

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

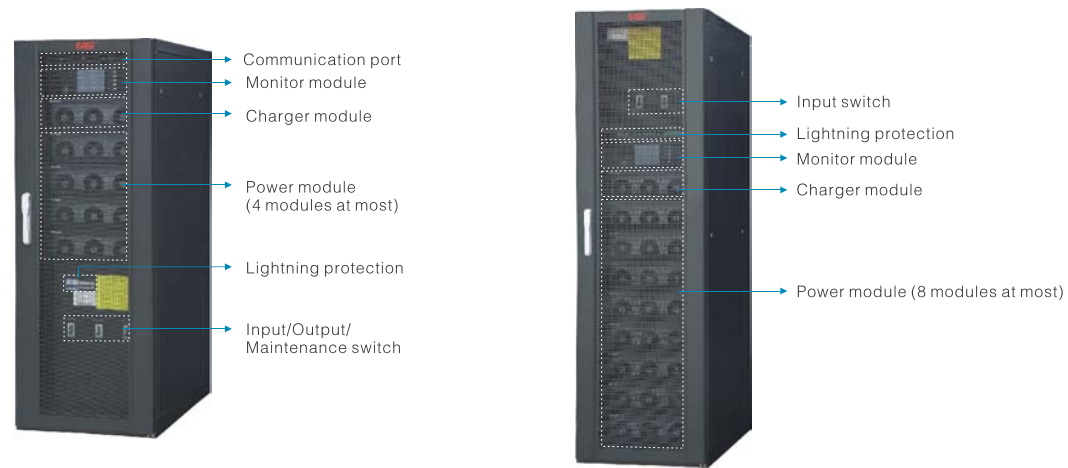
- High frequency online double-conversion with DSP control
- Hot swappable operation for all modules
- Inbuilt integrated PDU system, easy installation and economic initial investment
- Wide input voltage range, 50Hz/60Hz frequency self-adaptable
- Support two modes of frequency conversion: 50Hz input/60Hz 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, 40x12V/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 30A 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 supply self-starting
- 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 lighting 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 contact communication port
- Optional SNMP communication port
- Optional battery temperature compensation

Specifications

MODEL	EA6680	EA66160	EA66200	EA66400
Capacity	80KVA/80KW	160KVA/160KW	200KVA/200KW	400KVA/400KW
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	20KVA/20KW			
INPUT				
Rated Voltage	380V/400V/415VAC			
Voltage Range	204-520VAC(Load≤50%); 242-520VAC(50%<Load≤70%); 277V-520VAC(70%<Load≤100%)			
Rated Frequency	50/60Hz Auto Sensing			
Frequency Range	40-70Hz			
Power Factor	≥0.99			
Total Harmonic Distortion (THDi)	≤3%			
Bypass Voltage Range	Rated output voltage-40%- Rated output voltage+20%(Setting available via LCD)			
OUTPUT				
Voltage	380V/400V/415VAC			
Voltage Regulation	± 1%			
Frequency	Synchronized with utility on AC mode; 50/60Hz ± 0.1% on 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	AC mode to battery mode :0ms Inverter mode to bypass mode:0ms			
Inverter Overload Capability	110%-130%:Transfer to bypass after 10mins; 130%-150%:Transfer to bypass after 1mins; >150%: Transfer to bypass after 0.5s			
Bypass Overload Capability	≤150%: Long time running >150%: Power off after 10s			
BATTERY				
DC Voltage	± 240V(Option: ± 192V/ ± 204V/ ± 216V/ ± 228V)			
Inbuilt Battery of Standard Model	40* 12V/9AH for each module			
Charger Current	1-30A/60A(Setting available via LCD)			1-60A/120A (Setting available via LCD)
SYSTEM				
Efficiency	≥94%			
Display Panel	5.7 Inches LCD touch screen			
Alarm	Battery mode, Battery voltage low, Fans fault etc			
EMI	EN62040-2			
EMS	IEC61000-4-2(ESD) IEC61000-4-3(RS) IEC61000-4-4(EFT) IEC61000-4-5(Surge)			
ENVIRONMENT				
Humidity	0~95% RH @ 0~40℃(non-condensing)			
Noise Level	≤60dB			
MANAGEMENT				
Communication	RS232,RS485,USB,Dry contact Supports Windows® 98/2000/2003/XP/Vista/2008/ Windows® 7/8			
Optional SNMP	Power management from SNMP manager and web browser			
PHYSICAL				
Module Dimensions(mm) W*D*H	482 × 590 × 131			
Module Weight	28kg/Power module , 27kg/Charger module ,7kg/Monitor module			
UPS Dimension(mm) W*D*H	600 × 1000 × 1600	600 × 1000 × 2000		1200 × 1000 × 2000
UPS Packing Dimension(mm) W*D*H	700 × 1070 × 1760	700 × 1070 × 2160		700 × 1070 × 2160(× 2)
UPS Net/Gross Weight(kg)				
Without Inbuilt Battery and Power Module	225/245	290/310	280/300	560/600
Input/Output/Bypass breaker	Yes	Yes	No	No

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

EA660 Internal Structure

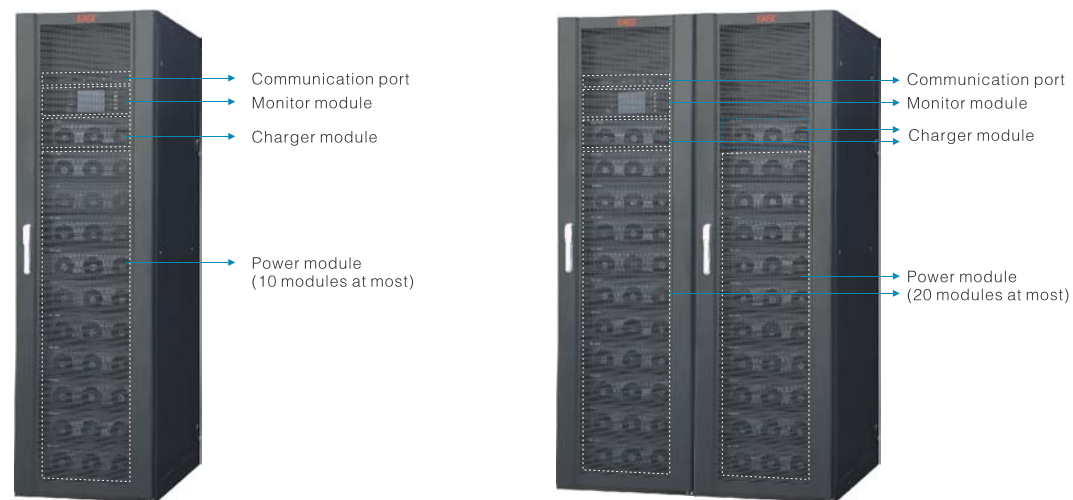


EA660-80KVA

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.

EA660-160KVA

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.



EA660-200KVA

200K use cabinet of 2 meter tall, and can match 10x20KVA power modules at most, so the biggest capacity is 200KVA. UPS adopt full front operation, and with power distribution inside, can match top cables and bottom cable connection. Due to the limited space there is no power distribution inside, so extra power distribution cabinet is needed.

EA660-400KVA

400K use cabinet of 2 meter tall, and can match 20x20KVA power modules at most, so the biggest capacity is 400KVA. UPS adopt full front operation, and with power distribution inside, can match top cables and bottom cable connection. Due to the limited space there is no power distribution inside, so extra power distribution cabinet is needed.

EA660 Battery Module



System front view

1. Power module
2. Battery module

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.

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