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Our products

Partis is ISO 9001: 2015 and ISO 14001: 2004 certified, with 28 years experience on power supply products' design, production and sales. We customize products to meet different international standards and specific client requests. Our main products and services include:

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



PRODUCT CATALOGUE

EuroCASE[®]
PARTIS a.s.

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EA200

400VA ~ 2000VA

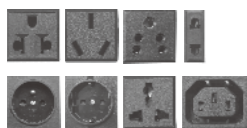


Features

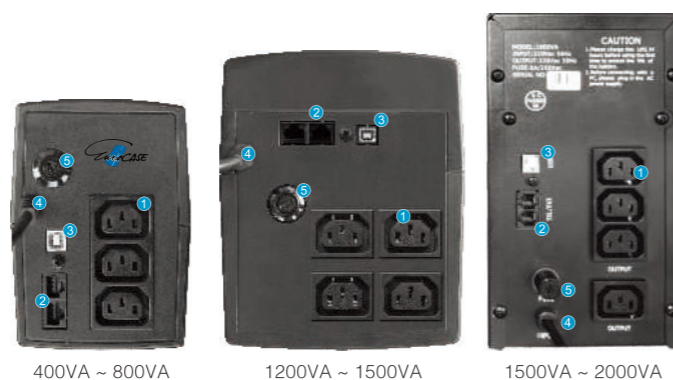
- LED display or LCD display selectable
- Microprocessor-based digital control
- Boost and buck AVR for voltage stabilization
- Auto sensing frequency
- Wide input voltage range
- Power-on self test
- Cold start
- Auto restart when mains power is restored
- Auto track mains phase to ensure that inverter output voltage has same phase with utility voltage, reducing transfer time and peak surge
- Intelligent battery management: battery temperature compensation to extend the battery life; three-stage charging to shorten recharge time
- Short circuit, battery overcharge / overdischarge, overload, surge protections
- Automatic charging in OFF mode
- Optional no-load shutdown
- Optional RS232 / USB communication port and RJ11 / RJ45 protection
- Unattended safety shutdown: system alarm and auto Power-On / Off by RS232 or USB interface communicating with PC

Rear Panel

1. Output Socket (selectable)
2. TEL/Modem/Fax surge protection (optional)
3. USB (optional)
4. AC Input
5. Fuse



Optional sockets



400VA ~ 800VA

1200VA ~ 1500VA

1500VA ~ 2000VA

Specifications

MODEL	EA240	EA260	EA280	EA2120	EA2150	EA2200		
Capacity	400 VA 240 W	600 VA 360 W	800 VA 480 W	1200 VA 720 W	1500 VA 900 W	2000 VA 1200 W		
INPUT								
Voltage	100 V / 110 V / 120 V: 80 ~ 150 Vac 220 V / 230 V / 240 V: 162 ~ 295 Vac (220 V: 145 ~ 295 Vac optional)							
Frequency	50 / 60 Hz ± 10% (auto-sense)							
OUTPUT								
Voltage	100 V / 110 V / 120 Vac ± 10% or 220 V / 230 V / 240 Vac ± 10%							
Frequency	50 / 60 Hz ± 1% (auto-sense)							
Waveform	Mains mode: pure sine wave; battery mode: simulated sine wave							
Transfer time	Typical 2 ~ 7 ms; Max. 10 ms							
BATTERIES								
DC voltage	12 V			24 V				
Configuration	12 V / 4.5 Ah × 1	12 V / 7.0 Ah × 1	12 V / 8.0 Ah × 1	12 V / 7.0 Ah × 2	12 V / 8.0 Ah × 2	12 V / 9.0 Ah × 2		
Recharge time	6 ~ 8 h							
COMMUNICATIONS								
USB / RS232 / SNMP (optional)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10							
OTHERS								
Protections	Short circuit - battery overcharge - overdischarge - overload - surge							
Humidity	20 ~ 90% RH @ 0 ~ 40°C (non-condensing)							
Noise level	≤ 45 dB (1m)							
Plastic case	Net / Gross weight (kg)	3.8 / 4.3	4.3 / 4.8	5.3 / 5.8	9.5 / 10.0	10.7 / 11.2	/	
	Dimensions (W × D × H) (mm)	100 × 280 × 140			140 × 345 × 170			/
	Packaged dimensions (W × D × H) (mm)	139 × 325 × 210			198 × 406 × 245			/
	Quantity / 20ft	2300 pcs			1000 pcs			/
Metal case	Net / Gross weight (kg)	/	5.5 / 6.0	6.7 / 7.2	10.5 / 11.2	12.6 / 13.4	14.0 / 14.8	
	Dimensions (W × D × H) (mm)	/	95 × 320 × 160		125 × 320 × 225		125 × 380 × 225	
	Packaged dimensions (W × D × H) (mm)	/	145 × 375 × 230		180 × 390 × 295		180 × 450 × 295	
	Quantity / 20ft	/	2000 pcs		1000 pcs			
Rack mount	Net / Gross weight (kg)	/	7.8 / 8.3	9.0 / 9.5	12.6 / 13.2	15.7 / 16.3	17.0 / 17.6	
	Dimensions (W × D × H) (mm)	/	308 × 438 × 88		308 × 438 × 132			
	Packaged dimensions (W × D × H) (mm)	/	395 × 525 × 185		395 × 525 × 225			

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

EA200 Plus

600VA ~ 800VA



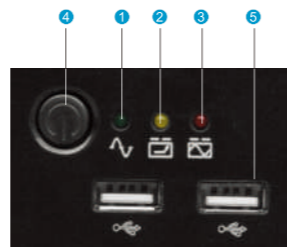
Features

- Microprocessor-based digital control
- Boost and buck AVR for voltage stabilization
- Auto sensing frequency
- Wide input voltage range
- Power-on self test
- Cold start
- Auto restart when mains power is restored
- Auto track mains phase to ensure that inverter output voltage has same phase with utility voltage, reducing transfer time and peak surge
- Intelligent battery management: battery temperature compensation to extend the battery life; three-stage charging to shorten recharge time
- Short circuit, battery overcharge / overdischarge, overload, surge protections
- Automatic charging in OFF mode
- 2 USB charger with 5 V / 1 A output (6 Schuko output model only)
- Optional RS232 / USB communication port and RJ11 protection



Control Panel

1. AC Normal Indicator (green)
2. Battery Charging Indicator (amber)
3. Back-up Indicator (red)
4. On / Off button
5. USB charger (optional)



Rear Panel

1. UPS output with surge protection
2. Bypass output with surge protection
3. AC Input
4. USB (optional)
5. RS232 (optional)
6. RJ11 (optional)

Specifications

MODEL	EA260P	EA280P
Capacity	600 VA / 360 W	800 VA / 480 W
INPUT		
Voltage	100 V / 110 V / 120 V: 80 ~ 150 Vac; 220 V / 230 V / 240 V: 162 ~ 295 Vac (220 V: 145 ~ 295 Vac optional)	
Frequency	50 / 60 Hz ± 10% (auto-sense)	
OUTPUT		
Voltage	100 V / 110 V / 120 Vac ± 10% or 220 V / 230 V / 240 Vac ± 10%	
Frequency	50 / 60 Hz ± 1% (auto-sense)	
Waveform	Mains mode: pure sine wave; battery mode: simulated sine wave	
Transfer time	Typical 2 ~ 7 ms; Max. 10 ms	
BATTERIES		
DC voltage	12 V	
Configuration	12 V / 7.0 Ah × 1	12 V / 8.0 Ah × 1
Recharge time	6 ~ 8 h	
COMMUNICATIONS		
USB / RS232 / SNMP (optional)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10	
OTHERS		
Protections	Short circuit – battery overcharge – overdischarge – overload – surge	
Humidity	20 ~ 90% RH @ 0 ~ 40°C (non-condensing)	
Noise level	≤ 45 dB (1m)	
Net / Gross weight (kg)	5.5 / 6.0	6.5 / 7.0
Dimensions (W × D × H) (mm)	185 × 280 × 95	
Packaged dimensions (W × D × H) (mm)	231 × 329 × 144	
Quantity / 20ft	2400 pcs	

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- Custom-made specifications are acceptable.

EA600

500VA ~ 3000VA
PF 0.8

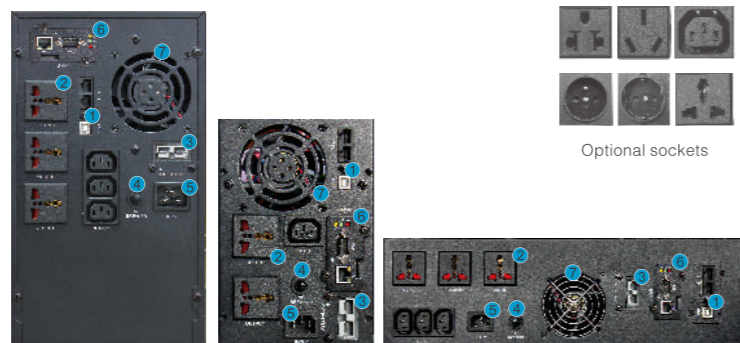


Features

- Pure sine wave output
- Output power factor 0.8
- DSP digital control
- Boost and buck AVR for voltage stabilization
- Auto sensing frequency
- Adjustable charging current and battery shutdown point
- Settable ECO mode and no-load shutdown
- Humanized alarm system
- Power-on self test
- Cold start
- Auto restart when mains power is restored
- Intelligent battery management
- Short circuit and overload protection
- Automatic charging in OFF mode
- USB & RJ45, AS400/SNMP (optional) communication port

Rear Panel

1. USB/RJ45
2. Output Sockets
3. EXT Battery (optional)
4. AC Breaker
5. Input
6. SNMP (optional)
7. Fan



Specifications

MODEL	EA605	EA610	EA615	EA620	EA630	
Capacity	500 VA / 300 W	1000 VA / 800 W	1500 VA / 1200 W	2000 VA / 1600 W	3000 VA / 2400 W	
DC INPUT						
Rated voltage	12 V	24 V	36 V (S) 48 V (H)	48 V		
DC input range (default)	10 ~ 15V	20 ~ 30 V	30 ~ 45V(S)40 ~ 60V(H)	40 ~ 60 V		
AC INPUT						
AC input range (bypass mode)	0 ~ 121 V / 132 V / 138 V / 144 Vac for 100 V / 110 V / 115 V / 120 Vac ± 10 Vac 0 ~ 242 V / 264 V / 276 V / 288 Vac for 200 V / 220 V / 230 V / 240 Vac ± 10 Vac					
AC input range (mains mode)	100 V: 70 ~ 130 Vac 110 V: 80 ~ 140 Vac 115 V: 85 ~ 145 Vac 120 V: 90 ~ 150 Vac 200 V: 145 ~ 260 Vac 220 V: 165 ~ 280 Vac 230 V: 175 ~ 290 Vac 240 V: 185 ~ 300 Vac					
Frequency input range	50 Hz / 60 Hz (auto-sense), 50 Hz / 60 Hz ± 5% ~ 15%					
Generator connection	Available (generator input power is settable)					
OUTPUT						
Inverter output range	100 V / 110 V / 115 V / 120 / 200 V / 220 V / 230 V / 240 Vac ± 5% (settable)					
AC output range (bypass mode)	0 ~ 121 V / 132 V / 138 V / 144 Vac for 100 V / 110 V / 115 V / 120 Vac ± 10 Vac 0 ~ 242 V / 264 V / 276 V / 288 Vac for 200 V / 220 V / 230 V / 240 Vac ± 10 Vac					
AC output range (mains mode)	100 V: 90 ~ 110 Vac 110 V: 99 ~ 121 Vac 115 V: 103 ~ 126 Vac 120 V: 108 ~ 132 Vac 200 V: 166 ~ 226 Vac 220 V: 188 ~ 245 Vac 230 V: 199 ~ 254 Vac 240 V: 210 ~ 264 Vac					
Output frequency	50 / 60 Hz ± 0.3 Hz (settable)					
Waveform	Pure sine wave					
Inverter efficiency	Max. 75%	Max. 80%		Max. 85%		
Energy saving mode	Settable (< 3% load), enter in 80 s					
No-load shutdown	Settable (< 3% load), shut down in 80 s					
Transfer time	≤ 10 ms					
THDV (resistive load)	≤ 5%					
Protections	Overload, short circuit (inverter), battery low voltage, battery overcharge, overtemperature					
Overload time (mains mode)	120 s for 110%, 60 s for 125%, 10 s for 150% (transfer to bypass mode)					
Overload time (inverter mode)	60 s for 110%, 10 s for 125%, 5 s for 150% (Shut down directly)					
Mute	Automatic mute in 60 s or by manual					
BATTERIES						
Battery capacity (H: external expansion)	12 V x 1	12 V / 7 Ah x 2	12 V / 9 Ah x 2	12V/9Ahx3 (H:12Vx4)	12 V / 9 Ah x 4	
Charging current	Standard model (S): 1 A (default)					
	Long time model (H): 10 A (default); < 10 A, set step 1 A; ≥ 10 A, set step 5 A					
	Max. 10 A (H)	Max. 15 A (H)	/	Max. 20 A (H)	Max. 25 A (H)	
Equalizing charge voltage	Single battery 14.1 Vdc (default), 13.6 ~ 15 Vdc adjustable					
Floating charge voltage	Single battery 13.5 Vdc (default), 13.2 ~ 14.6 Vdc adjustable					
Low voltage alarm point	Single battery 10.8 Vdc (default), 9.6 ~ 13 Vdc adjustable					
Low voltage shutdown point	Single battery 10.2 Vdc (default), 9.6 ~ 11.5 Vdc adjustable					
COMMUNICATIONS						
USB+RJ45	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10					
SNMP (optional)	Power management from SNMP manager and web browser (standard with slot)					
OTHERS						
Operating temperature	5°C ~ 40°C					
Operating humidity	Relative humidity ≤ 93%					
Noise level	≤ 50 dB (1m)					
Tower	Dimensions (W x D x H) (mm)	144 x 345 x 215 (S / H)			144 x 410 x 215 (S) 144 x 345 x 215 (H)	190 x 467 x 335.5 (S / H)
	Packaged dimensions (W x D x H) (mm)	236 x 427 x 316 (S / H)			236 x 492 x 316 (S) 236 x 427 x 316 (H)	320 x 592 x 462 (S / H)
	Net weight (kg)	7.0 (H)	12.2 (S) 11.6 (H)	14.2 (S)	18.5 (S) 17.8 (H)	28.1 (S) 28.0 (H)
	Gross weight (kg)	8.0 (H)	13.2 (S) 12.6 (H)	15.2 (S)	19.8 (S) 18.8 (H)	30.2 (S) 30.0 (H)
Rack mount	Dimensions (W x D x H) (mm)	/	440 x 338 x 88 (S)	440 x 410 x 132 (S)		
	Packaged dimensions (W x D x H) (mm)	/	611 x 448 x 208 (S)	611 x 505 x 235 (S)		
	Net weight (kg)	/	14.6 (S)	17.2 (S)	21.3 (S)	26.7 (S)
	Gross weight (kg)	/	16.8 (S)	20.4 (S)	24.5 (S)	30.5 (S)

- S means standard model, H means long time model.
- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

Pure Sine Wave Inverter

300W ~ 3500W

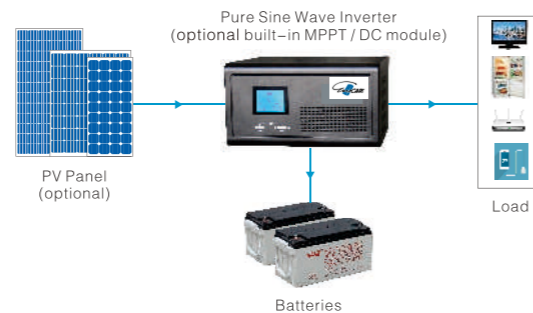


300W ~ 1600W



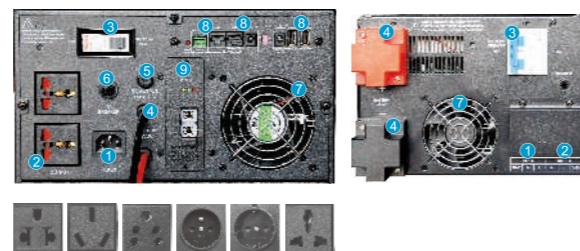
2500W ~ 3500W

The Pure Sine Wave Inverter is desirable long backup power solution for home and office appliances. It is not only an inverter but also contains a powerful intelligent charger. It provides pure sine wave power to all kinds of loads. And it can be used as UPS for computers as well.



Features

- DSP digital control technology
- Pure sine wave output
- Suitable for all kinds of loads, such as resistive, inductive and rectified loads and motors
- Use of pulse by pulse technology, improving load shock ability
- Charge current Max.60A. Settable charge current and charge voltage on front panel
- Settable no-load shutdown and energy saving mode
- Short circuit, overload and low battery protection
- Intelligent long backup time up to 10hrs (based on battery bank and loads)
- Compatible with generators, and matching of inverter and generator is settable.
- Unique functions: optional built-in MPPT modules enable the inverter to work as off-grid solar inverter, optional DC module enable the inverter to apply to communications, router, switch, mobile charging, DC fans and illumination.



Rear Panel

- | | |
|--------------------|---------------------------|
| 1. Input | 6. AC Breaker |
| 2. Output | 7. Fan |
| 3. Battery Breaker | 8. DC Output (optional) |
| 4. Battery Input | 9. MPPT Module (optional) |
| 5. Fuse | |

Specifications

MODEL	300 W	600 W	1000 W	1600 W	2500 W	3500 W
DC INPUT						
Nominal input voltage	12 V			24 V		
DC input voltage range	10 V ~ 15 V			20 V ~ 30 V		
AC INPUT						
Bypass voltage	0 ~ 264 Vac for 220 Vac / 230 Vac / 240 Vac, 0 ~ 132 Vac for 100 Vac / 110 Vac / 115 Vac / 120 Vac					
AC voltage	150 ~ 282 Vac for 220 Vac, 156 ~ 294 Vac for 230 Vac, 163 ~ 307 Vac for 240 Vac, 68 ~ 128 Vac for 100 Vac, 75 ~ 141 Vac for 110 Vac, 79 ~ 148 Vac for 115 Vac, 82 ~ 154 Vac for 120 Vac					
Frequency	50 Hz / 60 Hz (auto-sense), 42.5 ~ 57.5 Hz for 50 Hz, 51 ~ 69 Hz for 60 Hz					
Input voltage of generator	99 ~ 282 Vac for 220 Vac, 104 ~ 294 Vac for 230 Vac, 108 ~ 307 Vac for 240 Vac, 45 ~ 128 Vac for 100 Vac, 50 ~ 141 Vac for 110 Vac, 52 ~ 148 Vac for 115 Vac, 54 ~ 154 Vac for 120 Vac					
Input frequency of generator	40 ~ 70 Hz					
Input power limitation	Rated power 10% ~ 150%, regulating step 10%, default 120%					
OUTPUT						
DC mode output voltage	220 Vac / 230 Vac / 240 Vac ± 5% or 100Vac / 110Vac / 115Vac / 120Vac ± 5%					
AC mode output voltage	174 ~ 242 Vac for 220 Vac, 182 ~ 253 Vac for 230 Vac, 190 ~ 264 Vac for 240 Vac, 79 ~ 109 Vac for 100 Vac, 87 ~ 121 Vac for 110 Vac, 93 ~ 125 Vac for 115 Vac, 95 ~ 133 Vac for 120 Vac					
Nominal output frequency	50 Hz / 60 Hz ± 0.3 Hz (auto-sense & settable)					
Output waveform	Pure sine wave					
Output power	300 W	600 W	1000 W	1600 W	2500 W	3500 W
Efficiency	Max. 95% (mains mode); Max. 80% (inverter mode)					
ECO mode	Settable (< 3% load) to enter in 80 s					
No-load shutdown	Settable, time can be set (1 ~ 99 min), load can be set (3% ~ 50%)					
Transfer time	≤ 10 ms				≤ 15 ms	
Power factor	1.0					
THD	< 5% (linear load)					
Overload	Mains mode: 110% for 120 s, 125% for 60 s, 150% for 10 s (switch to bypass) Inverter mode: 110% for 60 s, 125% for 10 s, 150% for 10 s (shut down)					
BATTERIES						
Charging current (selectable)	Max. 15 A	Max. 30 A	Max. 40 A	Max. 40 A	Max. 50 A	Max. 60 A
Equalizing charge voltage	Single battery 14.4 Vdc (default), 13.6 ~ 15 Vdc adjustable					
Floating charge voltage	Single battery 13.7 Vdc (default), 13.2 ~ 14.6 Vdc adjustable					
Charge mode	3 stage charge mode					
EOD	Single battery 10.2 Vdc (default), 9.6 ~ 11.5 Vdc adjustable					
Reverse warning	Buzzer					
MPPT MODULES (OPTIONAL)						
Model	10 A / 20 A / 30 A / 40 A					/
Max. PV input voltage (Voc)	40 V			60 V		/
PV optimum operating voltage (Vmp)	18 V ~ 32 V			29 V ~ 48 V		/
Max. PV power	120 W / 240 W / 360 W / 480 W			240 W / 480 W / 720 W / 960 W		/
DC MODULES (OPTIONAL)						
Model	5 V (2 A), 9 V / 12 V (1 A), 15 V / 24 V (1 A), 12 V / 24 V (10 A)					
OTHERS						
Human-machine interface	LCD & BUZZER					
Operating temperature	0°C ~ 40°C					
Operating humidity	5% ~ 95% RH					
Forced air cooling	Variable speed fans					
Net weight (kg)	8.0 (w/o option) 8.5 (w/ option)	10.9 (w/o option) 11.4 (w/ option)	14.0 (w/o option) 14.6 (w/ option)	18.0 (w/o option) 18.5 (w/ option)	32.0	36.0
Gross weight (kg)	9.0 (w/o option) 9.5 (w/ option)	11.9 (w/o option) 12.4 (w/ option)	15.0 (w/o option) 15.6 (w/ option)	19.0 (w/o option) 19.5 (w/ option)	34.0	38.0
Dimensions (W × D × H) (mm)	280 × 258 × 120 (w/o option) 293 × 280 × 160 (w/ option)			293 × 280 × 160		302 × 479 × 209
Packaged dimensions (W × D × H) (mm)	330 × 352 × 200 (w/o option) 370 × 355 × 235 (w/ option)			370 × 355 × 235		353 × 582 × 287

EA900Pro

1KVA ~ 3KVA
PF 0.9



Specifications

MODEL	EA901PS	EA901PH	EA902PS	EA902PH	EA903PS	EA903PH				
Capacity	1 KVA / 900 W		2 KVA / 1800 W		3 KVA / 2700 W					
INPUT										
Rated voltage	208 V / 220 V / 230 V / 240 Vac									
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)									
Frequency	40 ~ 70 Hz (auto-sense)									
Power factor	≥ 0.99									
Bypass voltage range	-25% ~ +15% (settable)									
OUTPUT										
Voltage	208 V / 220 V / 230 V / 240 Vac (settable via LCD)									
Voltage regulation	± 1%									
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)									
Waveform	Sinusoidal									
Crest factor	3:1									
Harmonic distortion	≤ 2% (linear load); ≤ 5% (non-linear load)									
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)									
Overload capability	105% ~ 125%: transfer to bypass in 1 min; 125% ~ 150%: transfer to bypass in 30 s; > 150%: transfer to bypass in 300 ms									
EFFICIENCY										
Mains mode	≥ 90%		≥ 91%		≥ 92%					
Battery mode	≥ 85%		≥ 86%		≥ 87%					
ECO mode	≥ 95%		≥ 96%		≥ 97%					
BATTERIES										
DC voltage	24 V	36 V	36 V	48 V	72 V	72 V	72 V	96 V	96 V	
Inbuilt battery	2 × 9 Ah	3 × 7 Ah	/	4 × 9 Ah	6 × 7 Ah	/	6 × 9 Ah	8 × 7 Ah	/	
Charging current (max.)	1 A		6 A		1 A		6 A		6 A	
Recharge time	8 h									
ALARMS										
Utility failure	4 s per beep									
Low battery	1 s per beep									
Overload	1 s twice beep									
UPS fault	Long beep									
COMMUNICATIONS										
RS232 (standard) / USB (optional)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10									
SNMP (optional)	Power management from SNMP manager and web browser									
OTHERS										
Operating temperature	0 ~ 40°C									
Relative Humidity	0 ~ 90% (non-condensing)									
Noise level	≤ 50 dB (1m)									
Dimensions (W × D × H) (mm)	144 × 336 × 214	144 × 414 × 214	144 × 336 × 214	191 × 418 × 335			191 × 464 × 335	191 × 418 × 335		
Packaged dimensions (W × D × H) (mm)	232 × 417 × 318	231 × 492 × 316	232 × 417 × 318	318 × 533 × 471			320 × 573 × 471	318 × 533 × 471		
Net weight (kg)	9.5	13	6	18	25.7	10.5	27.2	32	11	
Gross weight (kg)	10.5	14.2	7	19.5	27.4	12	29	34	12.5	

● Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208Vac.
 ● S means standard model, H means long time model.
 ● All specifications subject to change without notice.
 ● Custom-made specifications are acceptable.

Features

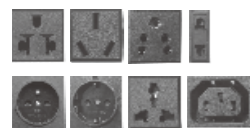
- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110V ~ 300Vac) and frequency range (40 ~ 70Hz)
- Auto sensing frequency
- 50/60Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 3 h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)

Available Options

- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, 12A charger (2-3KVA only) and built-in isolation transformer

Rear Panel

1. Overcurrent Protection
2. AC Input
3. Modem/Tel/Fax
4. DC Input
5. Outlet
6. Fan
7. RS232
8. USB (optional)
9. EPO (optional)
10. SNMP/AS400 (optional)



Optional sockets



EA900Pro

6KVA ~ 10KVA
PF0.9



Specifications

MODEL	EA906PS	EA906PH	EA9010PS	EA9010PH
Capacity	6 KVA / 5400 W		10 KVA / 9000 W	
INPUT				
Rated voltage	208 V / 220 V / 230 V / 240 Vac			
Voltage range	110 ~ 160 Vac (linear derating between 50% and 100% load); 160 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)			
Rated frequency	50 / 60 Hz (auto-sense)			
Frequency range	40 ~ 70 Hz			
Power factor	≥ 0.99			
Total harmonic distortion (THDI)	≤ 5%			
Bypass voltage range	- 40% ~ + 15% (settable)			
OUTPUT				
Voltage	208 V / 220 V / 230 V / 240 Vac (settable)			
Voltage regulation	± 1%			
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)			
Waveform	Pure sine wave			
Crest factor	3:1			
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)			
Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: 0 ms			
Inverter overload capability	102% ~ 125%: Transfer to bypass in 10 mins; 125% ~ 150%: Transfer to bypass in 1 min; > 150%: Transfer to bypass in 0.5 s			
Bypass overload capability	102% ~ 125%: Shut down in 20 mins; 125% ~ 150%: Shut down in 2 mins; > 150%: Shut down in 1 s			
BATTERIES				
DC voltage	192 VDC (168 / 180 / 192 / 204 / 216 / 228 / 240 VDC optional)			
Inbuilt battery	16 x 7 Ah	/	16 x 9 Ah	/
Recharge time	Standard model (S): 90% capacity restored in 4 hours; Long time model (H): depend on the capacity of battery			
SYSTEM				
EFFICIENCY	≥ 93%, ECO mode 98%			
Display	LCD+LED			
Alarms	Battery mode, battery voltage low, fans fault etc.			
Maximum Parallel numbers	6			
EMI	IEC/EN62040-2			
EMS	IEC61000-4-2 (ESD)			
	IEC61000-4-3 (RS)			
	IEC61000-4-4 (EFT)			
	IEC61000-4-5 (Surge)			
COMMUNICATIONS				
RS232 / USB / RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10			
SNMP	Power management from SNMP manager and web browser			
OTHERS				
Humidity	20 ~ 90% RH @ 0 ~ 40°C (non-condensing)			
Noise level	≤ 55 dB (1m)			
Dimensions (W x D x H) (mm)	191 x 462 x 710	191 x 462 x 350	191 x 462 x 710	191 x 462 x 350
Packaged dimensions (W x D x H) (mm)	308 x 640 x 896	267 x 573 x 436	308 x 640 x 896	267 x 573 x 436
Net weight (kg)	58.7	15.6	67.2	16.1
Gross weight (kg)	64.8	17.9	73.3	18.4

● I derate capacity to 70% in frequency conversion mode and to 90% when the output voltage is adjusted to 208 Vac.
 ● S means standard model, H means long time model.
 ● All specifications subject to change without notice.
 ● Custom-made specifications are acceptable.

Features

- High frequency on-line double conversion technology
- DSP (Digital signal processors) technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110V ~ 300Vac) and frequency range (40 ~ 70Hz)
- Auto sensing frequency
- 50/60Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Flexible battery configuration (Settable 14 ~ 20 pcs batteries)
- Quick and stable charging, 90% capacity restored in 4 h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times

- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, battery quantity, EOD, EPO, ECO mode, frequency conversion mode and parallel enable
- Powerful background software for parameters configuration, function settings and online updating
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)

Available Options

- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, maintenance bypass, EPO function, parallel function, battery temperature compensation and EMD environmental sensors

Rear Panel

1. Input and output terminal
2. Input breaker
3. Battery breaker
4. Maintenance bypass (optional)
5. Inbuilt battery
6. Fan
7. External battery connector
8. Intelligent slot (SNMP / AS400 / RS485 optional)
9. USB (optional)
10. RS232
11. EPO
12. Parallel card (optional)
13. Battery temperature compensation (optional)



Long time model Standard model

EA900Pro RT

1KVA ~ 3KVA
PF 0.9



Features

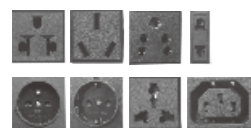
- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110V ~ 300Vac) and frequency range (40 ~ 70Hz)
- Auto sensing frequency
- 50/60Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 3 h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)

Available Options

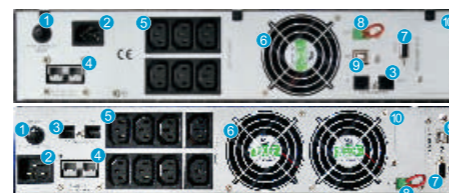
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, MBS (External maintenance bypass switch)

Rear Panel

1. Overcurrent Protection
2. AC Input
3. Modem/Tel/Fax
4. DC Input
5. Outlet
6. FAN
7. RS232
8. EPO (optional)
9. USB (optional)
10. Intelligent Slot



Optional sockets



Specifications

MODEL	EA901PSRT	EA901PHRT	EA902PSRT	EA902PHRT	EA903PSRT	EA903PHRT				
Capacity	1 KVA / 900 W		2 KVA / 1800 W		3 KVA / 2700 W					
INPUT										
Rated voltage	208 V / 220 V / 230 V / 240 Vac									
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)									
Frequency	40 ~ 70 Hz (auto-sense)									
Power factor	≥ 0.99									
Bypass voltage range	-25% ~ +15% (settable)									
OUTPUT										
Voltage	208 V / 220 V / 230 V / 240 Vac (settable via LCD)									
Voltage regulation	± 1%									
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)									
Waveform	Sinusoidal									
Crest factor	3:1									
Harmonic distortion	≤ 2% (linear load); ≤ 5% (non-linear load)									
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)									
Overload capability	105% ~ 125%: transfer to bypass in 1 min; 125% ~ 150%: transfer to bypass in 30 s; > 150%: transfer to bypass in 300 ms									
EFFICIENCY										
Mains mode	≥ 90%		≥ 91%		≥ 92%					
Battery mode	≥ 85%		≥ 86%		≥ 87%					
ECO mode	≥ 95%		≥ 96%		≥ 97%					
BATTERIES										
DC voltage	24 V	36 V	36 V	48 V	72 V	72 V	72 V	96 V	96 V	
Inbuilt battery	2 × 9 Ah	3 × 7 Ah	/	4 × 9 Ah	6 × 7 Ah	/	6 × 9 Ah	8 × 7 Ah	/	
Charging current (max.)	1 A		6 A		1 A		6 A		6 A	
Recharge time	8 h									
ALARMS										
Utility failure	4 s per beep									
Low battery	1 s per beep									
Overload	1 s twice beep									
UPS fault	Long beep									
COMMUNICATIONS										
RS232 (standard) / USB (optional)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10									
SNMP (optional)	Power management from SNMP manager and web browser									
OTHERS										
Operating temperature	0 ~ 40°C									
Relative Humidity	0 ~ 90% (non-condensing)									
Noise level	≤ 50 dB (1m)									
Dimensions (W × D × H) (mm)	440 × 468 × 88			440 × 658 × 88		440 × 468 × 88		440 × 658 × 88		440 × 468 × 88 (UPS) 440 × 440 × 86 (BAT)
Packaged dimensions (W × D × H) (mm)	545 × 592 × 198			545 × 782 × 198		545 × 592 × 198		545 × 782 × 198		545 × 592 × 198 (UPS) 590 × 580 × 200 (BAT)
Net weight (kg)	12.26	13.78	7.58	22.73	25.86	9.66	29.26	9.45 (UPS) 27.2 (BAT)	10.04	
Gross weight (kg)	15.78	17.3	11.1	26.63	29.76	13.18	33.16	12.97 (UPS) 30.2 (BAT)	13.56	

● Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208Vac.
● S means standard model, H means long time model.
● All specifications subject to change without notice.
● Custom-made specifications are acceptable.

EA900II RT

6KVA ~ 10KVA
PF 0.9

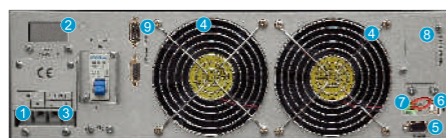


Features

- Rack / Tower design
- High frequency and true double-conversion
- DSP digital control technology
- Input power factor correction (PFC)
- Wide input voltage range (110 V ~ 300 V)
- Output power factor 0.9
- Cold start
- Auto sensing frequency
- ECO mode operation for energy saving
- Selectable output voltage via LCD
- 50 Hz / 60 Hz frequency conversion mode
- Selectable battery low voltage via LCD
- Power-on self test
- Advanced battery management (ABM)
- Short circuit and overload protection
- Automatic charging in OFF mode
- Fan speed auto control when temperature varies
- Standard RS232 communication port and RJ45 protection
- Optional USB / SNMP communication port
- Optional emergency power off (EPO)
- Optional extension battery bank
- Optional N+X redundancy parallel

Rear Panel

1. AC Input
2. DC Input
3. Outlet
4. Fan
5. RS232
6. USB (optional)
7. EPO (optional)
8. SNMP/AS400 (optional)
9. Parallel Card (optional)



Specifications

MODEL	EA906II RT	EA9010II RT
Capacity	6 KVA / 5400 W	10 KVA / 9000 W
INPUT		
Rated voltage	208 V / 220 V / 230 V / 240 Vac	
Voltage range	110 ~ 160 Vac (50~10% load linear derating) 160 ~ 300 Vac (no derating)	
Frequency	40 ~ 70 Hz ± 0.5% (auto-sense)	
Power factor	≥ 0.99	
Bypass voltage range	-40 ~ +15% (settable)	
OUTPUT		
Voltage	208 V / 220 V / 230 V / 240 Vac (settable via LCD)	
Voltage regulation	± 1%	
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.2 Hz in battery mode	
Waveform	Sinusoidal	
Crest factor	3:1	
Harmonic distortion	≤ 2% (linear load); ≤ 5% (non-linear load)	
Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: 0 ms	
Overload	105% ~ 125% for 3 mins, 125% ~ 150% for 30 s, > 150% for 0.5 s	
EFFICIENCY		
Mains mode	≥ 92%	
Battery mode	≥ 91%	
ECO mode	≥ 98%	
BATTERIES		
DC voltage	192 V	
Inbuilt battery of standard model	16 × 7 Ah	16 × 9 Ah
Charging current	Standard model	1 A
	Long time model	1 A / 3 A / 5 A / 8 A
Recharge time	8 h	
ALARMS		
Utility failure	4 s per beep	
Low battery	1 s per beep	
Overload	1 s twice beep	
UPS fault	Long beep	
COMMUNICATIONS		
RS232 (standard), USB (optional)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10	
SNMP (optional)	Power management from SNMP manager and web browser	
OTHERS		
Humidity	20~90% RH @ 0~40°C (non-condensing)	
Noise level	≤ 55 dB (1m)	
Long time model	Dimensions (W × D × H) (mm)	440 × 580 × 132 (UPS)
	Packaged dimensions (W × D × H) (mm)	530 × 703 × 227 (UPS)
model	Net / Gross weight (kg)	16.4 / 20.7
		17.1 / 21.4
Standard model	Dimensions (W × D × H) (mm)	440 × 580 × 132 (UPS), 440 × 580 × 132 (BAT)
	Packaged dimensions (W × D × H) (mm)	530 × 703 × 227 (UPS), 530 × 703 × 227 (BAT)
model	Net / Gross weight (kg)	16.4 / 20.7 (UPS)
		43.6 / 47.1 (BAT)
		17.1 / 21.4 (UPS)
		49.6 / 53.1 (BAT)

- Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208Vac.
- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

EA900II

6KVA ~ 20KVA (3:1)
PF 0.9



Specifications

MODEL	EA906II	EA9010II	EA9015II	EA9020II
Capacity	6 KVA / 5.4 KW	10 KVA / 9 KW	15 KVA / 13.5 KW	20 KVA / 18 KW
INPUT				
Rated voltage	3:1: 360 V / 380 V / 400V / 415 Vac; 1:1: 208 V / 220 V / 230 V / 240 Vac (settable via LCD)			
Voltage range	3:1: 190 ~ 277 Vac (derating 50%), 277 ~ 520 Vac (no derating); 1:1: 110 ~ 160 Vac (derating 50%), 160 ~ 300 Vac (no derating)			
Frequency	40 ~ 70 Hz (auto-sense)			
Power factor	3:1 ≥ 0.95; 1:1 ≥ 0.99			
BYPASS				
Voltage range	-40% ~ +15% (settable)			
Frequency	50 / 60 Hz ± 5 Hz			
OUTPUT				
Voltage	208 V / 220 V / 230 V / 240 Vac (settable via LCD)			
Voltage regulation	± 1%			
Frequency	Synchronized with utility in mains mode; 50 / 60 ± 0.2 Hz in battery mode			
Waveform	Sinusoidal			
Crest factor	3:1			
Harmonic distortion	≤ 2% (linear load); ≤ 5% (non-linear load)			
Transfer time	0 ms			
Overload capability	105% ~ 125%: transfer to bypass in 3 mins; 125% ~ 150%: transfer to bypass in 30 s; > 150%: transfer to bypass in 0.5 s			
EFFICIENCY				
Mains mode	≥ 92%			
Battery mode	≥ 91%			
ECO mode	≥ 98%			
BATTERIES				
DC voltage	192 Vdc / 240 Vdc			
Inbuilt battery of standard model	16 / 20 × 7 Ah	16 / 20 × 9 Ah	/	
Charging current	Standard model	1 A		/
	Long time model	7 A		/
Recharge time	8 h			
ALARMS				
Utility failure	4 s per beep			
Low battery	1 s per beep			
Overload	1 s twice beep			
UPS fault	Long beep			
COMMUNICATIONS				
RS232 / USB (standard)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10			
SNMP (optional)	Power management from SNMP manager and web browser			
OTHERS				
Humidity	20 ~ 90% RH @ 0 ~ 40°C (non-condensing)			
Noise level	≤ 58 dB (1m)		≤ 60 dB (1m)	
Dimensions (W × D × H) (mm)	262 × 580 × 455 (H), 262 × 580 × 732 (S)		262 × 580 × 628 (H)	
Packaged dimensions (W × D × H) (mm)	355 × 682 × 615 (H), 359 × 687 × 937 (S)		359 × 687 × 832 (H)	
Net weight (kg)	25.0 (H), 73.0 (S)	25.5 (H), 74.0 (S)	38.5 (H)	39.0 (H)
Gross weight (kg)	28.5 (H), 82.5 (S)	29.0 (H), 83.5 (S)	47.0 (H)	47.5 (H)

● Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208Vac.
 ● 3 : 1 means three-phase input and single-phase output mode; 1 : 1 means single-phase input and single-phase output mode.
 ● S means standard model, H means long time model.
 ● All specifications subject to change without notice.
 ● Custom-made specifications are acceptable.

Features

- High frequency and true double-conversion
- DSP digital control technology
- Wide input voltage range (110V ~ 300V)
- Output power factor 0.9
- Optimized battery configuration: 192V / 240V
- Cold start
- Auto sensing frequency
- ECO mode operation for energy saving
- 50/60Hz frequency conversion mode
- Selectable output voltage via LCD
- Selectable battery shutdown voltage (EOD) via LCD
- Selectable input mode via LCD (3:1 or 1:1)
- Power-on self test
- Advanced battery management (ABM)
- Short circuit and overload protection
- Automatic charging in OFF mode
- Fan speed auto control when temperature varies
- Standard RS232 / USB communication port
- Standard emergency power off (EPO)
- Optional RS485 / SNMP / AS400 communication port
- Optional extension battery bank
- Optional battery temperature compensation
- Optional built-in isolation transformer
- Optional manual bypass
- Optional N+X redundancy parallel

Rear Panel

1. AC Input
2. DC Input
3. Outlet
4. Fan
5. RS232
6. USB
7. EPO
8. Manual Bypass (optional)
9. SNMP/AS400 (optional)
10. Breaker
11. Parallel Card (optional)
12. BAT_NTC (optional)



6/10KS

15/20KH

6/10KH

EA900Pro

10KVA ~ 30KVA (3:3)
PF 0.9



Specifications

MODEL	EA9010P	EA9015P	EA9020P	EA9030P
Capacity	10 KVA / 9 KW	15 KVA / 13.5 KW	20 KVA / 18 KW	30 KVA / 27 KW
INPUT				
Rated voltage	360 V / 380 V / 400 V / 415 Vac			
Voltage range	277 ~ 485 Vac (no derating); 190 ~ 277 Vac (linear derating between 50% and 100% load)			
Rated frequency	50 / 60 Hz (auto-sense)			
Frequency range	40 ~ 70 Hz			
Power factor	≥ 0.99			
Total harmonic distortion (THDI)	≤ 5%			
Bypass voltage range	-40% ~ + 15% (settable)			
OUTPUT				
Voltage	360 V / 380 V / 400 V / 415 Vac (settable)			
Voltage regulation	± 1%			
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)			
Waveform	Sinusoidal			
Crest factor	3:1			
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)			
Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: 0 ms			
Inverter overload capability	102% ~ 125%: transfer to bypass in 10 mins; 125% ~ 150%: transfer to bypass in 1 min; > 150%: transfer to bypass in 0.5 s			
Bypass overload capability	102% ~ 125%: shut down in 20 mins; 125% ~ 150%: shut down in 2 mins; > 150%: shut down in 1 s			
BATTERIES				
DC voltage	Standard model: 240 VDC; Long time model: 192 VDC (168V / 192V / 216V / 240V optional)			
Inbuilt battery of standard model	20 × 7 Ah	40 × 7 Ah	40 × 9 Ah	60 × 9 Ah
Recharge time	Standard model: 90% capacity restored in 4 hours; Long time model: depend on the capacity of battery			
SYSTEM				
Efficiency	≥ 93%, ECO mode 98%			
Display	LCD + LED			
Alarm	Battery mode, low battery, fans fault etc.			
Max. parallel numbers	6			
EMI	IEC / EN62040-2			
EMS	IEC61000-4-2 (ESD)			
	IEC61000-4-3 (RS)			
	IEC61000-4-4 (EFT)			
	IEC61000-4-5 (surge)			
COMMUNICATIONS				
RS232 / USB / RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10			
SNMP	Power management from SNMP manager and web browser			
OTHERS				
Humidity	20 ~ 90% RH @ 0 ~ 40°C (non-condensing)			
Noise level	≤ 60 dB (1m)	≤ 65 dB (1m)		
Dimensions (W × D × H) (mm)	350 × 655 × 732 (H)			
	350 × 785 × 858 (S)	350 × 785 × 1078 (S)		
Packaged dimensions (W × D × H) (mm)	472 × 780 × 920 (H)			
	472 × 910 × 1050 (S)	472 × 910 × 1260 (S)		
Net weight (kg)	55 (H), 115 (S)	60 (H), 155 (S)	61 (H), 175 (S)	65 (H), 235 (S)
Gross weight (kg)	65 (H), 125 (S)	70 (H), 170 (S)	71 (H), 190 (S)	75 (H), 250 (S)

● Derate capacity to 90% when the output voltage is adjusted to 360Vac.
● S means standard model, H means long time model.

● All specifications subject to change without notice.
● Custom-made specifications are acceptable.

Features

- DSP digital control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Cold start
- Dual input
- Wide input voltage range (190V ~ 485V)
- Auto sensing frequency
- 50 / 60Hz frequency conversion mode
- Work efficiency up to 98% in ECO mode
- Auto control fan speed when loads varies
- Auto power ON/OFF according to the load capacity set by users
- Flexible battery configuration for using 14/16/18/20 pcs batteries
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration and online updating
- Doubling the battery charging speed, 90% capacity restored in 4 hours (standard model UPS)
- Linear derating in low voltage input, reducing battery discharging times, extending the service life of battery
- Advanced battery management (ABM), automatic floating / equalizing charge control, charger dormancy control
- Configurable switching time from battery mode to mains mode when mains power is restored, reducing the impact on power grid or generator
- Effective software and hardware protection function, powerful self-diagnostic function, abundant historical records
- Standard emergency power off (EPO)
- Standard maintenance bypass
- Standard RS232/USB communication port
- Optional RS485 / SNMP / AS400 communication port and SMS alarms
- Optional N+X redundancy parallel up to 6 units
- Optional battery temperature compensation, EMD environmental sensors

Rear Panel

1. Mains Input
2. DC Input
3. Bypass Input
4. Output
5. Mains Input Breaker
6. Bypass Input Breaker
7. Maintenance Bypass
8. Fan
9. RS232
10. USB
11. EPO
12. Battery Temperature Compensation (Optional)
13. Intelligent Slot 1 (SNMP / AS400 / RS485 Optional)
14. Intelligent Slot 2 (SNMP / AS400 / RS485 Optional)
15. Parallel Card (optional)
16. Battery Breaker



EA990

10KVA ~ 120KVA (3:3)
PF 0.9



Specifications

MODEL	EA9910	EA9920	EA9930	EA9940	EA9960	EA9980	EA99100	EA99120
Capacity	10 KVA 9 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
INPUT								
Rated voltage	380 V / 400 V / 415 Vac							
Voltage range	204 ~ 242 Vac (load ≤ 50%); 242 ~ 305 Vac (50% < load ≤ 70%); 305 ~ 520 Vac (70% < load ≤ 100%)							
Rated frequency	50 / 60 Hz (auto-sense)							
Frequency range	40 ~ 70 Hz							
Power factor	≥ 0.99							
Total harmonic distortion (THDI)	≤ 3%							
Bypass voltage range	Rated output voltage -40% ~ rated output voltage +20% (settable via LCD)							
OUTPUT								
Voltage	380 V / 400 V / 415 Vac							
Voltage regulation	± 1%							
Frequency	Synchronized with utility in mains mode; Frequency conversion mode: 50 Hz input and 60 Hz output or 60 Hz input and 50 Hz output 50 / 60 Hz in battery mode							
Waveform	Sinusoidal							
Crest factor	3:1							
Total harmonic distortion (THDV)	≤ 1% (linear load); ≤ 5% (non-linear load)							
Transfer time	0 ms							
Inverter overload capability	102% ~ 127%: transfer to bypass in 10 mins; 127% ~ 150%: transfer to bypass in 1 min; > 150%: transfer to bypass in 0.5 s							
Bypass overload capability	≤ 150%: long time running > 150%: shut down in 10 s							
BATTERIES								
DC voltage	± 192 V (options: ± 204 V / ± 216 V / ± 228 V / ± 240 V)							
Inbuilt battery of standard model	32 × 12 V / 9 Ah	64 × 12 V / 9 Ah	No					
Charging current	1 ~ 12 A (settable via LCD)		1 ~ 24 A (settable via LCD)			1 ~ 24 A (settable via LCD) 1 ~ 48 A (optional)		
SYSTEM								
Efficiency	≥ 93%, ECO mode 98.5%							
Display panel	5.7 Inches LCD touch screen							
Alarm	Battery mode, low battery, fans fault etc							
Max. parallel numbers	4							
EMI	EN62040-2							
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (surge)							
COMMUNICAITONS								
RS232 / RS485 / USB / dry contacts (standard)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10							
SNMP (optional)	Power management from SNMP manager and web browser							
OTHERS								
Humidity	0 ~ 95% RH @ 0 ~ 40°C (non-condensing)							
Noise level	≤ 60 dB							
Dimensions (W x D x H) (mm)	600 × 800 × 1360				600 × 800 × 1680			
Packaged dimensions (W x D x H) (mm)	720 × 920 × 1500				720 × 920 × 1820			
Net / Gross weight (kg)	180 / 200	186 / 205	188 / 210	227 / 245	231 / 250	316 / 376	354 / 414	
Without inbuilt battery								

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

Features

- High frequency online double-conversion with DSP control
- Modular design, high reliability, easily maintenance
- Double input distribution, higher reliability of system
- Input power factor correction (PFC)
- ECO mode operation for energy saving
- Wide input voltage range, 50 Hz / 60 Hz auto-sense frequency
- Support two modes of frequency conversion: 50 Hz input / 60 Hz output and 60 Hz input / 50 Hz output
- Input power factor > 0.99, input THDi ≤ 3%, output THDV ≤ 5%
- Output power factor 0.9
- High efficiency: load > 10%, efficiency ≥ 90%; load > 50%, efficiency ≥ 93%
- Digitized charger: flexible charger parameter and battery configuration setting, monitoring battery disconnected on line
- Share battery pack in parallel operation or separate battery pack for different UPS
- Flexible charger parameter and battery configuration setting, selectable battery number: 32 pcs / 34 pcs / 36 pcs / 38 pcs / 40 pcs
- Advanced intelligent battery management technique, prolong the working life of battery effectively
- Support battery cold start and mains supply self-starting
- 5.7 inches LCD touch screen, friendly human & machine interface
- Perfect protective function in hard and software, robust self-diagnosing, abundant event log for future check
- Perfect password control technology, including the first power-on password control, user password control and Maintenance password control.
- Reminders of battery out of warranty
- Standard emergency power off (EPO)
- Standard RS232 / USB / RS485 / dry contacts communication port
- Optional SNMP communication port
- Optional N+1 redundancy parallel up to 4 units
- Optional built-in isolation transformer
- Optional battery temperature compensation



Rear Panel

1. SNMP (optional)
2. RS232
3. RS485
4. USB
5. TEMP COMPENSATION
6. BATTERY PROTECTION
7. DRY CONTACT
8. PARALLEL PORT (optional)

EA990

150KVA ~ 800KVA (3:3)
PF 0.9



EA990 series 150KVA ~ 800KVA is three-phase input and three-phase output uninterruptible power supply system with high frequency on-line double-conversion technology controlled by DSP (Digital Signal Processor) microprocessor. It adopts a highly intelligent modular design to achieve utmost compact layout and improve reliability of the system. It meets the protection demands of critical loads in data centres or other important applications with high electrical performance and hardware/software protections.

Features

- DSP digital control technology
- Pure sine wave double conversion, with strong load capacity
- Modular design, high reliability and easy maintenance
- Dual input power distribution for higher usability
- Input power factor > 0.99, THDi < 3%, environment friendly and high-efficiency and energy-saving
- Keep high efficiency operation at low load rate: 96% at 40% rated load
- High power density, 500KVA system only 1.02 m² footprint
- High Efficiency operating in on-line mode up to 96%, in ECO mode up to 99%
- Wide input voltage range, 50Hz/60Hz frequency auto-sense, adapt to all kind of grid
- Support two modes of frequency conversion: 50Hz input/60Hz output and 60Hz/input 50Hz output
- Output power factor 0.9, load capability improved 12.5% more than traditional products
- 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, battery number 30 ~ 46pcs 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
- 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

Specifications

MODEL	EA99150	EA99200	EA99300	EA99400	EA99500	EA99600	EA99800
Rated capacity	150 KVA 135 KW	200 KVA 180 KW	300 KVA 270 KW	400 KVA 360 KW	500 KVA 450 KW	600 KVA 540 KW	800 KVA 640 KW
INPUT							
Input wiring	3Ph+N+PE						
Rated voltage	380 / 400 / 415 Vac						
Voltage range	138 ~ 485 Vac (305 ~ 485 Vac without power downgrading; 138 ~ 305 Vac with linear downgrading 40%)						
Input frequency	40 ~ 70 Hz						
Power factor	≥ 0.99						
Current distortion	< 3%						
BATTERIES							
Battery voltage	± 240 Vdc (± 180, ± 192, ± 204, ± 216, ± 228, ± 252, ± 264, ± 276 selectable)						
Number of battery	40 pcs 12 V batteries (supports 30 / 32 / 34 / 36 / 38 / 42 / 44 / 46 pcs)						
OUTPUT							
Output wiring	3Ph+N+PE						
Rated voltage	380 / 400 / 415 Vac						
Voltage regulation accuracy	± 1%						
Frequency	Synchronized with utility on mains power mode: 50Hz / 60Hz ± 0.25% in battery mode:						
Power factor	0.9						
Voltage distortion	≤ 1% with liner 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 ≤ 135% for long term; < 100% load for 100 ms						
SYSTEM							
Efficiency	96 %						
Max. number of parallel	4 units						
Transfer time	0 ms						
Protection	Lack-phase protection, phase-error protection, short circuit protection, overload protection, over-temperature protection, battery low voltage protection, output over/low voltage protection, fans failure protection ect.						
Communications	RS485, dry contacts, SNMP						
Display	7 inches LCD touch screen						
OTHERS							
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			
Dimensions (W × D × H) (mm)	600 × 850 × 2000			1200 × 850 × 2000	1400 × 850 × 2000	2400 × 850 × 2000	
Weight (kg)	333	365	439	680	795	1011	1540

● All specifications subject to change without notice.

EA800

6KVA ~ 10KVA (1:1)
10KVA ~ 30KVA (3:1)



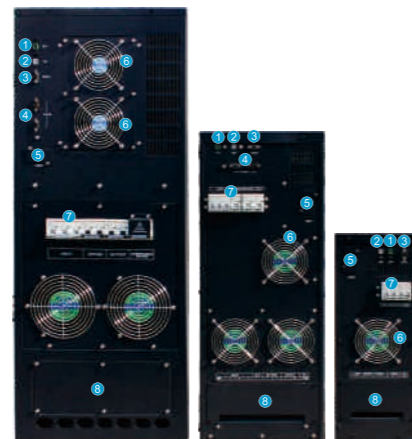
Specifications

MODEL	EA806 (1:1)	EA810 (1:1)	EA810 (3:1)	EA815 (3:1)	EA820 (3:1)	EA830 (3:1)
Capacity	6 KVA 4800 W	10 KVA 8 KW	10 KVA 8 KW	15 KVA 12 KW	20 KVA 16 KW	30 KVA 24 KW
INPUT						
Rated voltage	220 / 230 / 240 Vac (1 ϕ + N + PE)		380 / 400 / 415 Vac (3 ϕ + N + PE)			
Voltage range	165 ~ 275 Vac		285 ~ 475 Vac			
Rated frequency	50 Hz / 60 Hz					
Frequency range	40 ~ 70 Hz					
Frequency tracking range	\pm 5% Hz					
BYPASS						
Rated voltage	220 / 230 / 240 Vac (1 ϕ + N + PE)					
Overload capability	Load current < 150% rated current: long time running 150% \leq load current < 200%: 1 min 200% rated current \leq load current: 200 ms					
BATTERIES						
Battery voltage	192 Vdc					
Battery type	VRLA AGM maintenance-free lead based					
Number of battery	12 V \times 16 pcs					
Charging voltage	220 Vdc					
EOD	168 Vdc					
Charging current	Default 8 A (2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable)					
OUTPUT						
Rated voltage	220 / 230 / 240 (1 ϕ + N + PE)					
Power factor	0.8					
Waveform	Sinusoidal					
Rated frequency	50 Hz / 60 Hz (settable)					
Frequency precision	Mains mode: track bypass input in the state of synchronization Battery mode: 50 / 60 \pm 0.1 Hz					
Voltage precision	\pm 1%					
Recovery time of transient voltage	< 20 ms					
Crest factor	3:1					
THDV	\leq 3% (linear load); \leq 6% (non-linear load)					
Overload capability	Load \leq 105%: long time running ; 105% < load \leq 125%: transfer to bypass in 10 mins ; 125% < load \leq 150%: transfer to bypass in 1 min 150% < load \leq 200%: transfer to bypass in 200 ms 200% < load: transfer to bypass in 100 ms					
OTHERS						
Transfer time	0 ms					
Protections	Short-circuit – overload – overvoltage – undervoltage – low battery – overtemperature					
Communications	RS232 / USB (standard); RS485 / SNMP / dry contacts (optional)					
Operating temperature	0 ~ 40°C					
Storage temperature	-25°C ~ 55°C (without batteries);					
Relative humidity	0 ~ 95% (non-condensing)					
Operating altitude	\leq 1000 m (derating 1% for each additional 100 m)					
Noise level	< 60 dB (at 1 m)					
MTBF	MTBF > 200000 h					
MTTR	MTTR < 0.5 h					
IP rating	IP20					
Dimensions (W x D x H) (mm)	210 x 585 x 590	310 x 600 x 880		400 x 815 x 1100		
Packaged dimensions (W x D x H) (mm)	328 x 716 x 805	430 x 710 x 1080		525 x 925 x 1305		
Net weight (kg)	54	96	130	201	230	277
Gross weight (kg)	64	108	142	216	245	292

● All specifications subject to change without notice.
● Custom-made specifications are acceptable.

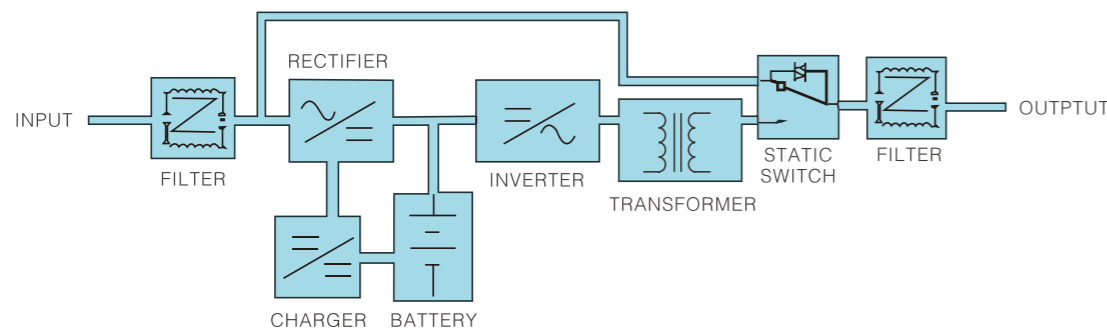
Features

- 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
- Supports dual input, hot standby in series
- Redundant & parallelable with advanced parallel current-sharing control technology
- 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)
- Standard configuration with output isolation transformer
- Superior protection (surges, short-circuit, overvoltages, undervoltages, overcharge, reverse connection 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
5. SNMP (optional)
6. Fan
7. Breaker
8. Terminal



EA890

10KVA ~ 120KVA (3:3)
PF 0.9



EA890 series UPS is a intelligent 3 phase in 3 phase out uninterruptible power supply, it adopts double transform high frequency PWM and high performance digital control technique (DSP), with perfect protection, super network management function, reasonable man-machine interface and a series of precision design, meets all high reliability requirements of uninterruptible power supply and integrates reliable, safety, maintainability characteristics of a new generation low frequency UPS.

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
- 5.7 inches LCD touch screen, friendly human & machine interface
- Front access makes maintenance and replacement easy (60 ~ 120KVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (>200,000h)
- Low MTTR (<0.5h)
- 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
INPUT									
Rated voltage	380 V / 400 V / 415 Vac								
Voltage range	± 25%								
Rated frequency	50 / 60 Hz								
Frequency range	50 / 60 Hz ± 5 Hz								
Power factor	≥ 0.95 (with filter)								
Bypass voltage range	± 20% (settable)								
Delayed start of rectifier	1 ~ 300 s (settable via display panel)								
ECO voltage range	± 10% (settable)								
OUTPUT									
Voltage	380 V / 400 V / 415 Vac								
Voltage regulation	± 1%								
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.1% in battery mode								
Waveform	Sinusoidal								
Power factor	0.9								
Crest factor	3:1								
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)								
Transfer time	AC mode to battery mode: 0 ms Inverter mode to bypass mode: 0 ms Inverter mode to ECO mode: 5 ~ 10 ms								
Inverter overload capability	105%: long time running; 105% ~ 110%: transfer to bypass in 1 h 110% ~ 125%: transfer to bypass in 10 mins 125% ~ 150%: transfer to bypass in 1 min 150% ~ 200%: transfer to bypass in 200 ms > 200%: transfer to bypass in 100 ms								
Slight adjustment of inverter output voltage	± 5 V								
BATTERIES									
DC Voltage	12 V × configured battery number (settable via display panel)								
Number of battery	28 ~ 32 pcs (settable)								
Charging current	10 A default / Settable								
Charging	Three-stage charging, auto switch floating / equalizing charge								
Battery state display	Display battery backup time, battery remaining capacity								
Battery self-test	Settable periodic self-test; manually configurable test time and voltage								
SYSTEM									
Efficiency	In line mode: Max. 93%; ECO mode: ≥ 98%								
Max. Parallel numbers	6								
Protections	Short-circuit - overload - overvoltage - undervoltage - low battery - overtemperature - fan fault								
IP rating	IP20								
EMI	EN62040-2								
EMS	IEC61000-4-2 (ESD)								
	IEC61000-4-3 (RS)								
	IEC61000-4-4 (EFT)								
	IEC61000-4-5 (surge)								
COMMUNICATIONS									
RS232 / RS485 / dry contacts (standard)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10								
SNMP (optional)	Power management from SNMP manager and web browser								
OTHERS									
Humidity	0~95% RH @ 0~40°C (non-condensing)								
Noise level	55 dB			60 dB			65 dB		
Dimensions (W × D × H) (mm)	400 × 800 × 1100			600 × 700 × 1500			700 × 800 × 1700		
Packaged dimensions (W × D × H) (mm)	490 × 890 × 1170			690 × 790 × 1570			790 × 890 × 1770		
Net / Gross weight (kg)	158 / 200	165 / 207	175 / 217	210 / 252	260 / 302	460 / 480	590 / 620	630 / 660	690 / 720

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

EA890

160KVA ~ 500KVA (3:3)
PF 0.9



EA890 series UPS 160KVA ~ 500KVA use double conversion technology with a very advanced design criteria improves the performance of components, minimizes the quantity of raw material used on the magnetic and reduces the number of semiconductors thus reducing servicing time and ownership costs. This UPS has high efficiency (>93%) and input power factor (>0.99) built-in output isolation transformer. The inverter transformer prevents the direct feed-through of the battery potential into the critical load and allows a very high rejection ratio of the power supply disturbances (spikes, surges etc).

Features

- Online double-conversion with DSP control
- IGBT rectifier and high input power factor (>0.99)
- High efficiency 93%
- Output power factor 0.9
- Low input distortion: THD<5%
- Generator compatible
- Output isolation transformer
- Inverter IGBT technology with high frequency communication
- High immunity to external disturbances
- Independent control on the three inverter phases
- High instantaneous overload capacity
- High MTBF (>200,000h)
- Capability of supplying distorted loads, containing output voltage distortion with crest factors
- Front access makes maintenance and replacement easy, save space
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- Low MTTR (<0.5h)
- 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

Specifications

MODEL	EA89160	EA89200	EA89250	EA89300	EA89400	EA89500
Capacity	160 KVA 144 KW	200 KVA 180 KW	250 KVA 225 KW	300 KVA 270 KW	400 KVA 360 KW	500 KVA 450 KW
INPUT						
Rated voltage	380 V / 400 V / 415 Vac					
Voltage range	346 V ~ 456 V (full load) 304 V ~ 346 V (power derating 10%)					
Rated frequency	50 / 60 Hz					
Frequency range	50 / 60 Hz ± 5 Hz					
Power factor	≥ 0.99					
Total harmonic distortion (THDI)	≤ 3%					
Input current-limiting	1.1 times of rated current (0.1 ~ 1.1 settable)					
Rectifier delay start	10 s (1 ~ 300 settable)					
Bypass voltage range	± 20% (settable)					
OUTPUT						
Rated voltage	380 V / 400 V / 415 Vac					
Voltage regulation	± 1%					
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.1% in battery mode					
Waveform	Sinusoidal					
Crest factor	3:1					
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)					
Transfer time	0 ms					
Inverter overload capability	105% ~ 110% for 60 minutes; 110% ~ 125% for 10 minutes;					
Slight adjustment of inverter output voltage	± 5 V					
BATTERIES						
DC voltage	600 Vdc (support 576 Vdc / 588 Vdc / 612 Vdc / 624 Vdc)					
Number of battery	50 pcs (support 48 / 49 / 51 / 52 pcs)					
Charging current	Charging rate (settable) × battery capacity (settable) × number of battery group (settable)					
Battery state display	Battery remaining capacity and backup time					
Battery self-test	Settable periodic self-test; manually configurable test time and voltage					
SYSTEM						
Efficiency	Line mode ≥ 93%, ECO mode ≥ 98%					
Max. parallel numbers	6					
Protections	Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failure					
IP rating	IP 20					
Display	5.7 inches LCD touch screen					
COMMUNICAITONS						
RS232 / RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10					
SNMP (optional)	Power management from SNMP manager and web browser					
OTHERS						
Operating temperature	0 ~ 40°C					
Storage temperature	- 25°C ~ 55°C (no battery)					
Humidity	5% ~ 95% (non-condensing)					
Noise level at 1 m	< 65 dB			< 70 dB		
Dimensions (W × D × H) (mm)	800 × 860 × 1700	1210 × 860 × 1950			2380 × 860 × 1950	
Packaged dimensions (W × D × H) (mm)	900 × 1000 × 1950	1300 × 1000 × 2200			1300 × 1000 × 2200 (× 2)	
Net/Gross weight (kg)	790 / 810	1135 / 1200	1275 / 1340	1355 / 1420	2090 / 2200	2300 / 2410

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

EA660

20KVA ~ 160KVA
PF 1.0



With extendable capacity up to 160KVA/160KW in each closet and full DSP control technology, EA660 series is the third generation of three phase high frequency modular UPS. All internal modules (power module, charger module and monitor module) are modularly designed and hot swappable. In addition, they are constructed with small modules, assuring both system compactness and reliability. Its full isolation design between fragile components and air flue makes the best of combination of reliability, functionality and flexibility. Moreover, this system adopts advanced "N+X" wireless parallel and redundancy technology, avoiding single point failure, and further strengthening the reliability.

Features

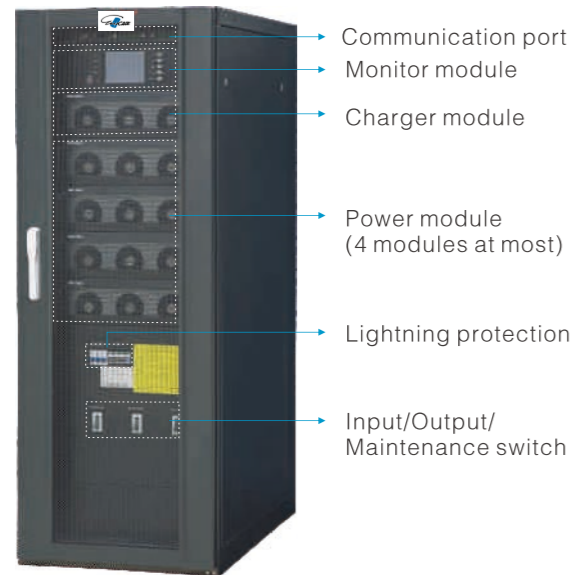
- High frequency online double-conversion with DSP control
- Hot swappable operation for all modules
- Inbuilt integrated PDU system, easy installation and economic initial investment
- Wide input voltage range, 50Hz / 60Hz auto sensing frequency
- Support two modes of frequency conversion: 50Hz input/60Hz output and 60Hz input / 50Hz output
- Input power factor > 0.99, input THDi ≤ 3%, output THDV ≤ 5%
- Advanced "N+X" wireless parallel and redundancy technology easily set up different numbers of redundancy UPS module via LCD
- Inbuilt battery module available, 40 × 12V/9AH for each module
- Share battery pack in parallel operation, saving user's battery cost
- System capacity up to 160KVA/160KW constructed by each module 20KVA / 20KW, single charger module be equipped with 30 A charging current, 4 modules be configured maximally
- Flexible charger parameter and battery configuration setting, selectable battery number: 32 pcs / 34 pcs / 36pcs / 38 pcs / 40 pcs
- Advanced intelligent battery management technique, prolong the working life of battery effectively
- Support battery cold start and mains auto restart
- Complete isolation between key components and air duct effectively improve the system reliability
- Fragile components can be replaced easily as modules at low maintenance cost
- Front accessible maintenance, top / bottom cable entry compatible
- Perfect protection for hardware and software (C class lightning protection, circuit breaker, fuse, software and hardware protection), robust self detection, abundant event log for future check
- 5.7 inches LCD touch screen, friendly human machine interaction
- Standard emergency power off (EPO)
- Standard RS232/USB/RS485/dry contacts communication port
- Optional SNMP communication port
- Optional battery temperature compensation

Specifications

MODEL	EA6680	EA66160
Capacity	80 KVA / 80 KW	160 KVA / 160 KW
Numbers of parallel module	1 ~ 4	1 ~ 8
Numbers of redundancy module	0 ~ 3	0 ~ 7
UPS power module	20 KVA / 20 KW	
INPUT		
Rated voltage	380 V / 400 V / 415 Vac	
Voltage range	204 ~ 242 Vac (load ≤ 50%); 242 ~ 277 Vac (50% < load ≤ 70%); 277V ~ 520 Vac (70% < load ≤ 100%)	
Rated frequency	50 / 60 Hz (auto-sense)	
Frequency range	40 ~ 70 Hz	
Power factor	≥ 0.99	
Total harmonic distortion (THDI)	≤ 3%	
Bypass voltage Range	Rated output voltage -40% ~ rated output voltage +20% (settable via LCD)	
OUTPUT		
Voltage	380 V / 400 V / 415 Vac	
Voltage regulation	± 1%	
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.1% in battery mode	
Power factor	1.0	
Waveform	Pure sine wave	
Crest factor	3:1	
Total harmonic distortion (THDV)	≤ 1% (linear load); ≤ 5% (non-linear load)	
Transfer time	0 ms	
Inverter overload capability	110% ~ 130%: transfer to bypass in 10 mins; 130% ~ 150%: transfer to bypass in 1 min; > 150%: transfer to bypass in 0.5 s	
Bypass overload capability	≤ 150%: long time running > 150%: power off in 10 s	
BATTERIES		
DC voltage	± 240 Vdc (options: ± 192 Vdc / ± 204 Vdc / ± 216 Vdc / ± 228 Vdc)	
Inbuilt battery of standard model	40 × 12 V / 9 Ah for each module	
Charging current	1 ~ 30 A / 60 A (settable via LCD)	
SYSTEM		
Efficiency	≥ 94%	
Display panel	5.7 Inches LCD touch screen	
Alarm	Battery mode, low battery, fans fault etc.	
EMI	EN62040-2	
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (surge)	
COMMUNICAITONS		
RS232 / RS485 / USB / dry contacts (standard)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10	
SNMP (option)	Power management from SNMP manager and web browser	
OTHERS		
Humidity	0 ~ 95% RH @ 0 ~ 40°C (non-condensing)	
Noise level	≤ 60 dB	
Module dimensions (mm) W × D × H	482 × 590 × 131	
Module weight	28 kg / power module, 27 kg / charger module, 7 kg / monitoring module	
UPS dimensions (mm) W × D × H	600 × 1000 × 1600	600 × 1000 × 2000
UPS packaged dimensions (mm) W × D × H	700 × 1070 × 1760	700 × 1070 × 2160
UPS Net / Gross weight (kg)	225 / 245	290 / 310
Without inbuilt battery and power module		
Input / output / bypass breaker	Yes	Yes

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

EA660 Internal Structure



EA660~80KVA

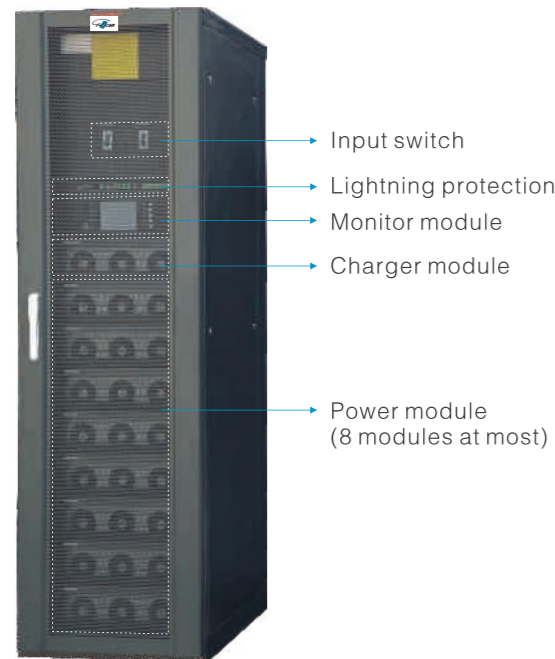
80K use cabinet of 1.6 meter tall, and can match 4x20KVA power modules at most, so the biggest capacity is 80KVA. UPS adopt full front operation, and with power distribution inside, can match top cables and bottom cable connection.

EA660 Battery Module



System front view

Hot swappable battery module is supporting modular UPS design products, the battery module uses the power module size, completely compatible with the power module drawer, without changing the modular cabinet of UPS system can be directly inserted, working on the power module position. Supporting online hot swap, easy maintenance, and support redundant battery module, providing high availability.



EA660~160KVA

160K use cabinet of 2 meter tall, and can match 8x20KVA power modules at most, so the biggest capacity is 160KVA. UPS adopt full front operation, and with power distribution inside, can match top cables and bottom cable connection.

Features

- The overall design using the same size as power module, power module slot compatible.
- Keep modular UPS maximum expansion function, readily removable battery module, without changing the system cabinet, can directly increase the power module to expand system power.
- Each battery module equipped with circuit breaker, with short circuit protection function, more safety and reliability.
- Battery module has low voltage & over discharge protection function, to prevent damage to the battery.
- Battery module using hot swap design. Simple operation, easy maintenance.
- Hot swappable and parallelizability battery module function, provide higher availability through redundancy battery module.
- Internal battery module using high performance free maintenance lead-acid batteries, with long service life.
- Battery module according to the 2 groups of multiple selection, each battery module contains 2 battery pack, and each battery pack containing 10PCs 12V/9AH batteries.



Battery Pack with 10pcs 12V/9AH



Battery Module with 20pcs 12V/9AH



Hot swap connector

EA660

50KVA ~ 800KVA
PF 0.9



EA660 is the third generation of three phase high frequency on-line double-conversion modular UPS. Its single unit is extendable to 800 KVA, system capacity can be expanded to 3.2 MVA constructed by each power module 50 KVA. All internal modules (Power module, bypass module and control module) are modularly designed and hot-swappable.

Features

- DSP digital control technology
- Pure sine wave double conversion, with strong load capacity
- Flexible modularity and easy scalability with all hot-swappable module design
- Keep high efficiency operation at low load rate: 96% at 40% rated load and 95% at 20% rated load
- High power density of 50 KVA / 3U power module
- 500 KVA system only 1.02 m² 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
- Wide input voltage range, 50 Hz / 60 Hz frequency auto-sense, adapt to all kind of grid
- 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 enable UPS to operate efficiently at low load rate
- 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, battery number 30 ~ 46 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

Specifications

MODEL	EA66200	EA66300	EA66400	EA66500	EA66600	EA66800
Rated capacity	200KVA	300KVA	400KVA	500KVA	600KVA	800KVA
Numbers of power modules	4	6	8	10	12	16
Rated capacity of power module	50 KVA					
INPUT						
Input wiring	3Ph + N + PE					
Rated voltage	380 / 400 / 415 Vac					
Voltage range	138 ~ 485 Vac (305 ~ 485 Vac without power downgrading; 138 ~ 305 Vac with linear downgrading 40%)					
Input frequency	40 ~ 70 Hz					
Power factor	≥ 0.99					
Current distortion	< 3%					
BATTERIES						
Battery voltage	± 240 Vdc (± 180, ± 192, ± 204, ± 216, ± 228, ± 252, ± 264, ± 276 selectable)					
Number of battery	40 pcs 12 V batteries (30 / 32 / 34 / 36 / 38 / 42 / 44 / 46 pcs selectable)					
OUTPUT						
Output wiring	3Ph + N + PE					
Rated voltage	380 / 400 / 415 Vac ± 1%					
Frequency	Synchronized with utility in mains power mode: 50 Hz / 60 Hz ± 0.25% in battery mode:					
Power factor	0.9					
Voltage distortion	≤ 1% with liner load / ≤ 3% with non-linear load					
Crest factor	3:1					
Inverter overload capacity	105% < load ≤ 110%: transfer to bypass in 60 mins 110% < load ≤ 125%: transfer to bypass in 10 mins 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						
Efficiency	96 %					
Max. number of parallel	4 units					
Transfer time	0 ms					
Protection	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 ~ 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 × D × H) (mm)	600 × 850 × 2000	1200 × 850 × 2000	1400 × 850 × 2000	2400 × 850 × 2000		
UPS module dimensions (W × D × H) (mm)	442 × 620 × 130					
Cabinet weight (kg)	233	415	465	617	1025	
UPS module weight (kg)	32					

●All specifications subject to change without notice.

Outdoor UPS

Pure Sine Wave Line Interactive

500VA ~ 3000VA



Pure sine wave interactive outdoor UPS is specially designed for outdoor communication equipment, networking equipment, traffic control system and other applications of city corner, countryside, or mountainous area. High temperature resistance, frost resistance, corrosion resistant, dust prevention, and water resistance are based. With advanced functions like wide range of input voltage and frequency, high reliability, energy saving, environmental protection, anti-thunder, remote control, remote detection, etc. Our UPS can guarantee stable power supplying to communication, networking, traffic control and other devices. It is a type of ideal helpmate for running these important outdoor devices.

Features

- Strong environmental adaptability
- High reliability, energy saving, environmental protection
- Wide adaptability to power grid
- Unattended and intelligent monitoring (option)
- Inverter isolation & pure sine wave technology
- Online UPS protection function
- Intelligent no-load shutdown (option)
- Auto restart when mains power is restored



Specifications

MODEL	500 VA	1000 VA	2000 VA	3000 VA
Capacity	300 W	600 W	1200 W	1800 W
DISPLAY				
Panel indicator	LED / LCD (customized)			
MAINS STATES				
Applications	PC, banking system, ATM, medical system			
Input voltage range	100 Vac / 110 Vac / 115 Vac / 120 Vac / 200 Vac / 220 Vac / 230 Vac / 240 Vac ± 25%			
Input frequency range	45 ~ 65 Hz (over-frequency automatically transfer to inverter power)			
Stable output voltage range	174 ~ 216 Vac / 190 ~ 238 Vac / 199 ~ 250 Vac / 210 ~ 260 Vac ± 10 Vac for 200 Vac / 220 Vac / 230 Vac / 240 Vac 87 ~ 108 Vac / 96 ~ 120 Vac / 100 ~ 125 Vac / 105 ~ 130 Vac ± 10 Vac for 100 Vac / 110 Vac / 115 Vac / 120 Vac			
Input P.F. (AC/DC)	98%			
Efficiency	Mains mode ≥ 96%			
Mains overload	110% for 120 s, 125% for 60 s, 150% for 10 s			
Short circuit	Input fuse			
INVERTER STATES				
Inverter output voltage	100 Vac / 110 Vac / 115 Vac / 120 Vac / 200 Vac / 220 Vac / 230 Vac / 240 Vac ± 5% (battery ≥ 11 Vdc)			
Output frequency	50 Hz / 60 Hz ± 1% frequency adaptive			
Output power factor	≥ 0.6			
Waveform distortion	Linear load ≤ 5%			
Transfer time	≤ 10 ms			
Efficiency	Inverter mode ≥ 80%			
Inverter overload	110% for 60 s, 125% for 10 s, 150% for 5 s			
No-load shut-off (option)	load < 5% auto shutdown in 1 min			
Short circuit	the system automatically shut down			
ALARM				
Mains abnormal	1 / 4 s, be silent in 40 s			
Low battery	1 / 0.2 s			
Overload	1 / 1 s			
BATTERIES				
DC voltage	24 Vdc		48 Vdc	
Inner battery space	2Pcs × 12V/38 Ah / 2Pcs × 12V/120 Ah		4Pcs × 12V/38 Ah	4Pcs × 12V/120 Ah
Charging current	Max. 12 A			
Communication interface (option)	Dry contacts / RS232 / USB / SNMP			
OTHERS				
Installing	Floor standing or Wall-mounted			
Surge protection	Class C			
Safety	IEC62040-2:2006, GB4943-2001			
EMC	EA50091-2; IEC62040-1:2006; EA61000-3-2:2006; EA61000-3-3:2008			
Protection grade	IP 55			
Environmental temperature	0°C ~ 50°C (-30°C option)			
Environmental humidity	10% ~ 95% (no cooling)			
Noise	≤ 50 dB			
Weight (kg)	17.5 / 36.7		36.7	60.7
Dimensions (mm) W × D × H	430 × 245 × 550 / 470 × 245 × 900		470 × 245 × 900	800 × 560 × 1100
Packaged dimensions (mm) W × D × H	500 × 330 × 620 / 540 × 330 × 980		540 × 330 × 980	948 × 648 × 1142

●All specifications subject to change without notice.

AVR

500VA ~ 5000VA



500VA ~ 1000VA

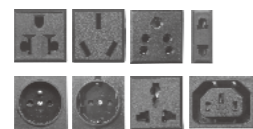


500VA ~ 5000VA

AVR series AC automatic regulators apply the advanced control technology with well qualified components. It has the features of wide input voltage compatibility, high reliability, output voltage stabilizing, energy saving etc.; it has over voltage and low voltage protection and delayed output protection etc.. it could supply stabilized power to lights, TVs, air-conditioners, refrigerator, computers and duplicating machines and other household equipment in schools, offices, hotels, meeting rooms where the stabilized voltage is needed.

Features

- Classic series, EI transformer, relay type
- Input and output voltage LED / Meter / LCD display
- High temperature protection
- Circuit breaker protection
- Efficiency: 98%



Optional sockets



Rear Panel

1. AC Input
2. Output
3. Fuse
4. ON/OFF

Specifications

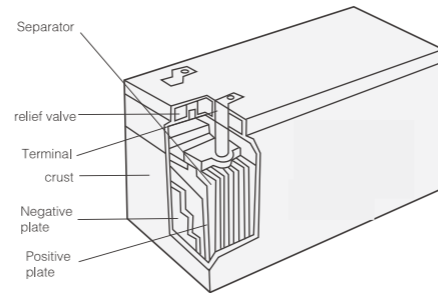
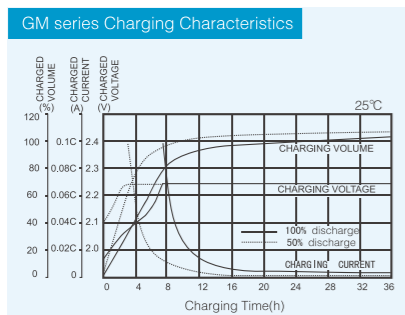
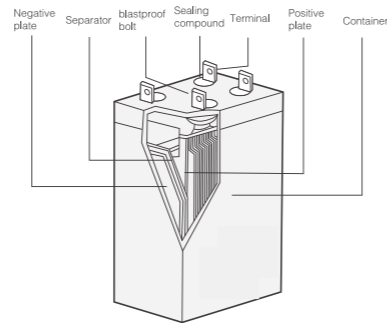
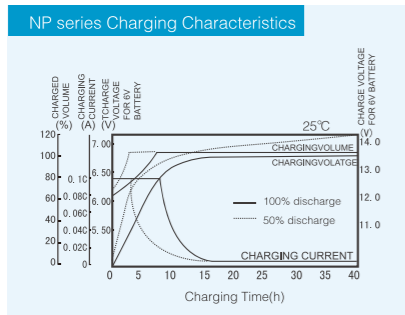
MODEL	500 VA	800 VA	1000 VA	1500 VA	2000 VA	3000 VA	5000 VA	
INPUT								
Phase	Single Phase + N + GND							
Voltage range	140 Vac ~ 270 Vac (option: 100 ~ 270 V)							
OUTPUT								
Voltage range	200 ~ 240 V (no load)							
Frequency	50 / 60 Hz							
Overvoltage protection	250 V ± 5 V (overvoltage indicator on, output off)							
Undervoltage protection	180 V ± 5 V (overvoltage indicator on, output off)							
OTHERS								
Efficiency	≥ 95%							
Display mode	LED indicator light; pointer voltmeter / LCD display (selectable)							
Input / output setting	Plug / Socket						Terminal blocks	
Time-delay	short delay : < 3 s; long delay: 3 mins							
Output short circuit protection	fuse / breaker							
Waveform distortion	No additional waveform distortion							
Insulation resistance	> 2 MΩ							
Dielectric strength	Low frequency sine voltage 1500 V for 1 minute (without phenomena of breakdown and flashover)							
Ambient temperature	-10°C ~ ± 40°C							
Relative humidity	≤ 95%							
Working	Continuing working							
Dimensions (W × D × H) mm	Metal case	125 × 230 × 135			143 × 258 × 185	210 × 291 × 201	229 × 345 × 220	
	Plastic case	100 × 215 × 160			---			
Net weight (kg)	Metal case	2.5	2.9	3.1	5.4	6.5	9.2	13.0
	Plastic case	2.1	2.5	2.7	---			
Packaged dimensions (W × D × H) mm	Metal case	176 × 280 × 207			192 × 310 × 252	262 × 343 × 273	271 × 396 × 303	
	Plastic case	145 × 265 × 229			---			
Gross weight (kg)	Metal case	2.8	3.2	3.4	5.6	6.7	9.6	13.55
	Plastic case	2.4	2.8	3.0	---			
Quantity / 20ft	2400 pcs			1600 pcs		900 pcs	730 pcs	

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

Battery



EAST Valve-regulated sealed lead-acid battery is featured with high energy, long life, zero pollution, maintenance-free and safety. It adapts modern updated design, manufacturing process, advanced lead-calcium electrode plate, super-fine glass fiber separators and airproof design. The product mainly includes lead liquid battery for the NP series (12V), GM series (2V); colloidal battery for the NPJ series (12V), GMJ series (2V).



Specifications

NP series

Model	Rate voltage	Rate capacity	Dimensions				Weight	Bolt
			W	D	H	Total H		
NP4-12	12	4	90	70	101	107	1.45	T1
NP7-12	12	7	151	65	94.5	100	2.15	T2
NP8-12	12	8	151	65	94.5	100	2.35	T2
NP9-12	12	9	151	65	94.5	100	2.5	T2
NP12-12	12	12	151	98	95	101	3.8	T2
NP17-12	12	17	181.5	77	167.5	167.5	5.32	T3
NP24-12	12	24	166	175	125	125	7.6	M5
NP38-12	12	40	197.5	165.5	170	170	12.8	M6
NP65-12	12	65	350	167	179	179	20.4	M6
NP100-12	12	100	339	173	214.5	220	28.0	M8
NP120-12	12	120	410	176	224	224	33.5	M8
NP150-12	12	150	482	170	240	240	44.5	M8
NP200-12	12	200	522	238	218	223	59.1	M8
NP230-12	12	230	520	269	203	208	72.6	M8

GM series

Model	Rate voltage	Rate capacity	Dimensions				Weight	Bolt
			W	D	H	Total H		
GM100-2	2	100	170	72	205	212	6.0	M6
GM200-2	2	200	170	110	328	350	13.6	M8
GM300-2	2	300	170	150	328	350	18.7	M8
GM400-2	2	400	210	175	330	350	25.5	M8
GM500-2	2	500	240	175	330	350	30.0	M8
GM600-2	2	600	302	175	330	350	38.5	M8
GM800-2	2	800	410	175	330	351	51.0	M8
GM1000-2	2	1000	475	175	328	350	60.0	M8
GM1500-2	2	1500	403	354	339	349	96.5	M8
GM2000-2	2	2000	490	350	345	382	125.0	M8
GM3000-2	2	3000	710	350	345	382	210.0	M8

NPJ series

Model	Rate voltage	Rate capacity	Dimensions				Weight	Bolt
			W	D	H	Total H		
NPJ24-12	12	24	166	175	125	125	8.0	M5
NPJ38-12	12	26	197	165	172	172	14.5	M5
NPJ50-12	12	50	229	138	211	216	18.2	M6
NPJ65-12	12	65	350	166	174	174	23.4	M6
NPJ100-12	12	100	339	174	216	222	32.0	M8
NPJ120-12	12	120	407	175	210	240	39.7	M8
NPJ150-12	12	150	484	170	240	240	46.2	M8
NPJ200-12	12	200	520.5	240	219	224	65.0	M8

GMJ series

Model	Rate voltage	Rate capacity	Dimensions				Weight	Bolt
			W	D	H	Total H		
GMJ200-2	2	200	170	110	328	337	14.2	M8
GMJ300-2	2	300	170	150	328	337	19.1	M8
GMJ400-2	2	400	210	175	330	339	25.5	M8
GMJ500-2	2	500	240	175	330	340	31.7	M8
GMJ600-2	2	600	300	175	330	340	38.8	M8
GMJ800-2	2	800	410	175	330	340	50.6	M8
GMJ1000-2	2	1000	475	175	328	338	61.6	M8
GMJ1500-2	2	1500	403	354	339	349	98.2	M8
GMJ2000-2	2	2000	490	350	339	349	132	M8
GMJ3000-2	2	3000	709	350	337	349	190	M8

Monitoring Software UPSmart



Product Introduction

UPSmart is monitoring software for single UPS developed on RS232/USB interface. When mains input is normal, UPSmart can display the input voltage, output voltage, frequency, load, battery capacity and many other parameters with real time data curves. When mains input is abnormal or other fault occurs, UPSmart can save the document automatically, make system turned off safely and automatically send alarm information by email or SMS messages. With UPSmart, users don't need to worry about any loss to the system cause by the abnormal mains power; users can make the necessary processing at the first time, and learn the historical operation information of equipment through query historical data and events saved in the system.

Application platform

Windows 98; Windows NT; Windows 2000; Windows ME; Windows XP; Windows 2003; Windows Vista; Windows 7

Features

- Working status: mains, battery, inverter, bypass, self test, etc.
- Real time monitoring: voltage, frequency, load, battery and other information
- Automatically securely saves data for common applications before shut down the system
- Multiple test methods for UPS diagnostic testing
- Automatic sequence turning on / off time of computer and UPS is configurable
- Historical parameters, operations and events can be inquired
- Local alarm and remote alarm functions are available
- Auto restart is settable

SNMP Card



Internal SNMP card



Internal SNMP card



External SNMP card

Application schematic diagram

