

EA660

400 kVA ~ 1200 kVA
PF 1.0



Highlights

High power factor 1.0

High efficiency 97%

High adaptability

Power flexibility from 400 - 1200 kW

Modular hot-swappable & Scalability

High MTBF and low MTTR

EA660 modular UPS is ideal for reliable, saving, intelligent and easy solutions. It ensures that a scalable, secure, high quality power supply is available for any critical high-density computer and IT environment applications, such as data centers and other critical loads.

EA660 modular UPS is a scalable three-phase / three-phase uninterruptible power supply system with DSP technology and provides true on-line double conversion power protection. The available UPS power and redundancy level can expand vertically from 400 to 1200 kVA / 1200 kW in one single power cabinet, and four power cabinets can be connected in parallel, increasing the capacity up to 4800 kW. It features modular hot-swappable design, all modules support "plug & play", including power modules, bypass module, and control module, simplifies UPS servicing and maintenance.

Features

- Dual DSP digital control technology
- Flexible modularity and easy scalability with all hot-swappable module design
- High efficiency at low load rate: 97% at 40% rated load and 96% at 20% rated load
- High power density of 100 kVA / 3U power module
- Wide input voltage range, high grid adaptability, strong load adaptability and strong overload capability
- Small footprint (600 kVA system only 0.8 m² footprint)
- Inbuilt integrated PDU system, easy installation and saving investment
- Input power factor > 0.99, THDi < 3%, environment friendly and high-efficiency and energy-saving
- Soft-start technology improves generator matching up to 1:1.1
- Support two modes of frequency conversion: 50 Hz input / 60 Hz output and 60 Hz input / 50 Hz output
- Intelligent hibernation design enables UPS to operate efficiently at low load rate to prolong service life and improve the system efficiency
- Advanced parallel expansion technology, support 4 units in parallel
- Share battery pack in parallel operation, saving user's battery cost
- Flexible charger parameter and battery configuration setting, numbers of battery 30 ~ 50 pcs selectable
- Intelligent battery management (Intelligent charge/discharge management and float charging voltage temperature compensation), extending battery lifespan
- Support battery cold start and utility self boot
- Self-aging function, easy debugging and test on site
- Fault-tolerant design for fan system: 20% load can be driven when 2 fans fail and 50% load when 1 fan fails
- Front accessible maintenance, top/bottom cable entry compatible
- Complete hardware and software protection function, robust self-diagnostic function, and abundant event log for check
- 7 inches LCD touch screen, friendly human-machine interface
- Monitoring unit with built-in SNMP, supports RS485 and dry contacts



400-600kVA



800-1200kVA



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 | EA66400 | EA66500 | EA66600 | EA66800 | EA661000 | EA661200 |
|--|--|----------------|----------------|--------------------|------------------|------------------|
| Rated capacity | 400 kVA/400 kW | 500 kVA/500 kW | 600 kVA/600 kW | 800 kVA/800 kW | 1000 kVA/1000 kW | 1200 kVA/1200 kW |
| Numbers of power modules | 4 | 5 | 6 | 8 | 10 | 12 |
| Rated capacity of power module | 100 kVA / 100 kW | | | | | |
| INPUT | | | | | | |
| Input wiring | 3 Ph + N + PE | | | | | |
| Rated voltage | 380 / 400 / 415 Vac | | | | | |
| Voltage range | 138 ~ 485 Vac (324 ~ 485 Vac without power downgrading; 139 ~ 324 Vac with linear downgrading 35%) | | | | | |
| Input frequency | 40 ~ 70 Hz | | | | | |
| Power factor | ≥ 0.99 | | | | | |
| Current distortion | < 3% | | | | | |
| BATTERIES | | | | | | |
| Battery voltage | 480 Vdc (360 ~ 600Vdc selectable) | | | | | |
| Number of battery | 40 pcs 12 V batteries (30~50 pcs selectable) | | | | | |
| OUTPUT | | | | | | |
| Output wiring | 3 Ph + N + PE | | | | | |
| Rated voltage | 380 / 400 / 415 Vac ± 1% | | | | | |
| Frequency | Synchronized with utility in mains power mode: 50 Hz / 60 Hz ± 0.05% in battery mode | | | | | |
| Power factor | 1 | | | | | |
| Voltage distortion | ≤ 1% with linear load / ≤ 3 % with non-linear load | | | | | |
| Crest factor | 3:1 | | | | | |
| Inverter overload capacity | 105% < load ≤ 110%: transfer to bypass in 60 min 110% < load ≤ 125%: transfer to bypass in 10 min 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 | 97% | | | | | |
| Max. number of parallel connections | 4 units | | | | | |
| Transfer time | 0 ms | | | | | |
| Protections | Short circuit protection, overload protection, over-temperature protection, battery low voltage protection, output over/low voltage protection, fans failure protection etc. | | | | | |
| Communications | RS485, dry contacts, SNMP | | | | | |
| Display | 7 inches LCD touch screen | | | | | |
| OTHERS | | | | | | |
| Operating temperature | 0°C ~ 55°C | | | | | |
| Storage temperature | -25°C ~ 55°C | | | | | |
| Humidity | 0 ~ 95%(non-condensing) | | | | | |
| Altitude | ≤1000 m. Above 1000 m, derating 1% for each additional 100 m | | | | | |
| Protection level | IP 20 | | | | | |
| Cabinet dimensions (W x D x H) (mm) | 800 × 1000 × 2000 | | | 2000 × 1000 × 2000 | | |
| UPS module dimensions (W x D x H) (mm) | 440 × 750 × 130 | | | | | |
| Cabinet weight (kg) | 412 | | | 920 | | |
| Power module weight (kg) | 50 | | | | | |

●All specifications are subject to change without notice.