

EA890i 160 kVA to 500 kVA

The three-phase UPS

IGBT rectifier + built-in isolation transformer



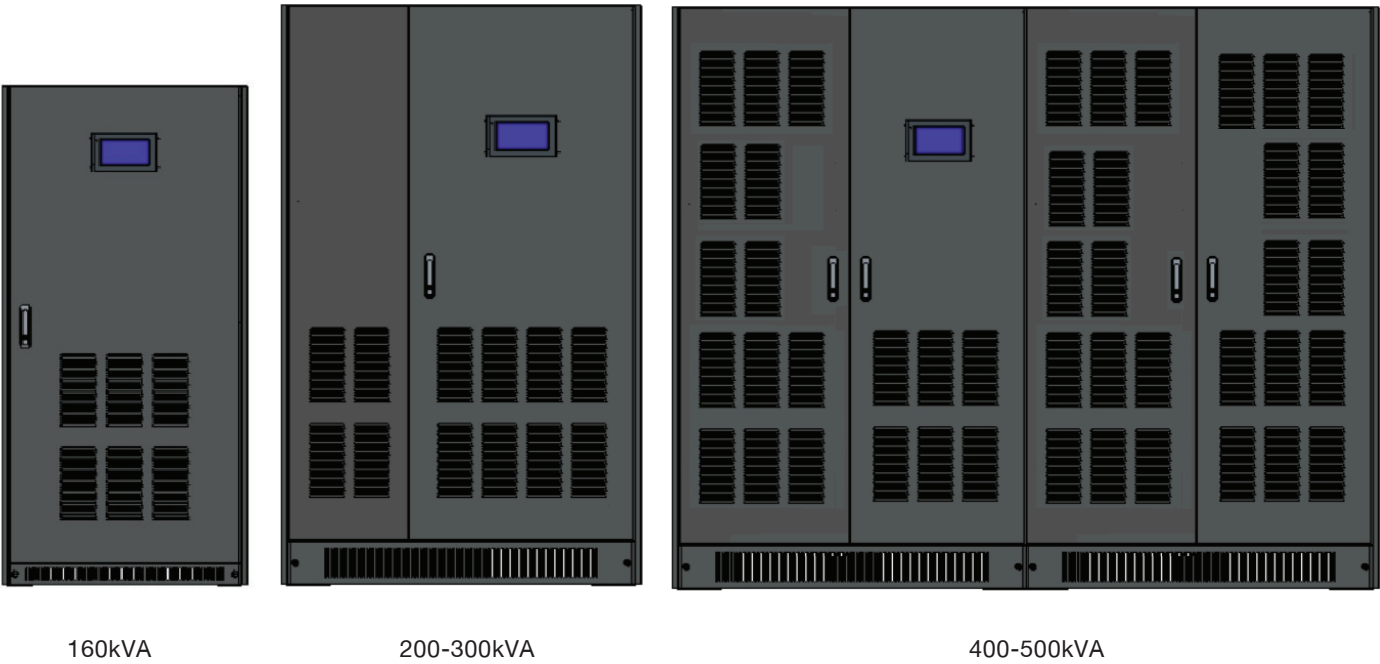
EA890i series is an on-line dual-conversion industrial UPS based on EA890i platform, which is designed based on our years of experience in the application of power electronic products in highways, tunneling, manufacturing and electric power etc. This series of products adopts IGBT rectifier + built-in isolation transformer scheme, which has superior electrical safety performance and high system availability, and can provide stable and reliable power supply guarantee for the industries of finance, transportation, telecommunication, and manufacturing.

Product features

- Online Double Conversion Topology, accept Dual-Mains Input
- DSP Technology Guarantees High Reliability
- Input and output are completely isolated for great security
- True Inbuilt Galvanic Isolation Transformer Design
- Strong mixed load capacity and high overload capacity
- Redundant Fan Design and Independent Ventilation Enhances Durable Operation Under Harsh Environment
- Intelligent self-diagnosing function, superior failure protection, large capability of history records storage
- High efficiency even at light loads
- Adjustable Battery Numbers
- Intelligent Battery Management to Prolong Battery Life Cycle
- N+X Redundancy Parallel Operation with up to 6 Units (Option)
- Variety of Communication Options Available
- EPO & ECO Mode Operation
- Generator compatible
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)



Available models



Cabinet type	Cabinet : 160kVA	Cabinet : 200-300kVA	Cabinet : 400-500kVA
Dimensions (WxDxH) (mm)	800 × 860 × 1700	1210 × 860 × 1950	2380 × 860 × 1950

Display

7 inches LCD touch screen



The operation display panel of the UPS is on the front door panel. On the operation display panel, you can control the operations of the UPS, and view all parameters, battery status, and event and warning information of the UPS. The operation display panel can be divided into two parts by functions: LCD touch screen and LED indicator.

The monitoring display unit displays the running information and warning information of the UPS in real time through the LCD, and can also set and manage parameters of the UPS through the LCD.

Connect Parallel Cables (Optional)

N+X redundancy parallel 6 units

Parallel signal line connection

Each machine has four parallel wire interfaces (including two DB25 and two DB9). In the parallel system, the parallel wire of DB25 should be connected into a closed loop, the same is true to DB9. Two parallel wires of the same loop should run in parallel and be not close to the power cable, so as to reduce the external interference to the parallel wires.

The wiring diagram is shown in Fig. 3 42.

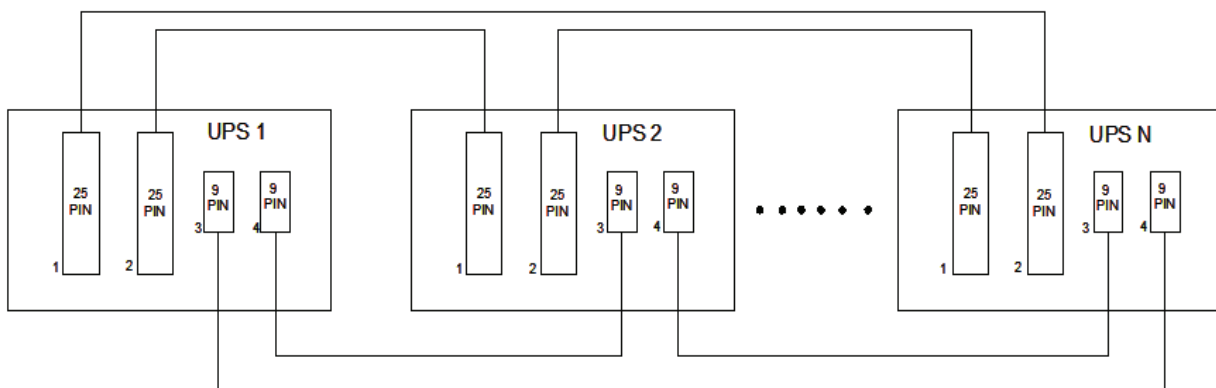
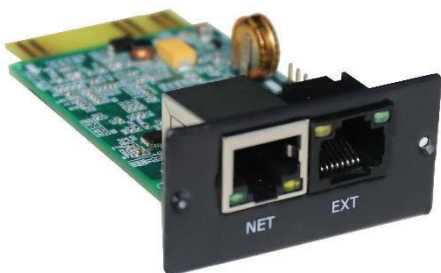


Fig. 3-42: Schematic diagram of parallel signal line connection

Network interface card (Optional)



SNMP card enables real-time monitoring of your UPS system via a standard web browser.

SNMP card is new generation network monitoring product.

Not only could monitor UPS stand-alone, SNMP card also could real-time network monitor and management of UPS.

Integrated monitoring can be achieved by coordinating corresponding PC software. And it is quite convenient for User to take network management for UPS.



Technical specifications

MODEL		EA89160i	EA89200i	EA89250i	EA89300i	EA89400i	EA89500i
Capacity		160kVA	200kVA	250kVA	300kVA	400kVA	500kVA
Output rated power		144kW	180 kW	225kW	270kW	360kW	450kW
INPUT							
Input wiring		Three-phase five-wire (3Φ + N + PE)					
Rated voltage		380 / 400 / 415 Vac					
Voltage range		304 ~ 346 V (derating 10%), 346 ~ 456 V (full load)					
Rated frequency		50 / 60 Hz					
Frequency rang		(50 / 60) ± 5 Hz					
power factor		≥ 0.99					
Total harmonic distortion (THDi)		≤ 3%					
Delayed start of rectifier		10 s (1 ~ 300 settable)					
Bypass voltage range		± 20% (settable)					
OUTPUT							
Output wiring		Three-phase five-wire (3Φ + N + PE)					
Rated voltage		380 / 400 / 415 Vac					
Output voltage regulation		± 1 %					
Output frequency regulation		50 / 60 Hz ± 0.1% in battery mode					
Waveform		Sinusoidal					
Power factor		0.9					
Voltage distortion (THDv)		≤ 2% (linear load), ≤ 5% (non-linear load)					
Crest factor		3:1					
Overload		105% ~ 110% for 60 min, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, 150% ~ 200% for 200ms					
BATTERIES							
DC Voltage		Lead acid battery: 600 Vdc Lithium iron phosphate battery: 614.4 Vdc					
Number of batteries		Lead acid battery: 12 V x 50 pcs (48~52 pcs settable)					
		Lead acid battery: 2 V x 300 pcs (288~312 pcs settable)					
		Lithium iron phosphate battery: 3.2 V x 192 pcs (192/208 pcs settable)					
Charging current		Charging rate (settable) × battery capacity (settable) × number of battery groups (settable)					
SYSTEM							
Efficiency		Line mode ≥ 94%, ECO mode ≥ 98%					
Max. number of parallel connections		6					
Protections		Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failure					
Communications		Standard configuration: RS232, RS485, dry contacts Optional configuration: SNMP card, temperature compensation, SMS alarms					
Display		7 inches LCD touchscreen					
OTHERS							
Operating temperature		0 ~ 40C					
Storage temperature		-25C ~ 55 C (without batteries)					
Relative humidity		0 ~ 95% (non-condensing)					
Altitude		≤1000 m. Above 1000 m, derating 1% for each additional 100 m					
IP rating		IP 20					
Noise level at 1 m		< 65 dB				< 70 dB	

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STANDARDS						
Safety	EN 62040-1					
EMC	EN 62010-2					
Performance	IEC 62010-3					
Manufacturing	ISO 9001:2008, ISO 14001:2004					
TIS	TIS.1291 Type 1-2553, TIS1291 Type 2-2553, TIS.1291 Type 3-2555					
WEIGHT, DIMENSIONS						
Dimensions (WxDxH) (mm)	800 × 860 × 1700	1210 × 860 × 1950			2380 × 860 ×1950	
Net weight (kg)	790	1135	1275	1355	2090	2300

- All specifications subject to change without notice
- Custom-made specifications are acceptable
- This product is applicable to industrial, commercial, financial, rail transit and other industries applications, but not available for life support systems
- For critical systems related to public safety or significant economic benefits, dual power system is required to power the load

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