

EA660 HV

200 kVA ~ 600 kVA
PF 1.0



Highlights

High power factor 1.0

High efficiency 96%

High adaptability

Power flexibility from 200~600kW

Modular hot-swappable & Scalability

High MTBF and low MTTR

The fourth-generation EA660 series, ranging from 200kVA to 600kVA, represents a new generation of high-end modular UPS systems with three inputs and three outputs, leveraging EAST's latest R&D achievements and application experience. This series utilizes dual-DSP fully digital control technology and components from leading global brands, effectively improving product performance and system reliability while enabling higher power density integration and miniaturization. A single module boasts a power output of 50 kVA /50kW/3U, with a maximum capacity of 600kVA. The modular design allows for hot-swappable operation of all modules(including power modules, bypass modules, and control modules), truly realizing the advantages of high-performance modular UPS systems, including high reliability, high efficiency, ease of management, and ease of maintenance.

Features

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
- If one fan is damaged, the load can be maintained at 50%, and if two fans are damaged, the load can be maintained at 30%, the fault tolerance is strong
- 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

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, and can flexibly configure the number of battery cells to save 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 modes
- The system is equipped with a standard maintenance switch for easy maintenance

High Usability:

- 7-inch large 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, with a 300kVA system occupying only 0.5m²
- All modules support hot-swap operation
- The power distribution unit is integrated inside the cabinet, 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:

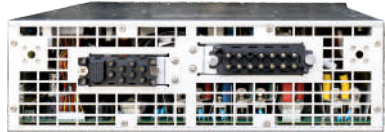
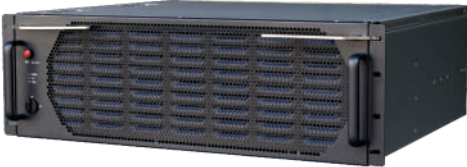
- Standard RS485, RS485/CAN(BMS), NET(with SNMP function), input and output dry contacts and EPO
- Optional parallel unit component, LBS component, WIFI card, 4G card, battery temperature sensor, EMD environment detector



Power Module



Bypass Module



Control Module



- ① Parallel port
- ② LED indicator
- ③ DRY_IN
- ④ DRY_OUT
- ⑤ BTG port
- ⑥ BCB port
- ⑦ BCB tripping signal
- ⑧ EPO port
- ⑨ Switch state port of power distribution cabinet
- ⑩ SPD port
- ⑪ Environmental temperature port
- ⑫ Battery temperature compensation port
- ⑬ CAN port
- ⑭ RS485 port 1
- ⑮ RS485 port 2
- ⑯ Ethernet port
- ⑰ USB port
- ⑱ LCD screen port

Specifications

MODEL	EA66200 HV	EA66300 HV	EA66400 HV	EA66500 HV	EA66600 HV
Rated capacity	200kVA/200kW	300kVA/300kW	400kVA/400kW	500kVA/500kW	600kVA/600kW
Numbers of power modules	4	6	8	10	12
Rated capacity of power module	50kVA/50kW				
INPUT					
Input wiring	3Ph+N+PE				
Rated voltage	480/440Vac				
Voltage range	384~528Vac(no derating); 288~384Vac(linear derating between 60%~100% load)				
Input frequency range	40~70Hz				
Power factor	≥0.99				
Current distortion	≤3%				
Bypass input voltage range	-60%~+10%(settable)				
Battery voltage	±240Vdc(±180~±276Vdc settable), 40 pcs 12V batteries(even number 30~46 pcs settable)				
OUTPUT					
Output wiring	3Ph+N+PE				
Rated voltage	480/440Vac				
Output voltage stabilized voltage precision	±1%				
Frequency accuracy	Mains mode: tracking bypass input in synchronous state; battery mode: 50Hz/60Hz ± 0.1%				
Power factor	1				
Voltage distortion	≤1%(resistive load); ≤3%(non-resistive load)				
Crest factor	3:1				
Inverter overload capacity	105%<load≤110%, transfer to bypass in 60 mins; 110%<load≤125%, transfer to bypass in 10 mins; 125%<load≤150%, transfer to bypass in 1 min; Load>150%, transfer to bypass in 200 ms				
Bypass overload capacity	Load ≤125% for long term; >200% load for 100 ms				
SYSTEM					
Efficiency	Online mode: 96%, ECO mode: 99%				
Max. number of parallel connections	4 units				
Switching time	0ms				
Protections	Output short-circuit protection, output overload protection, over-temperature protection, battery low voltage protection, output over / under voltage protection, fan failure protection etc.				
Communication interface	Standard: RS485, RS485 / CAN (BMS), NET (with SNMP function), input / output dry contacts, EPO; Optional: parallel kits, LBS components, Wifi card, 4G card, battery temprature sensor, EMD environment detector				
Display	7 inches LCD touch screen				
ENVIRONMENT					
Operating temperature	0~40°C				
Storage temperature	-25°C~55°C(without battery)				
Relative humidity	0~95%(non-condensing)				
Altitude	≤1000m, above 1000m, derating 1% for each additional 100m				
Protection level	IP20				
Noise at 1m	≤65dB		≤68dB		
OTHERS					
Cabinet dimensions (WxDxH)(mm)	600×850×2000		1200×850×2000		1400×850×2000
Module dimensions (WxDxH)(mm)	440×620×130				
Cabinet net weight (kg)	230	240	410	450	600
Module net weight (kg)	32				
Color	Black				

- This product is primarily intended for industrial and commercial applications. Please contact the manufacturer for technical support when using it for life support systems.
- For critical power supply systems, a Class A or Class B power supply architecture as specified in the national standard GB50174 should be adopted, i.e. a dual power supply system should be used to supply power to the load to improve system reliability.
- All specifications subject to change without notice. Images are for reference only, please refer to the actual product.