EA660

20 kVA ~ 150 kVA
PF 1.0

Application

Small and medium-sized IDC data center, ISP internet service provider, telecommunication, finance, securities, taxation, transportation, energy and other industries.

The fourth-generation EA660 series 20kVA-150kVA (PM20K, PM25K, PM30K, PM50K) plug-in UPS power supply product is a collection of EAST's latest R&D results and application experience, the new launch of a new generation of three-input three-output high-end modular UPS power supply. This product series using dual DSP full digital control technology design, effectively improves product performance and system reliability, and achieves a higher power density of integration and miniaturization. There are four models of single-module power: 20kVA, 25kVA, 30kVA and 50kVA. The maximum capacity of a single machine is 150kVA. The whole machine adopts a modular design, all modules (including the power module, bypass module and control module) support hot-swappable operation, which truly realizes the advantages of high reliability, high efficiency, easy management, and easy maintenance.

Available Options

Standard configuration with wheels for independent installation, easy to move, can be used alone as a whole machine, can also remove the side door plate and casters pushed into the distribution cabinet to save space.

Features & Benefits

High Reliability

- Advanced DSP digital control technology, rectifier and inverter using dual DSP control
- Fan speed changes intelligently with temperature, which reduces noise and extends the life of the fan
- Any one damaged fan can still carry 35% load, with strong fault tolerance
- Adopting the three-proof paint immersion process, the UPS can work in harsh environments for a long time
- Perfect hardware and software protection, super self-diagnostic function, abundant history record
- Advanced digital parallel technology for higher reliability than stand-alone systems
- Online monitoring of vulnerable devices, monitoring and management, early warning

High Availability

- Wide input voltage range, 50Hz/60Hz grid system self-adaptive, suitable for a variety of grid environments
- Linear derating at low voltage input reduces the number of times of battery discharges and extends battery life
- Support 30-46 batteries, flexible configuration of the number of battery cells, saving customers' investment
- Compatible with lead-acid batteries and lithium iron batteries, adapting to the needs of different types of battery configurations
- The UPS can be started directly from the battery in the absence of mains power to meet emergency requirements
- The reset delay start time can be set to reduce the impact on the power grid or generator
- Supports 50Hz input/60Hz output and 60Hz input/50Hz output frequency conversion

High Usability

- Touch color screen display, friendly human-machine interface
- Powerful background software for various parameter settings, online upgrade program and other operations
- Compact internal layout reduces footprint
- All modules support hot-swap operation
- Plug-in box type design, easy to install and saves the user's investment
- Self-aging function, convenient for on-site debugging and testing

High Intelligence

- Support RS485, RS485/CAN (BMS), NET (with SNMP function), dry contact, WIFI card and 4G card and other communication interfaces to monitor the operation status of the UPS, configure WIFI card or 4G card to monitor the UPS in real time through the cell phone APP
- Intelligent battery management, float charge voltage temperature compensation technology, automatic equal or float charge control, charger sleep control, can improve the reliability of the charger and extend battery life
- Intelligent dormancy design ensures efficient operation of the UPS system at low load rates

High Efficiency

- With active power factor correction (PFC) technology, the input power factor is up to 0.99
- On-line efficiency is increased to 96%, saving energy and reducing operating costs
- Under good grid conditions, its working efficiency is up to 99% with ECO mode on

Plentiful Fittings

- Standard RS485, RS485/CAN (BMS), NET (with SNMP function), input and output dry contacts and EPO
- Optional parallel unit component, LBS component, WIFI card, 4G card, battery temperature sensor, EMD environment detector.

Specifications

MODEL	EA6640	EA6680	EA66120
System cabinet rated capacity	40kVA/40kW	80kVA/80kW	120kVA/120kW
Power module rated capacity	20kVA/20kW		
Number of power modules	2	4	6
MODEL	**EA6650**	**EA66100**	**EA66150**
System cabinet rated capacity	50kVA/50kW	100kVA/100kW	150kVA/150kW
Power module rated capacity	25kVA/25kW		
Number of power modules	2	4	6
MODEL	**EA6660**	**EA66120**	**EA66150**
System cabinet rated capacity	60kVA/60kW	120kVA/120kW	150kVA/150kW
Power module rated capacity	30kVA/30kW		
Number of power modules	2	4	5+1
INPUT			
Input phases	Three-phase five-wire (3Φ+N+PE)		
Input rated voltage	380Vac/400Vac/415Vac		
Input voltage variable range	304~485Vac (no derating); 138~305Vac (linear derating between 40%~100% load)		
Input frequency variable range	40~70Hz		
Input power factor	≥0.99		
Input current harmonics	≤3%		
Bypass input voltage range	-60%~+25% (settable)		
Battery voltage	Lead-acid battery: ±240VDC (±180VDC~±276VDC settable), 12V battery 40 cells (even number 30~46 cells settable); Lithium battery: ±256VDC (±192VDC~±256VDC settable), 3.2V cell 160 single cells (120, 128, 150, 160 single cell settable)		
OUTPUT			
Output phases	Three-phase five-wire (3Φ+N+PE)		
Output rated voltage	380Vac/400Vac/415Vac		
Output voltage regulation precision	±1%		
Output frequency accuracy	Mains mode: tracking bypass input in synchronized state; battery mode: 50Hz/60Hz±0.1%		
Output power factor	1		
Output waveform distortion	≤1% (resistive load); ≤3% (non-resistive load)		
Output current crest factor	3:1		
Inverter overload capacity	105%<load≤110%, turn to bypass after 60 minutes; 110%<load≤125%, turn to bypass after 10 minutes; 125%<load≤150%, turn to bypass after 1 min; load>150%, turn to bypass after 0.2 sec.		
SYSTEM			
Max. system efficiency	Online mode: 96%, ECO mode: 99%		
Switching time	0 ms		
Maximum parallel units	2 units		
Protection	Output short-circuit protection, output overload protection, over-temperature protection, battery low voltage protection, output over-/under-voltage protection, fan failure protection, etc.		
Communications interface	Standard configuration: RS485, RS485/CAN (BMS), NET (with SNMP function), input and output dry contacts and EPO; Optional configuration: parallel unit component, LBS component, WIFI card, 4G card, battery temperature sensor, EMD environment detector		
Display	0035 inch touch color screen		
ENVIRONMENT			
Operating temperature	0~40°C		
Storage temperature	-25°C~55°C (without battery)		
Relative humidity	0%~95% (non-condensing)		
Altitude	Altitude ≤1000m, over 1000m, load derated 1% per 100m		
IP rating	IP20		
OTHERS			
Cabinet dimension (W×D×H) (mm)	483×852×490	483×852×670	483×852×850
Cabinet net weight (kg)	65	70	88
Module dimension (W×D×H) (mm)	442×620×86		
Module net weight (kg)	21		
Color	Black		

MODEL	EA66150
System cabinet rated capacity	150kVA/150kW
Power module rated capacity	50kVA/50kW
Number of power modules	3
INPUT	
Input phases	Three-phase five-wire (3Φ+N+PE)
Input rated voltage	380Vac/400Vac/415Vac
Input voltage variable range	304~485Vac (no derating); 138~305Vac (linear derating between 40%~100% load)
Input frequency variable range	40~70Hz
Input power factor	≥0.99
Input current harmonics	≤3%
Bypass input voltage range	-60%~+25% (settable)
Battery voltage	Lead-acid battery: ±240VDC (±180VDC~±276VDC settable), 12V battery 40 cells (even number 30~46 cells settable); Lithium battery: ±256VDC (±192VDC~±256VDC settable), 3.2V cell 160 single cells (120, 128, 150, 160 single cell settable)
OUTPUT	
Output phases	Three-phase five-wire (3Φ+N+PE)
Output rated voltage	380Vac/400Vac/415Vac
Output voltage regulation precision	±1%
Output frequency accuracy	Mains mode: tracking bypass input in synchronized state; battery mode: 50Hz/60Hz±0.1%
Output power factor	1
Output waveform distortion	≤1% (resistive load); ≤3% (non-resistive load)
Output current crest factor	3:1
Inverter overload capacity	105%<load≤110%, turn to bypass after 60 minutes; 110%<load≤125%, turn to bypass after 10 minutes; 125%<load≤150%, turn to bypass after 1 min; load>150%, turn to bypass after 0.2 sec.
SYSTEM	
Max. system efficiency	Online mode: 96%, ECO mode: 99%
Switching time	0 ms
Maximum parallel units	4 units
Protection	Output short-circuit protection, output overload protection, over-temperature protection, battery low voltage protection, output over-/under-voltage protection, fan failure protection, etc.
Communications interface	Standard configuration: RS485, RS485/CAN (BMS), NET (with SNMP function), input and output dry contacts and EPO; Optional configuration: parallel unit component, LBS component, WIFI card, 4G card, battery temperature sensor, EMD environment detector
Display	0035 inch touch color screen
ENVIRONMENT	
Operating temperature	0~40°C
Storage temperature	-25°C~55°C (without battery)
Relative humidity	0%~95% (non-condensing)
Altitude	Altitude ≤1000m, over 1000m, load derated 1% per 100m
IP rating	IP20
OTHERS	
Cabinet dimension (W×D×H) (mm)	485×850×620
Cabinet net weight (kg)	65
Module dimension (W×D×H) (mm)	442×620×129
Module net weight (kg)	35
Color	Black

Remarks:

- This product is mainly used in industrial and commercial aspects, when the application involves life support system, please contact the manufacturer's technical personnel.
- For the important power supply system, should be used in the national standard GB50174 provisions of class A or B power supply architecture, that is, dual power supply system to power the load, improve the reliability of the system power supply.
- Specifications change without notice, pictures are for reference, please prevail in kind.