



## High-Reliability Transformer-Based On-Line UPS

**EAST UPS  
Guard  
Power Well**



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# COMPANY PROFILE

## About Us

EAST Group Co., Ltd. established in 1989, is a global digital industry and smart energy integrated solution supplier and excellent listed company (stock code 300376), having registered capital of 2.3 billion CNY and a headquarter with 200,000m<sup>2</sup> manufacturing and R&D space in Dongguan city. We keep growing our marketing and service network covering more than 140 countries' partners and customers. We have been awarded Global Top 500 New Energy Enterprises, and the 117<sup>th</sup> China Patent Excellence Award with more than 800 patents.

## Our Products

EAST is ISO 9001: 2015 and ISO 14001: 2015 certified, and committed to providing green, energy-saving, stable, reliable and continuous power supply products and solutions. Our main products and services include:

- 1) UPS & Data center solutions
- 2) Solar inverters & PV energy solutions
- 3) Electric vehicle charging station
- 4) Energy storage & Smart micro-grid system
- 5) Stabilizer (AVR)
- 6) EPS (Emergency power supply)
- 7) Lead-acid maintenance-free battery

## Our Team

EAST R&D team consists of 600 professional engineers and power experts. A Postdoctoral Scientific Research Workstation granted by the National Ministry of Personnel, and four R&D and operation bases in Dongguan, Chengdu, Nanjing, Xi'an city have been established, which constantly bring in talent from all over the world to join us.

## Our Mission

Customer satisfaction is our permanent pursuit. To consistently create maximum value for customers, we focus on our customers' market challenges and needs by providing excellent power supply solutions and high quality products as well as the best service, and giving top priority to meeting customer requirements to enhance their competitiveness and profitability.

# CONTENTS

01 EA800  
6 kVA ~ 10 kVA (1:1)  
10 kVA ~ 30kVA (3:1)

03 EA890  
10 kVA ~ 120 kVA

05 EA890i  
30 kVA ~ 60 kVA

07 EA890i  
80 kVA ~ 500 kVA

# EA800

6 kVA ~ 10 kVA (1:1)  
 10 kVA ~ 30 kVA (3:1)  
 PF 0.8

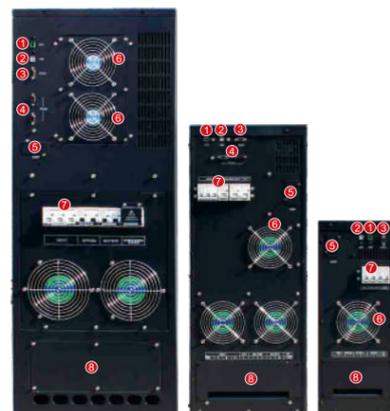


## Features

- Single / single-phase, three / single-phase models with on-line double conversion technology
- DSP (Digital Signal Processors) technology
- Suitable for all kinds of loads (resistive, inductive and non-linear loads etc)
- High overload capability (up to 150%)
- Bypass dual DSP control design to enhance more reliability(10-30 kVA)
- Supports dual input, hot standby in series
- Redundant & paralleleable with advanced parallel current-sharing control technology (10 - 30 kVA)
- Cold start and mains start function
- High charging capability: 2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable (standard), 14 A / 16 A / 18 A / 20 A / 22 A / 24 A selectable (options)(10-30 kVA)
- Standard configuration with output isolation transformer
- Superior protection (surge, short-circuit, overvoltage, undervoltage, overcharge, reverse battery protection etc.)
- Advanced communications: RS232 and USB ports (standard), SNMP, dry contacts and RS485 (options)
- Other options (parallel kits, input isolation transformer, bypass isolation transformer and harmonic suppressor)

## Rear Panel

1. EPO
2. USB
3. RS232
4. Parallel port (optional)
5. SNMP (optional)
6. Fan
7. Breaker
8. Terminal



## Specifications

MODEL	EA806 (1:1)	EA810 (1:1)	EA810 (3:1)	EA815 (3:1)	EA820 (3:1)	EA830 (3:1)
Capacity	6 kVA / 4.8 kW	10 kVA / 8 kW	10 kVA / 8 kW	15 kVA / 12 kW	20 kVA / 16 kW	30 kVA / 24 kW
<b>INPUT</b>						
Input wiring	Single-phase three-wire (1Φ+N+PE)		Three-phase five-wire (3Φ+N+PE)			
Rated voltage	220 / 230 / 240 Vac		380 / 400 / 415 Vac			
Voltage range	165 ~ 275 Vac		285 ~ 475 Vac			
Rated frequency	50 / 60 Hz					
Frequency range	40 ~ 70 Hz					
Bypass voltage range	± 25% (settable)					
<b>OUTPUT</b>						
Output wiring	Single-phase three-wire (1Φ+N+PE)					
Rated voltage	220 / 230 / 240 Vac					
Output voltage regulation	± 1%					
Rated frequency	50 / 60 Hz (settable)					
Output frequency regulation	50 / 60 Hz ± 0.1 Hz in battery mode					
Waveform	Sinusoidal					
Power factor	0.8					
Voltage distortion (THDv)	≤ 2% (linear load); ≤ 5% (non-linear load)					
Crest factor	3:1					
Overload	105% ~ 125% for 10 min, 125% ~ 150% for 1 min, 150% ~ 200% for 200 ms, > 200% for 100 ms					
<b>BATTERIES</b>						
DC voltage	192 Vdc					
Number of batteries	12 V × 16 pcs					
Charging voltage	216 Vdc					
EOD	168 Vdc					
Charging current	Default 8 A (2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable)					
<b>SYSTEM</b>						
Max. number of parallel connections	/		2			
Protections	Short-circuit, overload, overvoltage, undervoltage, low battery, overtemperature					
Communications	RS232 / USB (standard); RS485 / SNMP / dry contacts (optional)					
<b>OTHERS</b>						
Operating temperature	0 ~ 40°C					
Storage temperature	- 25°C ~ 55°C (without batteries)					
Relative humidity	0 ~ 95% (non-condensing)					
Altitude	≤ 1000 m (derating 1% for each additional 100 m)					
IP rating	IP 20					
Noise level at 1 m	< 60 dB					
Dimensions (W × D × H) (mm)	210 × 585 × 590	310 × 600 × 880		400 × 815 × 1100		
Packaged dimensions (W × D × H) (mm)	328 × 716 × 805	430 × 710 × 1080		525 × 925 × 1305		
Net weight (kg)	54	104	140	210	240	280
Gross weight (kg)	64	113	153	225	255	295

- All specifications are 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.

# EA890

10 kVA ~ 120 kVA  
PF 0.9



## Features

- Online double-conversion with full DSP control
- IGBT inverter with output isolation transformer
- 100% unbalance load capability
- Output power factor 0.9
- Generator compatible
- Support battery cold start and auto-restart when mains power is restored
- ECO mode operation for energy saving
- Superior protection
- 7 inches LCD touch screen friendly human & machine interface
- Front access makes maintenance and replacement simplified (60 ~ 120 kVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)
- Standard emergency power off (EPO)
- Standard RS232, RS485, dry contacts communication port
- Optional SNMP communication port
- Optional N+X redundancy parallel up to 6 units
- Optional input filter to improve input power factor

## Specifications

MODEL	EA8910	EA8915	EA8920	EA8930	EA8940	EA8960	EA8980	EA89100	EA89120
Capacity	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW	30 kVA / 27 kW	40 kVA / 36 kW	60 kVA / 54 kW	80 kVA / 72 kW	100 kVA / 90 kW	120 kVA / 108 kW
<b>INPUT</b>									
Input wiring	Three-phase five-wire (3Φ + N + PE)								
Rated voltage	380 / 400 / 415 Vac								
Voltage range	285~475V								
Rated frequency	50 / 60 Hz								
Frequency range	(50 / 60) ± 5 Hz								
Power factor	≥0.95 (with filter)								
Delayed start of rectifier	10 s (1 ~ 300 settable)								
Bypass voltage range	±20% (settable)								
<b>OUTPUT</b>									
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)	≤ 1% (linear load), ≤ 5% (non-linear load)								
Crest factor	3:1								
Overload	105% ~ 110% for 60 min, 110% ~ 125% for 10 min								
<b>BATTERIES</b>									
DC Voltage	Lead acid battery: 360Vdc Lithium iron phosphate battery: 384 Vdc								
Number of batteries	Lead acid battery: 12 V x 30 pcs (support 28~32 pcs) Lead acid battery: 2 V x 180 pcs (support 168~192 pcs) Lithium iron phosphate battery: 3.2 V x 120 pcs (support 112/120 pcs)								
Charging current	Charging rate (settable) × battery capacity (settable) × number of battery groups (settable)								
<b>SYSTEM</b>									
Efficiency	In line mode: Max. 93%; ECO mode: ≥ 98%								
Max. number of parallel connections	6								
Protections	Short-circuit, overload, overvoltage, undervoltage, low battery, overtemperature, fan failure								
Communications	RS232 / RS485 / dry contacts (standard), SNMP (optional)								
EMI	EN62040-2								
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (surge)								
<b>OTHERS</b>									
Operating temperature	0 ~ 40°C								
Storage temperature	-25°C ~ 55°C (without batteries)								
Relative humidity	0 ~ 95% (non-condensing)								
Altitude	≤ 1000 m (derating 1% for each additional 100 m)								
IP rating	IP 20								
Noise level at 1 m	65dB								
Dimensions (W x D x H) (mm)	400 x 800 x 1100					600 x 700 x 1500	700 x 800 x 1700		
Packaged dimensions (W x D x H) (mm)	490 x 920 x 1300					700 x 800 x 1650	800 x 900 x 1850		
Net weight (kg)	158	165	175	210	260	460	590	630	690
Gross weight (kg)	200	207	217	252	302	480	620	660	720

- All specifications are 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.

# EA890i

30 kVA ~ 60 kVA  
PF 0.8  
IGBT Rectifier



This series is an online dual-conversion UPS, a 2-level topology design with bidirectional rectifier and inverter, which supports regenerative load, with no need for an extra Dynamic Braking Resistor (DBR), especially for industrial loads like motors, lifts, and laser cutting machines.

It also adopts an IGBT rectifier design with a high input power factor ( $\geq 0.99$ ) and low THDi ( $< 5\%$ ), which is a grid-friendly product. With its built-in output isolation transformer, this design delivers exceptional electrical safety and high system availability, guaranteeing a stable and reliable power foundation.

## Features

- Standard anti-backflow function prevents shock damage to the UPS, no additional accessories are required
- Avoid the need for oversized UPS and batteries to support energy backflow, dramatically reduce total cost of ownership
- Maximize battery protection and extend service life
- Contribute to a greener planet by minimizing energy losses and recycling energy

## Applications

- Industrial application (e.g. crane, CNC machines, flexo printers, etc)
- Braking lift
- Tower crane
- Electro medical equipment (e.g. computed tomography, etc)
- Radar



## Specifications

MODEL	EA8930i	EA8940i	EA8960i
Capacity	30kVA	40kVA	60kVA
<b>INPUT</b>			
Input wiring	Main circuit input: three-phase four-wire(3 $\Phi$ +PE); Bypass input: three-phase five-wire(3 $\Phi$ +N+PE)		
Rated voltage	380/400/415Vac		
Voltage range	285~467Vac		
Rated frequency	50/60Hz		
Frequency range	40~70Hz		
Power factor	0.99		
THDi	<5%		
<b>OUTPUT</b>			
Output wiring	Three-phase five-wire(3 $\Phi$ +N+PE)		
Rated voltage	380/400/415Vac		
Output voltage regulation	$\pm 1.5\%$		
Output frequency regulation	Main mode: synchronous with bypass input; battery mode: 50/60Hz $\pm 0.1\%$		
Waveform	Sinusoidal		
Power factor	0.8		
THDv	$\leq 2\%$ (linear load), $\leq 5\%$ (non-linear load)		
Crest factor	3:1		
Overload	105%<load $\leq$ 110% for 60mins, 110%<load $\leq$ 125% for 10mins, 125%<load $\leq$ 150% for 1min		
<b>BATTERIES</b>			
DC voltage	Default 600 Vdc		
Number of batteries	12Vx50PCS(50~52pcs settable)		
Charging current	Charging rate(settable) x battery capacity(settable) x number of battery groups(settable)		
<b>SYSTEM</b>			
Parallel	Up to 6 units		
Protections	Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failure		
Communications	Standard: USB, RS232, RS485, dry contacts; Optional: SNMP card, battery temperature compensation		
Display	LCD touch screen+LED		
<b>OTHERS</b>			
Operating temperature	-5~40° C		
Storage temperature	-25° C~55° C(without battery)		
Relative humidity	0%~95%(non-condensing)		
Altitude	$\leq 1000m$ , above 1000m, derating 1% for each additional 100m		
IP rating	IP20		
Dimensions(W x D x H)(mm)	400 x 800 x 1010	450 x 860 x 1200	
Packaged dimensions (W x D x H)(mm)	480 x 865 x 1260	530 x 940 x 1460	
Net weight(kg)	230	260	330
Gross weight(kg)	260	290	360

Note: Specifications are subject to change without notice.  
Pictures are for reference only. Please refer to the actual product.

# EA890i

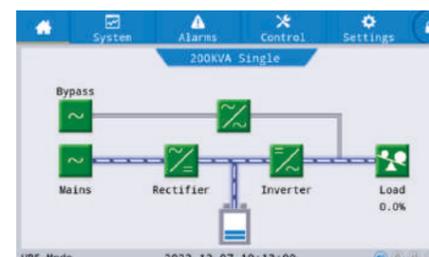
80 kVA ~ 500 kVA  
PF 0.9  
IGBT Rectifier



EA890i series is an on-line dual-conversion industrial UPS based on EA890 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.

## 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, DZn0 winding transformer compatible with unbalanced load
- 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(Optional)
- Variety of Communication Options Available
- EPO&ECO Mode Operation
- Generator compatible
- High MTBF(>200,000 h)
- Low MTTR(<0.5 h)



7" Touch Screen

## Specifications

MODEL	EA8980i	EA89100i	EA89120i	EA89160i	EA89200i	EA89250i	EA89300i	EA89400i	EA89500i	
Capacity	80kVA/ 72kW	100kVA/ 90kW	120kVA/ 108kW	160kVA/ 144kW	200kVA/ 180kW	250kVA/ 225kW	300kVA/ 270kW	400kVA/ 360kW	500kVA/ 450kW	
<b>INPUT</b>										
Input wiring	Three-phase five-wire(3Φ+N+PE)									
Rated voltage	380/400/415Vac									
Voltage range	304~346V(derating 10%), 346~456V(full load)									
Rated frequency	50/60Hz									
Frequency range	(50/60) ± 5Hz									
Power factor	≥0.99									
Total harmonic distortion(THDi)	≤3%									
Delayed start of rectifier	10s(1~300 settable)									
Bypass voltage range	± 20%(settable)									
<b>OUTPUT</b>										
Output wiring	Three-phase five-wire(3Φ+N+PE)									
Rated voltage	380/400/415Vac									
Output voltage regulation	± 1%									
Output frequency regulation	50/60Hz ± 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 1min, 150%~200% for 200ms									
<b>BATTERIES</b>										
DC voltage	Lead acid battery: 600Vdc Lithium iron phosphate battery: 614.4Vdc									
Number of batteries	Lead acid battery: 12Vx50pcs (48~50pcs settable) Lead acid battery: 2Vx300pcs (288~300pcs settable) Lithium iron phosphate battery: 3.2Vx192pcs (192/208pcs settable)									
Charging current	Charging rate(settable) × battery capacity(settable) × number of battery groups(settable)									
<b>SYSTEM</b>										
Efficiency	Line mode ≥92%, ECO mode ≥96%			Line mode ≥93%, ECO mode ≥97%			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, RJ45, USB, dry contacts Optional configuration: SNMP card, temperature compensation, SMS alarms									
Display	7 inches LCD touch screen									
<b>OTHERS</b>										
Operating temperature	0 ~ 40℃									
Storage temperature	- 25℃~55℃(without battery)									
Relative humidity	0%~95%(non-condensing)									
Altitude	≤1000m. Above 1000m, derating 1% for each additional 100m									
IP rating	IP20									
Noise level at 1m	< 65 dB						<70dB			
Dimensions(W × D × H)(mm)	800 × 800 × 1800			800 × 860 × 1700		1210 × 860 × 1950			2380 × 860 × 1950	
Packaged dimensions (W × D × H)(mm)	900 × 900 × 2050			900 × 1000 × 1950		1300 × 1000 × 2200			1300 × 1000 × 2200 (× 2)	
Net weight(kg)	580	630	680	790	1135	1275	1355	2090	2300	
Gross weight(kg)	630	680	730	840	1200	1340	1420	2200	2410	