-EN 1630 Class 3		
	Fan type	EC fan		Operating Environment	Operating humidity (RH)	5% ~ 95%	
	Compressor	DC variable-frequency			Operating temp. ^④	-20°C~+55°C	-40°C~+55°C
	A/C group control	Support			Altitude ^⑤	≤ 4000m	
	Temp. range	18~27°C					
	Humidity range	20%~80%					
	Hot/cold aisle	Hot aisle containment					
Humidification	Electrode humidifier						

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: Low-temperature air-conditioner is required for -40°C to -20°C.

⑤: Output power derating is required when the altitude is over 1000m.

⑥: Customized access control will cause changes to U space and monitoring solution.

⑦ N+X and 2N refers to redundancy level of power system. N+X refers to UPS module redundancy. 2N refers to UPS unit redundancy.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

General Disclaimer

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.

HUAWEI TECHNOLOGIES CO., LTD.

Huawei Industrial Base
Bantian Longgang
Shenzhen 518129, P.R. China
Tel: +86-755-28780808