# **EA660**

50 kVA ~ 800 kVA PF 0.9





# Highlights

Power flexibility from 50 kVA - 800 kVA

Modular hot-swappable & Scalability

High MTBF and low MTTR

High efficiency

High adaptability

EA660 modular UPS is ideal for reliable, saving, intelligent and easy solutions. It ensures that a scalable, secure, high quality power supply is available for any critical high – density computer and IT environment applications, such as data centers and other critical loads.

EA660 modular UPS is a scalable three-phase / three-phase uninterruptible power supply system with DSP technology and provides true on - line double conversion power protection. The available UPS power and redundancy level can expand vertically from 50 to 800 kVA / 720 kW in one single power cabinet, and four power cabinets can be connected in parallel, increasing the capacity up to 3.2 M kVA. It features modular hot-swappable design, all modules support "plug & play", including power modules, bypass module, and control module, simplifies UPS servicing and maintenance.

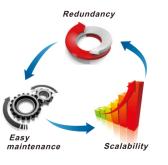
## Features

- DSP digital control technology
- Pure sine wave double conversion, with strong load capacity
- Flexible modularity and easy scalability with all hot-swappable module design
- High efficiency at low load rate: 96% at 40% rated load and 95% at 20% rated load
- High power density of 50 kVA / 3U power module
- High grid adaptability, strong load adaptability and strong overload capability
- Small footprint (500 kVA system only 1.02 m<sup>2</sup> 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 kinds 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 enables 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, numbers of battery 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









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#### Power Module

# Bypass Module









# Control Module



## Specifications

MODEL	EA66200	EA66300	EA66400	EA66500	EA66600	EA66800
Rated capacity	200 kVA	300 kVA	400 kVA	500 kVA	600 kVA	800 kVA
Numbers of power modules	4	6	8	10	12	16
Rated capacity of power module	50 kVA					
INPUT						
Input wiring	3 Ph + N + PE					
Rated voltage	380 / 400 / 415 Vac					
Trace a contage	138 ~ 485 Vac (305 ~ 485 Vac without power downgrading;					
Voltage range	138 ~ 305 Vac with linear downgrading 40%)					
Input frequency	40 ~ 70 Hz					
Power factor	≥ 0.99					
Current distortion	< 3%					
BATTERIES	V 0 /0					
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	1 40	, pos iz v ballei	100 ( 00 / 02 / 04 /	00,00,42,44,	-to pos selectabl	<u> </u>
Output wiring	3 Ph + N + PE					
Rated voltage	380/400/415 Vac ± 1%					
nated voltage	Synchronized with utility in mains power mode:					
Frequency	50 Hz / 60 Hz ± 0.25% in battery mode:					
Power factor	50 Hz / 60 Hz ± 0.25% in dattery mode:					
Voltage distortion	0.0					
Crest factor	≤ 1% with liner load / ≤ 3% with non-linear load 3:1					
Crest factor	105% < load ≤ 110%: transfer to bypass in 60 min					
Inverter overload capacity	110% < load ≤ 110%: transfer to bypass in 60 min					
	110% < 10ad ≤ 125%: transfer to bypass in 10 min 125% < load ≤ 150%: transfer to bypass in 1 min					
Dynasa syarland sanasity	Load > 150%: transfer to bypass in 200 ms Load ≤ 135% for long term; < 1000% load for 100 ms					
Bypass overload capacity		Load ≤ I	35% for long term	1; < 1000% 1080	TOT TOO THS	
SYSTEM			0.0	. 0/		
Efficiency	96 % 4 units					
Max. number of parallel						
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	1					
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 $\times$ D $\times$ H) (mm)	600 × 850 × 2000	1	200 × 850 × 200	00	1400 × 850 × 2000	2400 × 850 × 2000
UPS module dimensions (W $\times$ D $\times$ H) (mm)			442 × 6	20 × 130		
Cabinet weight (kg)	233	4	15	465	617	1025
UPS module weight (kg)			32	2.5		

All specifications subject to change without notice.

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