

400-1200KVA Modular UPS



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. This modular UPS is a scalable three-phase / three-phase uninterruptible power supply system with DSP technology and provides true online double conversion power protection. The available UPS power and redundancy level can expand vertically from 400 to 1200 kVA / 1200 kW in one single power cabinet, and four power cabinets can be connected in parallel, increasing the capacity up to 4800 kW. It features modular hot-swappable design, all modules support “plug & play”, including power modules, bypass module, and control module, simplifies UPS servicing and maintenance.

Highlights

- High power factor 1.0
- High efficiency 97%
- High adaptability
- Power flexibility from 400 - 1200 kW
- Modular hot-swappable & Scalability
- High MTBF and low MTTR

Features

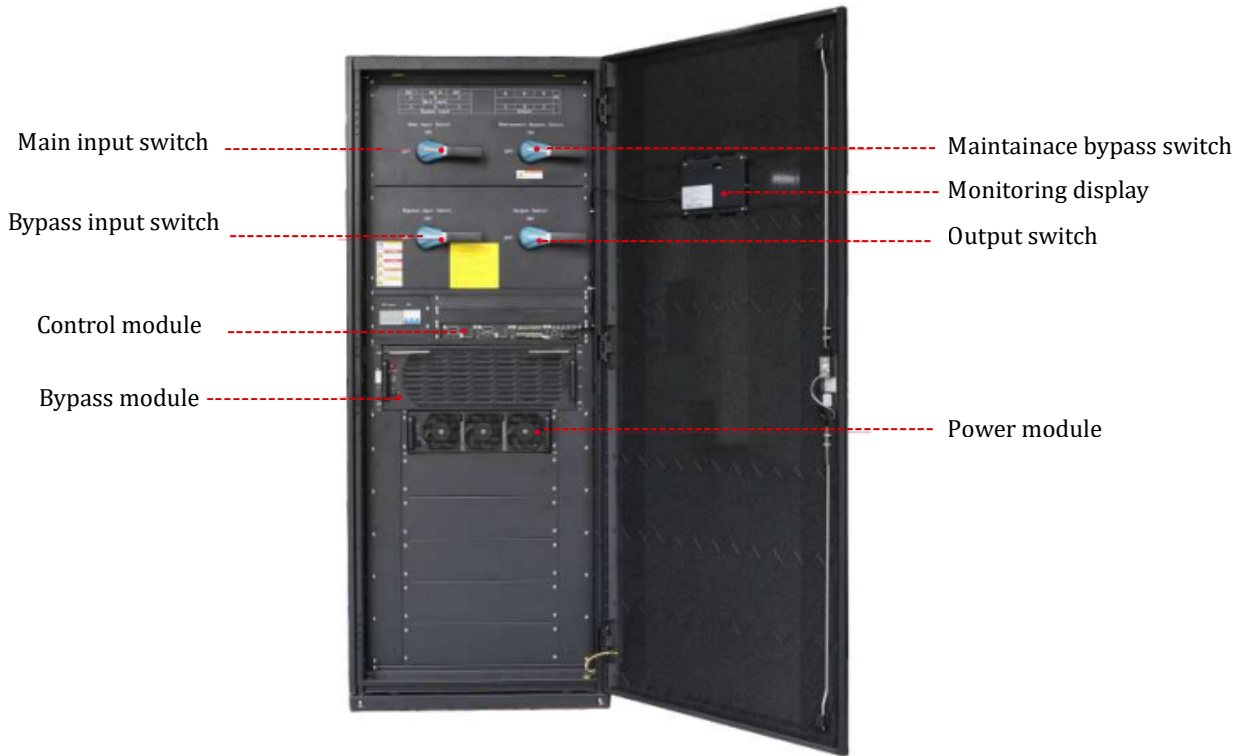
- Dual DSP digital control technology
 - Flexible modularity and easy scalability with all hot-swappable module design
 - High efficiency at low load rate: 97% at 40% rated load and 96% at 20% rated load
 - High power density of 100 kVA / 3U power module
 - Wide input voltage range, high grid adaptability, strong load adaptability and strong overload capability
 - Small footprint (600 kVA system only 0.8 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
 - 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 to prolong service life and improve the system efficiency.
 - Advanced parallel expansion technology, support 4 units in parallel
 - Share battery pack in parallel operation, saving user's battery cost
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- Flexible charger parameter and battery configuration setting, numbers of battery 30 ~ 50 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: 20% 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



400-600kVA



800-1200kVA



Power Module



Bypass Module



Control Module



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|------------------|--|---|
| 1. Parallel port | 7. BCB tripping signal | 12. Battery temperature compensation port |
| 2. LED indicator | 8. EPO port | 13. CAN port |
| 3. DRY_IN | 9. Switch state port of power distribution cabinet | 14. RS485 port 1 |
| 4. Dry_Out | 10. SPD port | 15. RS485 port 2 |
| 5. BTG port | 11. Environmental temperature port | 16. Ethernet port |
| 6. BCB port | | 17. USB port |
| | | 18. LCD screen port |

Spectifications

MODEL	HD66400	HD66500	HD66600	HD66800	HD661000	HD661200
Rated capacity	400kVA/400kW	500kVA/500kW	600kVA/600kW	800kVA/800kW	1000kVA/1000kW	1200kVA/1200kW
Numbers of power modules	4	5	6	8	10	12
Rated capacity of power module	100kVA/100kW					
INPUT						
Input wiring	3 Ph + N + PE					
Rated voltage	380 / 400 / 415 Vac					
Voltage range	138 ~ 485 Vac (324 ~ 485 Vac without power downgrading; 139 ~ 324 Vac with linear downgrading 35%)					
Input frequency	40 ~ 70 Hz					
Power factor	≥ 0.99					
Current distortion	< 3%					
BATTERIES						
Battery voltage	480 Vdc (360~600Vdc selectable)					
Number of battery	40 pcs12V batteries (30~50 pcs selectable)					
OUTPUT						
Output wiring	3 Ph + N + PE					
Rated voltage	380 / 400 / 415 Vac ±1%					
Frequency	Synchronized with utility in mains power mode; 50Hz / 60Hz ±0.1% in battery mode					
Power factor	1					
Voltage distortion	≤ 1% with linear 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 ≤125% for long term; >200% load for 100ms					
SYSTEM						
Efficiency (Max)	97%					
Max. number of parallel connections	4 units					
Transfer time	0 ms					
Protections	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 ~ 55°C					
Storage temperature	-25°C ~ 55°C					
Humidity	0 ~ 95% (non-condensing)					
Altitude	≤1000 m. Above 1000 m, derating 1% for each additional 100 m					
Protection level	IP 20					
Cabinet dimensions (W x D x H) (mm)	800 × 1000 × 2000			2000 × 1000 × 2000		
Cabinet weight (kg)	412			920		
Power module Dim (W x D x H) (mm)	440 × 750 × 130					
Power module weight (kg)	50					

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