Prefabricated Data Center

FusionModule1000A Prefabricated All-in-One Data Center

Introduction

The prefabricated all-in-one data center solution functions as a foundation for cloud computing in enterprise data centers. It meets the requirements for environmental protection, saving energy, and fast deployment. In addition, it has distinct advantages in scenarios such as disaster relief operations, oil exploration, and enterprise data management.



FusionModule1000A 40ft

Application Scenarios

- IT load≤48kW per container
- Fast deployment and movable scenarios

Features & Value

Simple

- Prefabricated and pre-tested
- Highly integrated, one container is an entire data center facility
- Easy on-site work, saving 80% deployment time

Efficient

- High energy efficiency, PUE down to 1.5
- High efficiency O&M, saving 10% OPEX at least

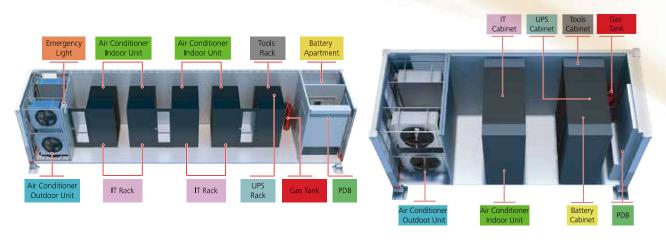
Reliable

- High environment adaption helps business operate stably
- IP55 external protection level and 9 degree anti-seismic intensity performance



FusionModule1000A 20ft

Specifications



FusionModule1000A 40ft

FusionModule1000A 20ft

Item	Sub Feature	FusionModule1000A 40ft	FusionModule1000A 20ft
Power	Input power	380/400/415Vac, 50/60Hz, 3Ph+N+PE; 480Vac, 60Hz, 3Ph+N+PE	
	Lightningproof level	60kA(PDB)	
	Power density per rack	6kW per rack	
	UPS mode	HUAWEI UPS 2000G, 20kVA rack mounted UPS	
	UPS redundancy	3+1 redundancy	2+1 redundancy
	BAT backup time	7~10 mins	10 mins
Cooling	Technology	DX (Direct Expansion) type air-conditioner units	
	Containment	Hot and cold aisle isolation	
	Cooling capacity	20kW per unit, 3+1 redundancy	20kW per unit, 2+1 redundancy
	Refrigerant	R410A	
	Humidity	Build-in humidification function	
Environmental requirements	Operation temperature	-15°C ~ +52°C*	
	Operation humidity	5% to 100% relative humidity	
	Altitude	<3000m	
Fire control	Туре	Automatic fire detection & suppression system c/w emergency release function	
Size	Dimensions (L x W x H)	12192mm x 2438mm x 2896mm	6058mm x 2438mm x 2896mm
	Total IT load	48kW	24kW
	Typical rack capacity	8 IT racks, 360U	4 IT racks, 180U

^{* -40°}C \sim -15°C conditions should use low temperature air conditioner, some parameters will change.

Prefabricated Data Center

New Generation ICT Prefabricated All-in-One Data Center

Introduction

HUAWEI FusionModule1000A is an advanced, all-in-one designed and prefabricated data center infrastructure facility solution to house, power and manage modern IT equipment with simple, green and reliable power & environment control system. The prefabricated all-in-one data center solution functions as a foundation for network facility in data center constructions. It meets the requirements for environmental protection, saving energy, and fast deployment.



FusionModule1000A 40ft

Features & Value

Simple

- All-in-One structure, prefabricated and pre-tested
- Highly integrated, one container is an entire data center facility
- Easy on-site installation work, saving 80% deployment time

Efficient

- Highly efficient power supply & distribution and temp. control solution with PUE as low as 1.5; highly efficient DX inverter in-row precision air conditioners with light load non-condensing design
- Save 10% TCO at least in comparison with traditional DC

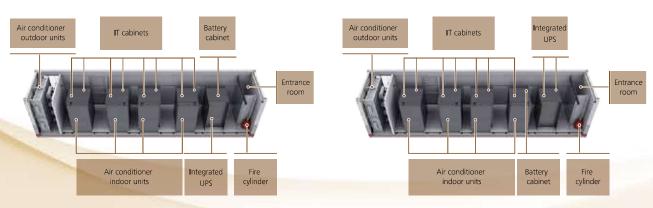
Poliable

- High environment adaption helps business operate stably
- IP55 (optional IP65) external protection level and 9 degree anti-seismic intensity performance



FusionModule1000A 40ft Deployment

Layout



FusionModule1000A 40ft TIER2

FusionModule1000A 40ft TIER3

Specifications

Item	Sub Feature	FusionModule1000A 40ft TIER2	FusionModule1000A 40ft TIER3
Power	Input power	380/400/415Vac, 50/60Hz, 3Ph+N+PE	380/400/415Vac, 50/60Hz, 3Ph+N+PE 208Vac, 60Hz, 3Ph+N+PE
	Power density per rack	≤9kW	208Vac≤7.5kW; Others≤9kW
	UPS model	HUAWEI Integrated UPS	
	UPS redundancy	N+X	2N
	BAT backup time $^{\oplus}$	7.5 to 15mins	10 to 15mins
Cooling	Technology	DC Inverter DX (Direct Expansion) type air-conditioner units	
	Containment	Hot and cold aisle isolation	
	Cooling capacity	25kW per unit, 3+1 redundancy	
	Refrigerant	R410A	
	Humidity	Build-in humidification function	
Environmental requirements	Operation Temperature [®]	-40°C ~ +55°C	
	Operation humidity	5% to 95% relative humidity	
	Altitude	<4000m	
Fire control	Туре	Automatic fire detection & suppression system c/w emergency release function	
Size	Dimensions (L x W x H)	12192mm x 2438mm x 2896mm	
	Total IT l oad	52kW	
	Rack capacity [®]	6 to 8 42U racks	

 $[\]textcircled{1}\textcircled{3}: \textbf{The BAT backup time and rack capacity is different based on the configuration. Please check the product overview for specific information.}$

②: -40°C to -20°C condition should use low temperature air conditioner, some parameters will change.

Prefabricated Data Center

New Generation ICT Prefabricated All-in-One Data Center

Introduction

HUAWEI FusionModule1000A is an advanced, All-in-One designed and prefabricated data center infrastructure facility solution to house, power and manage modern IT and CT equipments with simple, green and reliable power & environment system. The prefabricated all-in-one data center solution functions as a foundation for network facility in telecom data center constructions. It meets the requirements for environmental protection, saving energy, and fast deployment.



FusionModule1000A 40ft CT

Features & Value

Simple

- All-in-One structure, prefabricated and pre-tested
- Highly integrated, one container is an entire data center facility
- Easy on-site work, saving 80% deployment time

Efficient

- Highly efficient power supply & distribution and temp. control solution with PUE as low as 1.5; with free cooling technology, PUE is as low as 1.2
- Save 10% TCO at least in comparison with traditional DC

Reliable

- High environment adaption helps business operate stably
- IP55(optional IP65) external protection level and 9 degree anti-seismic intensity performance



FusionModule1000A 20ft CT

Layout



FusionModule1000A 40ft CT

FusionModule1000A 20ft CT

Specifications

Item	Sub Feature	FusionModule1000A 40ft CT	FusionModule1000A 20ft CT
Power	Input power	380/400/415Vac, 50/60Hz, 3Ph+N+PE	
	Power density per rack	≤8kW per rack	
	CO Power model	HUAWEI TP48 CO Powers	
	CO Power redundancy	1+1 redundancy	
	BAT backup time	60 mins	240 mins
Cooling	Technology	DC Inverter DX (Direct Expansion) type air-conditioner units	DX (Direct Expansion) + Freecooling type air-conditioner units
	Containment	Hot and cold aisle isolation	NA
	Cooling capacity	25kW per unit, 3+1 redundancy	12.5kW per unit, 1+1 redundancy
	Refrigerant	R410A	R407C
	Humidity	Build-in humidification function	Direct air free cooling
Environmental requirements	Operation temperature	-40°C ~ +55°C	-20°C ~ +40°C
	Operation humidity	5% to 95% relative humidity	
	Altitude	<4000m	<3000m
Fire control	Туре	Automatic fire detection & suppression system c/w emergency release function	
Size	Dimensions (L x W x H)	12192mm x 2438mm x 2896mm	6058mm x 2438mm x 2896mm
	Total IT load	40kW	8kW
	Typical cabinet capacity *	Support 8 CT cabinets	Support 4 CT cabinets

 $^{^{\}star}$ -40°C to $\,$ -20°C conditions should use low temperature air conditioner, some parameters will change. CT cabinets and equipments are excluded in standard configurations.