MUST®

EH9500 Series

Module Power System Solution

20KVA-400KVA

All-in-One Data Center Solution

EH9500 Series
High Frequency 3/3 Power Modular

EH9500 Modular series adopts advanced “N+X” wireless parallel redundancy technology, which can support 4 parallel connections. The system is easy to update, dilatation and maintain, has excellent electrical performance, high system availability, perfect software and hardware protection. Including power modules, monitoring modules, power distribution modules, maintenance bypass switches, and output switches, providing safe and reliable power protection for varieties of loads.

Selected capacity of single module: 20KVA, 30KVA, 40KVA
Maximum capacity of the cabinet: 3 modules
Single cabinet system maximum capacity:
60KVA, 90KVA, 120KVA
Cabinet parallel capacity: 6pcs

Selected capacity of single module: 20KVA, 30KVA, 40KVA
Maximum capacity of the cabinet: 5 modules
Single cabinet system maximum capacity:
100KVA, 150KVA, 200KVA
Cabinet parallel capacity: 6pcs

Selected capacity of single module: 20KVA, 30KVA, 40KVA
Maximum capacity of the cabinet: 10 modules
Single cabinet system maximum capacity:
200KVA, 300KVA, 400KVA
Cabinet parallel capacity: 6pcs

Applications

Small and medium data center

Computer data room

Communication base station

Automation Control System

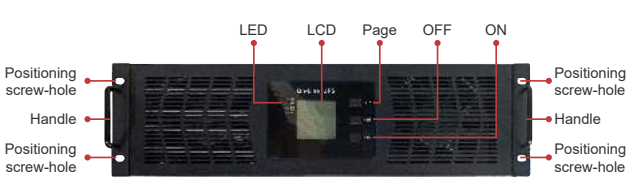
Security system

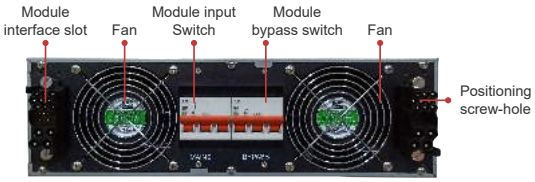
Broadcast television system

Factory production control

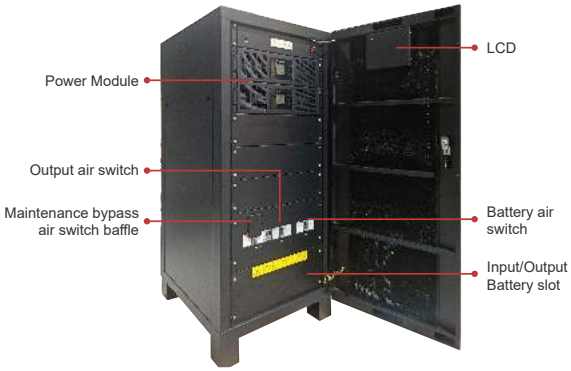
Petrochemical

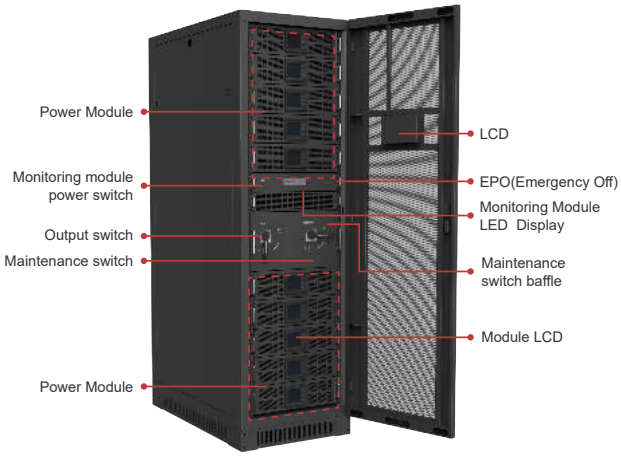
Standard Product Details





Module Display View





Module Panel Details

Product Features

Reliable “N+X” wireless parallel redundancy technology

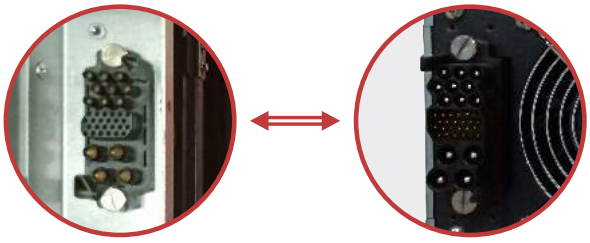
Available to set the number of redundant parallel units through LCD; all modules support hot swap operation for easy maintenance.
With distributed bypass power supply, each module has an automatic bypass switch and corresponding bypass current sharing inductor, which provides good current sharing of system bypass power supply.

Full Digital Control and Display

EH9500 series use the most advanced DSP as the central controller, which not only improves reliability and accuracy, but also easy to update and maintain. 7-inch large color LCD touch screen is used as the operation interface, graphic display, easy to operate and read information.

Integrated Design for Easy Installation

The system cabinet adopts the standard 19-inch cabinet. The parallel devices required for UPS modules parallel are built in the system cabinet. No need special installation, inserting modules to realize parallel.



UPS Cabinet:
Hot swap operation female socket

Module:
Hot swap male socket

Flexible and reliable battery solution

Three-step intelligent charging; select different external battery numbers based on user's needs (32/34/36/38/40pcs). Sharing the battery pack when parallel, which can save user's cost.

Energy saving and environmental protection

With input power factor correction (PFC), the input power factor is 0.99, and the overall efficiency is 94.5%. The sleep mode can be set. When the load rate is low, some modules automatically exit the power supply, and the sleep module periodically rotates with the working module to extend the working life of the whole machine.

Varieties of communication interface

Including RS232, RS485, USB, dry contacts, and SNMP (optional) cards

Strong load capacity

Completely support for new type modern data center loads, allowing three-phase 100% load imbalance

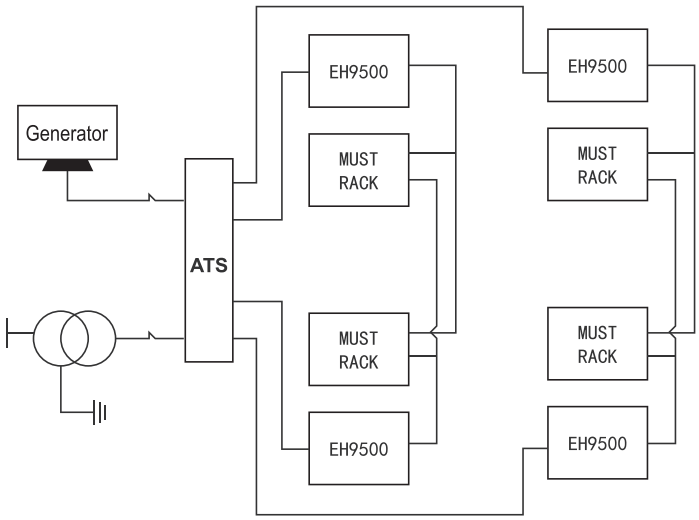
EPO switch

With emergency shutdown (EPO) switch and remote emergency shutdown (REPO) function.

EH9500 Series Appliance

Industry

In general industrial applications, most of the UPS power supply protection is precision instrumentation. The load type is mainly three-phase motor load, large startup transient current, serious pollution to utility, requires high output precision, and generally heavy load (10KVA- 100KVA).
EH9500 series has excellent input power factor correction and overload capability, output voltage accuracy reaches ±1%. It can easily cope with the output surge current at the moment of inductive load start-up, and the input current can maintain sine wave form regardless of serious load harmonic current. total harmonic distortion <5%, to reduce the harmonic interference to utility to be minimum.
EH9500 series has variable frequency capability especially suitable for special loads requiring a fixed frequency (50Hz/60Hz).



Large Central Data Center

Large central data center generally includes schools/research institutes, data center, network centers, and business halls for securities transactions, Internet cafes, enterprises large offices and so on. The load equipment is computer, network equipment, etc., generally the number is more than 50pcs, total load is between 20KVA-100KVA. Such application requires only one EH9500-100KVA, EH9500-120KVA or EH9500-200KVA.

High-reliability Large-scale Data Centers

High-reliability large-scale data centers mainly include switches rooms of communication companies, data centers of banks, air traffic control centers of civil aviation, various central computer rooms of government, and national defense. This kind of application's ultimate goal is high reliability, no heavy cost pressure, each system has redundant backup. The loads mainly are computer, network equipment and some special equipment, total load up to 1000KVA or higher. In order to support these large loads, long backup time, high reliability and low risk, multiple EH9500 series models can be used to build a regional power supply system. Two UPS can be used in each area to make a dual bus system. Each UPS maintains N+X (X>1) redundancy, which reaches over 99.99999% availability. It is important to note that this type of application is generally equipped with a backup generator to ensure almost unlimited backup time, so UPS is also very important to match various generators. The EH9500 series models have low requirements for generators, which matches mainstream brands' generator's output.

Small and Medium Data Room or Office

UPS is mainly used for small and medium-sized data room or office, such as computers, network equipment, and office equipment.

EH9500 Series Specification

Model			EH9500-60KVA/20 EH9500-90KVA/30 EH9500-120KVA/40	EH9500-100KVA/20 EH9500-150KVA/30 EH9500-200KVA/40	EH9500-200KVA/20 EH9500-300KVA/30 EH9500-400KVA/40
Capacity	Module		RU-20(18KW)/RU-30(27KW)/RU-40(32KW)		
	Max module quantity		3	5	10
Input	Input phase		3 Phases 4 wires + neutral		
	Rated voltage		380/400V/415Vac		
	AC voltage range		208~478Vac		
	Frequency range		40~70Hz		
	Power factor		≥0.99		
	Bypass range		380vac up: 25% (+10%, +15%/, +20% can be set) 400vac up: 20% (+10%, +15% can be set) 415vac up: 15% (+10%) Down to 45% (-20%/-30% available) Bypass frequency protection range: ±10%		
	Input current harmonic		≤ 3% (100% non-linear load)		
Output	Output phase		3 Phases 4 wires + neutral		
	Rated voltage		380/400V/415Vac		
	Voltage regulation		±1%		
	Output frequency	Bypass mode	Same with utility; When utility frequency is higher than maxium ±10% (±1%, ±2%, ±4%, ±5% can be set, output frequency 50Hz×(±0.2%)Hz		
		Battery mode	(50/60±0.2%)Hz		
	Load peak ratio		3:1		
	Transfer time		Inverter mode to Bypass mode: 0ms (track) Line mode to Battery mode: 0ms		
	Overload capacity		Load ≤ 110%, 10min, ≤ 125%, lasting 1min, ≥ 150% transfer to bypass mode immpeiately		
	Output voltage harmonic		≤ 2%(100% non-linear load)		
Others	Efficiency		95%		
	Communication		RS232, RS485, 2 Intelligent Slot (Intelligent card slot, dry contact)		
	Standards		CE, EN/IEC 62040-2, EN/IEC 62040-1-1, YD/T1095-2008		
Battery	Battery voltage		±192V, ±204V, ±216V, ±228V, ±240V DC; (32pcs, 34pcs, 36pcs, 38pcs, 40pcs selectable)		
	Charge current	UPS cabinet	30A Max.	50A Max.	100A Max.
		Power module	10A Max.		
Environment	Operation temperautre		0℃ ~40℃		
	Operation Humidity		0~95% non condensing		
	Storage temperature		-25℃ ~55℃		
	Operation altitude		< 1500m		
Physical	Dimension (D×W×H)	Cabinet	600 x 840 x 1400mm		600 x 1100 x 2000mm
		Module	580 x 443 x131		
	Net Weight	Cabinet	157kg	169kg	306kg
		Module	33kg		

Shenzhen Must Energy Technology Co.,Ltd

Shenzhen Factory Address:
8/F, Common Building, Sogood Science Park, Aviation Road, Xixiang Town, Bao'an District, Shenzhen

Foshan Factory Address:
Building 8, 115# OF Zhangcha 1st Road, Chancheng District, Foshan City, Guangd ong Province, China 528051

Tel: +86 755 - 8365 8583 ; +86 757 - 82981699

Web: www.upsoem.com ; www.mustpower.com