

# MODULAR UPS

400 kVA ~ 1200 kVA  
PF 1.0



POWER  
MAXMA

ماكسما  
ماركة مسجلة

## 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 m<sup>2</sup> 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

## 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.



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	400kVA	500kVA	600kVA	800kVA	1000kVA	1200kVA
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 ± 0.1% 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 x 1000 x 2000			2000 x 1000 x 2000		
Cabinet packing dimensions (W x D x H) (mm)	900 x 1100 x 2190			2100 x 1100 x 2190		
Power module dimensions (W x D x H) (mm)	440 x 750 x 130					
Power module package dimensions (W x D x H) (mm)	604 x 1004 x 268					
6 power modules package dimensions (W x D x H) (mm)	1250 x 1030 x 940					
Cabinet net weight (kg)	412			920		
Cabinet packing weight (kg)	450			1010		
Power module weight (kg)	50					
Power module packing weight (kg)	55					
6 power modules packing weight (kg)	360					

● All specifications are subject to change without notice.