# **EA660 LV**

15 kVA ~ 120 kVA PF 1.0



## Highlights

High power factor 1.0

High efficiency 94%

High power density

3-level technology

2 U power module

Power flexibility from 15 – 120 kW

Scalability & Modular hot-swappable

Low total cost of ownership

EA660 Series 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 Series (15 kVA  $\sim$  120 kVA) UPS is a high-end modular UPS with latest dual-core DSP control technology. It adopts a highly intelligent modular design which mainly contains power modules, bypass module and control module, all modules support "plug & play" to simplify UPS servicing and maintenance. The available UPS power and redundancy level can expand vertically from 15 kVA / 15 kW to 120 kVA / 120 kW in one single power cabinet with flexible configuration for meeting different needs. Based on superior electrical performance, perfect hardware and software protection function, EA660 Series UPS can adapt to different grid environment and provides maximum protection and high quality power for critical loads in data centers or other important applications.

#### **Features**

- Advanced dual-core DSP control technology
- True On-line, double conversion power protection, and with strong load capacity
- Compact footprint, modular Hot-swappable design simplifying maintenance and scalability
- High efficiency up to 94% in on-line mode, 99% efficiency in ECO mode
- Dual input design, independent bypass available, improving bypass availability
- Output power factor 1.0, input power factor ≥ 0.99, input THDi ≤ 3%, output THDv ≤ 2%
- 114 ~ 277 Vac wide input voltage range, 50 Hz / 60 Hz grid self-adaptive
- Frequency conversion available: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Advanced digital parallel technology, improving redundancy and reliability in system
- Flexible charger parameter and battery configuration settings, battery number 16 ~ 24 pcs selectable
- Compatible with lead-acid battery and lithium battery, suitable for different types of battery configuration requirements
- Support cold start with battery and auto restart with mains power
- Settable delay time for startup when the mains power is restored, reducing the impact on the grid or generators
- Fan speed varies intelligently with temperature, reducing noise and extending the service life of the fan
- Fault-tolerant design for fan system, taking 35% loads when any one of fans fails
- Superior hardware and software protection function, robust self-diagnostic function, and abundant event log
- Hibernation function to improve the system efficiency at light loads and extend the service life of UPS
- Powerful background software for parameters configuration and online updating
- 7 inches LCD touch screen, friendly human-machine interface
- Multi-platform communications: RS485, CAN, NET, dry contacts, SNMP, Wi-Fi and GPRS
  communication interfaces; Real-time monitoring UPS available through the mobile App after
  installing Wi-Fi card and GPRS card
- Intelligent battery management, automatic floating/equalizing charge control, battery self-diagnosis control, SOC detection,

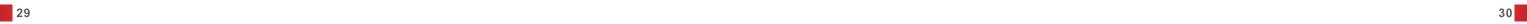
SOH detection and charger hibernation control, extending battery lifespan

### **Available Options**

Parallel cables, LBS cables, Battery temperature sensor, Wi-Fi card, GPRS card









#### **Power Module**





① Run indicator ② Alarm indicator ③ Fault indicator

4 Ready switch 5 Output port

⑥ Input port

Dimensions (W×D×H) (mm)	442×620×86
Weight (kg)	20.26 kg
Charging current	10 A
Capacity	15 kVA / 15 kW

## **Bypass Module**



4 Ready switch 5 Signal terminal 6 Power terminal

① Run indicator ② Alarm indicator ③ Fault indicator

Dimensions (W×D×H) (mm)	442×500×130
Weight (kg)	18 kg
Capacity	120 kVA / 120 kW

#### **Control Module**



①LBS connection port/rack parallel port ② LED indicator ③ Input dry contacts ④ Output dry contacts ⑤ Battery ground fault (BTG) interface/ ① Ambient temp port ① Battery temperature compensation port ① CAN port ② R485 port 1 ③ R485 port 2 ⑥ Ethernet port ① USB port (1) LCD port (1) lug-in switch of system control boards (2) Plug-in switch of dry contacts board (2) Plug-in switch of monitoring board

## **Specifications**

MODEL	EA6660 LV	EA66120 LV	
Capacity	60 kVA 60 kW	120 kVA 120 kW	
Number of power module	4	8	
Rated capacity of power module	15 kVA /	15 kW	
NPUT			
nput wiring	Three phase five u	iro (24) + N + DE\	
	Three-phase five-wire (3Φ + N + PE)		
Rated voltage	190 / 208 / 220 Vac		
Voltage range	166 ~ 277 Vac (no downgrading), 114 ~ 166 Vac (linear downgrading between 40% ~ 100% load)		
requency range	40 ~ 70 Hz		
nput power factor	≥ 0.99		
THDi	≤ 3%	(( - 1-1 - \)	
Bypass input voltage range	-40% ~ +25% (settable)		
Battery voltage	<u> </u>	± 120VDC (± 96V,± 108V,± 120V,± 132V,± 144V settable)	
Number of battery  OUTPUT	20 pcs 12 V batteries (16, 18, 20	, 22, 24 pcs settable)	
Output wiring	Three-phase five wire (24) ± N ± DEV		
	Three-phase five-wire (3Φ + N + PE)		
Rated voltage	190 / 208 / 220 Vac		
Output voltage regulation accuracy	± 1%		
Output frequency accuracy	Synchronized with utility in mains power mode; 50 Hz / 60 Hz ± 0.1% in battery mode		
Output power factor	1		
Output waveform distortion (THDv)	≤ 2% (linear load); ≤ 5% (non-linear load)		
Crest factor	3:1		
Overload capacity	105% < load ≤ 110% for 60 min, 110% < load ≤ 125% for 10 min, 125% < load ≤ 150% for 1 min, load > 150% for 0.2 s		
SYSTEM			
Max. efficiency	94% in on-line mode, 99% in ECO mode		
Fransfer time	0 ms		
Max. number of parallel connections	2		
Protections	Short-circuit, overload, over-temperature, battery low voltage, undervoltage, overvoltage, fan failure protection		
Communications	Standard configurations: RS485, CAN, NET, SNMP, dry contacts port, and EPO Optional configurations: Wi-Fi card, parallel port, LBS port, GPRS card, Battery temperature sensor, EMD and SMS alarms		
Display	7 inches LCD touch screen		
ENVIRONMENTAL			
Operating temperature	0°C ~40°C		
Storage temperature	-25°C ∼ +55°C (without battery)		
Relative humidity	0% ~ 95% (non-condensing)		
Altitude	≤ 1000 m, above 1000 m, derating 1% for each additional 100 m		
Protection level	IP 20		
Voise	≤ 65 dB	(at 1 m)	
OTHERS			
Cabinet dimensions (W x D x H) (mm)	600 x 850 x 1200	600 x 850 x 2000	
Cabinet weight (kg)	180	280	
	442 × 620 × 86		
Module dimensions (W x D x H) (mm)	442 x 620	J X 86	
Module dimensions (W x D x H) (mm)  Power module weight (kg)	442 x 620 20.2		

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