

# EA660

20KVA ~ 400KVA  
PF 1.0



With extendable capacity up to 400KVA/400KW 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 ≤ 3%
- Output power factor 1.0
- Advanced "N+X" wireless parallel and redundancy technology easily set up different numbers of redundancy UPS module via LCD
- Inbuilt battery module available, 40 x 12V / 9AH for each module
- Share battery pack in parallel operation, saving user's battery cost
- System capacity up to 400KVA / 400KW 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
- Completely isolation design between fragile components and air flue, improving the system reliability greatly
- Fragile components been replaced as module easily at low maintenance cost
- Front door operation, available for top and bottom terminal connection
- 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 interface
- 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	EA66200	EA66400
Capacity	80 KVA / 80 KW	160 KVA / 160 KW	200 KVA / 200 KW	400 KVA / 400 KW
Numbers of parallel module	1 ~ 4	1 ~ 8	1 ~ 10	1 ~ 20
Numbers of redundancy module	0 ~ 3	0 ~ 7	0 ~ 9	0 ~ 19
UPS power module	20 KVA / 20 KW			
<b>INPUT</b>				
Rated voltage	380 V / 400 V / 415 Vac			
Voltage range	204 ~ 520 Vac (load ≤ 50%); 242 ~ 520 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)			
<b>OUTPUT</b>				
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); ≤ 3% (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			
<b>BATTERIES</b>				
DC voltage	± 240 V (options: ± 192 V / ± 204 V / ± 216 V / ± 228 V)			
Inbuilt battery of standard model	40 × 12V / 9 Ah for each module			
Charging current	1 ~ 30 A / 60 A (settable via LCD)			1 ~ 60 A / 120 A (settable via LCD)
<b>SYSTEM</b>				
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)			
<b>COMMUNICAITONS</b>				
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			
<b>OTHERS</b>				
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	1200 × 1000 × 2000	
UPS packaged dimensions (mm) W × D × H	700 × 1070 × 1760	700 × 1070 × 2160	700 × 1070 × 2160 (x 2)	
UPS Net / Gross weight (kg)	225 / 245	290 / 310	280 / 300	560 / 600
Without inbuilt battery and power module				
Input / output / bypass breaker	Yes	Yes	No	No

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