# **EA660 LV**

25 kVA ~ 300 kVA PF 1.0



## **Highlights**

High power factor 1.0

High efficiency 96%

High adaptability

Power flexibility from 25-300 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.

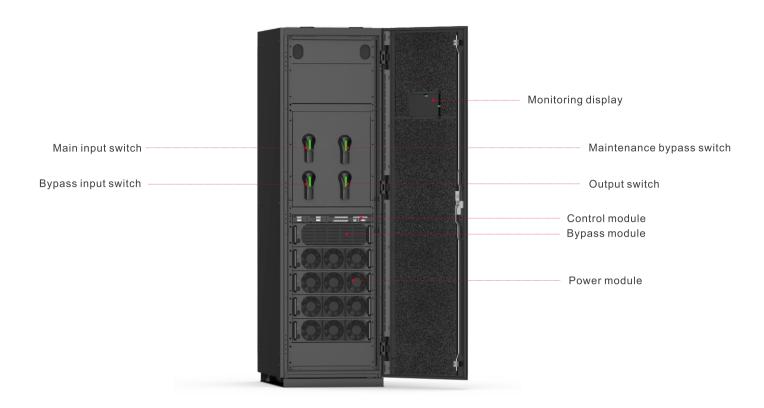
EA660 modular UPS is a scalable three-phase / three-phase uninterruptible power supply system with DSP technology and provides true on-line double conversion power protection. The available UPS power and redundancy level can expand vertically from 25 to 300 kVA / 300 kW in one single power cabinet, and four power cabinets can be connected in parallel, increasing the capacity up to 1.2 MW. It features modular hotswappable 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: 96% at 40% rated load and 95% at 20% rated load
- High power density of 25kVA / 3U power module
- Wide input voltage range, high grid adaptability, strong load adaptability and strong overload capability
- Small footprint (250kVA system only 1.02 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: 50Hz input/60 Hz output and 60Hz input/50Hz 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 16~24 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: 30% 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







#### **Power Module**





### **Bypass Module**



#### **Control Module**



 Parallel port ② LED indicator

7 BCB tripping signal 8 EPO port

CAN port RS485 port 1 ③ DRY\_IN

① RS485 port 2

4 DRY\_OUT

Ethernet port

Switch state port of power distribution cabinet
SPD port
power distribution cabinet

⑤ BTG port

① USB port

① Environmental temperature port

Battery temperature compensation port

13 LCD screen port

6 BCB port

## **Specifications**

MODEL	EA66100	EA66150	EA66200	EA66250	EA66300
Rated capacity	100 kVA/100 kW	150 kVA/150 kW	200 kVA/200 kW	250 kVA/250 kW	300 kVA/300 kW
Numbers of power modules	4	6	8	10	12
Rated capacity of power module	25 kVA				
INPUT					
Input wiring	3 Ph + N + PE				
Rated voltage	190 / 208 / 220 Vac				
Voltage range	114 ~ 277 Vac (166 ~ 277 Vac without power downgrading; 114 ~ 166 Vac with linear downgrading 40%)				
Input frequency	40 ~ 70 Hz				
Power factor	≥ 0.99				
Current distortion	< 3%				
BATTERIES					
Battery voltage	± 120 Vdc (± 96, ± 108, ± 120, ± 132, ± 144 selectable)				
Number of battery	20 pcs12 V batteries ( 16 / 18 / 20 / 22 / 24 pcs selectable)				
OUTPUT					
Output wiring	3 Ph + N + PE				
Rated voltage	190 / 208 / 220 Vac ± 1%				
Frequency	Synchronized with utility in mains power mode:				
	$50  \text{Hz} / 60  \text{Hz} \pm 0.25\%$ in battery mode				
Power factor	1				
Voltage distortion	≤ 1% with linear load / ≤ 3 % with non-linear load				
Crest factor	3:1				
	105% < load ≤ 110%: transfer to bypass in 60 min				
Inverter overload capacity	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 ≤135% for long term; < 1000% load for 100 ms				
SYSTEM		E080 = 100 70 101	Tong term, 1 10007	010441011001113	
Efficiency			96%		
Max. number of parallel connections	4 units				
Transfer time	0 ms				
Transfer tille	Short circuit protection, overload protection, over-temperature protection, battery low				
Protections	Short circuit protection, overload protection, over-temperature protection, battery low voltage protection, fans failure protection etc.				
Communications	RS485. dry contacts, SNMP				
Communications	7 inches LCD touch screen				
Display		7 11	iches LCD touch sci	reen	
OTHERS			0 4000		
Operating temperature	0 ~ 40°C				
Storage temperature	-40°C ~ +70°C				
Humidity	0 ~ 95% (non-condensing)				
Altitude	≤ 1000 m. Above 1000 m, derating 1% for each additional 100 m				
Protection level	IP 20				
Noise level at 1 m	< 65 dB < 68 dB				
Cabinet dimensions (W x D x H) (mm)	600 × 850 × 2000 1200 × 850 × 2000 1400 × 850 × 2000				
UPS module dimensions (W x D x H) (mm)			440 × 620 × 130		
Cabinet weight (kg)	230	240	410	450	600
Power module weight (kg)	32				

<sup>•</sup> All specifications are subject to change without notice.