

Modular 25

25KVA ~ 125KVA
PF 1.0



Applications

IDC – Internet Data Center
ISP – Internet Service Provider
SCADA monitoring system
Electricity & Railway signaling system
Bank or Bond Trading / Clearing center
Precision instruments, Automation system

Highlights

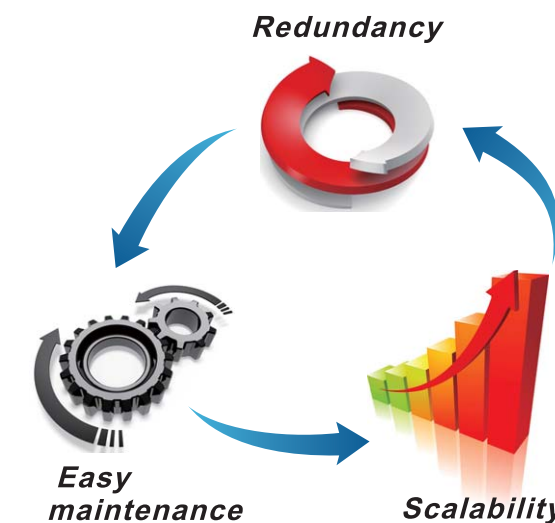
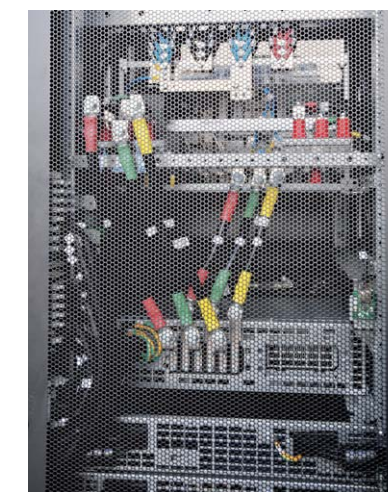
- ✓ Power flexibility from 25 – 125 kVA
- ✓ Utmost Availability
- ✓ Modular hot-swappable
- ✓ Scalability & redundancy
- ✓ Outstanding performances
- ✓ Low total cost of ownership (TCO)

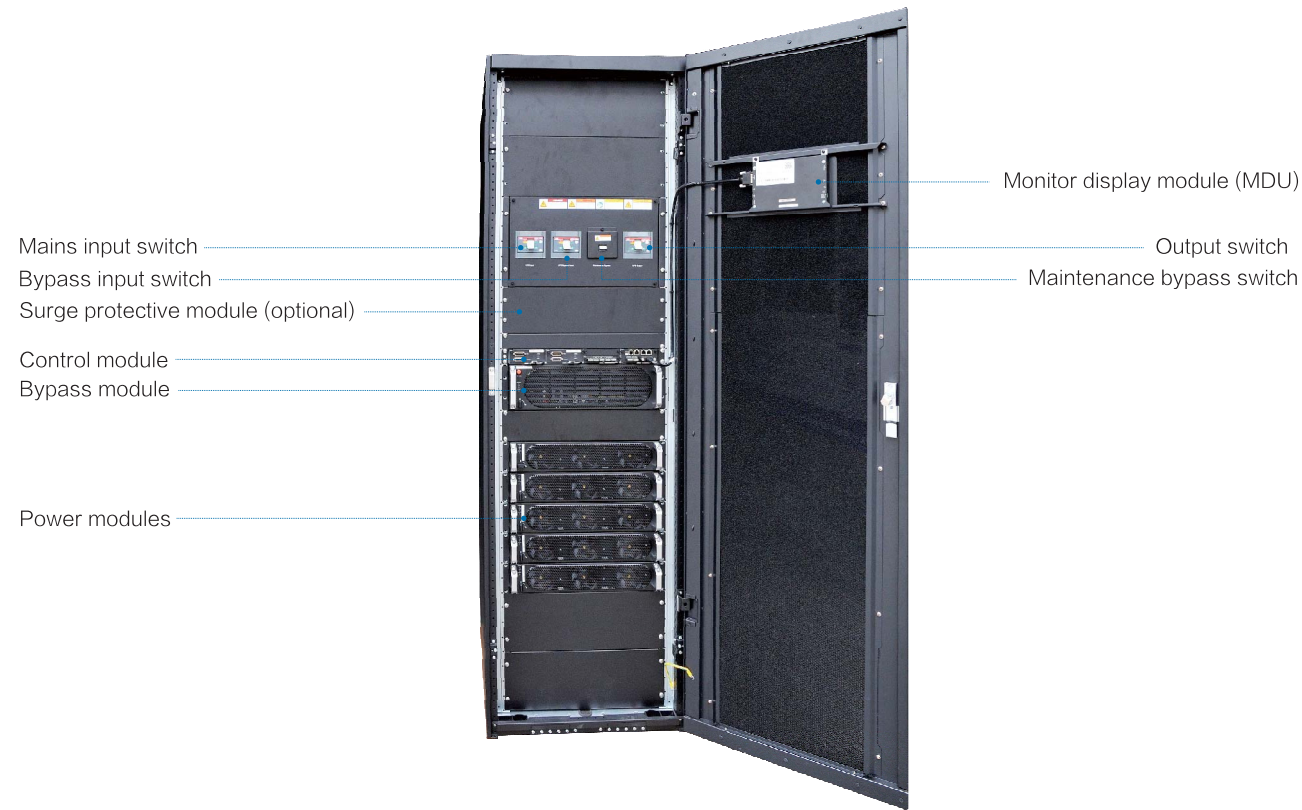
Modular 25 Series modular UPS is ideal for reliable, saving, intelligent and easy solutions. It ensures that a scalable, secure, high quality power supply is available for any critical high-density computer and IT environment applications, such as data centers and other critical loads.

Modular 25 Series (25kVA ~ 125kVA) UPS is a high-end modular UPS with latest DSP control technology and most reliable, famous brand components. It adopts a highly intelligent modular design, which mainly contains power modules, bypass module and control module, all modules support "plug & play" to simplify UPS servicing and maintenance. The available UPS power and redundancy level can expand vertically from 25 kVA / 25 kW to 125 kVA / 125 KW in one single power cabinet with flexible configuration for meeting different needs. Based on superior electrical performance, perfect hardware and software protection function, Modular 25 Series UPS can adapt to different grid environment and provides maximum protection and high quality power for critical loads in data centers or other important applications.

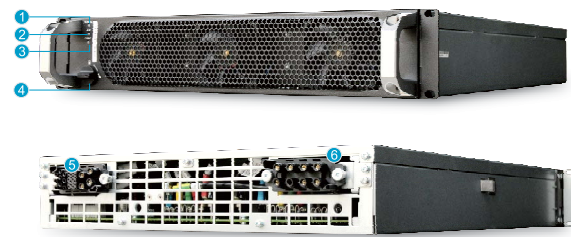
Features

- DSP microprocessor control technology
- True On-line, double conversion power protection, and with strong load capacity
- Modular Hot-swappable design for easy maintenance and scalability
- High efficiency up to 96.5% at most frequently-used load rate
- Inbuilt integrated PDU system simplifying installation and saving investment
- Output power factor 1.0, input power factor 0.99, input THDi < 3%, output THDv ≤ 1%
- 138 ~ 485 Vac wide input voltage range, 50 Hz / 60Hz grid self-adaptive
- 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 mode upgrading enables UPS to operate efficiently at low load rate
- Advanced parallel and redundancy technology, support 4 units connected in parallel
- Share battery pack in parallel operation, saving user's battery cost
- Flexible charger parameter and battery configuration settings, battery number 30 ~ 46 pcs selectable
- Intelligent battery management technology (Intelligent charge/discharge management and float charging voltage temperature compensation), extending battery lifespan
- Support cold start with battery and auto restart with mains power
- Self-aging function to simplify debugging and test on site
- Fault-tolerant design for fan system, taking 30% loads when 2 fans fail and 50% loads when 1 fan fails
- Superior hardware and software protection function, robust self-diagnostic function, and abundant event log for check
- 7 inches LCD touch screen, friendly human-machine interface
- System with built-in SNMP, supporting RS485 and dry contacts
- Back-feed protection function (optional)





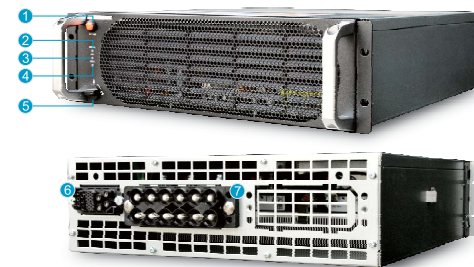
Power Module



- ① Run indicator ② Alarm indicator ③ Fault indicator
- ④ Ready switch ⑤ Output port ⑥ Input port

Dimensions (W × D × H) (mm)	442 × 620 × 86
Weight (kg)	19.1 kg
Charging current	10 A
Capacity	25 kVA / 25 kW
Power density	17.2 W / inch ³

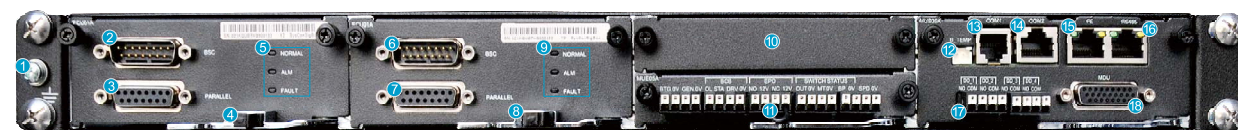
Bypass Module



- ① Battery cold start button ② Run indicator ③ Alarm indicator
- ④ Fault indicator ⑤ Ready switch ⑥ Signal port
- ⑦ Input and output port

Dimensions (W × D × H) (mm)	442 × 500 × 130
Weight (kg)	17.9 kg
Max. output power	125 kW

Control Module



- ① Ground terminal ② BSC port 1 ③ Parallel port 1 ④ Ready switch on ECM 1 ⑤ Indicators for ECM 1 ⑥ BSC port 2
- ⑦ Parallel port 2 ⑧ Ready switch on ECM 2 ⑨ Indicators for ECM 2 ⑩ Optional card subrack cover ⑪ Dry contact card ⑫ Battery temperature sensor port
- ⑬ COM1 port ⑭ COM2 port ⑮ Fast Ethernet (FE) port ⑯ RS485 port ⑰ Dry contacts ⑱ MDU port

Technical specifications

MODEL	MOD 25
Rated capacity of system cabinet	125 kVA
Number of power module	5
Rated capacity of power module	25 kVA
INPUT	
Input wiring	Three-phase five-wire (3 φ + N + PE)
Rated voltage	380 Vac / 400 Vac / 415 Vac
Voltage range	135 ~ 305 Vac (linear derating), 305 ~ 485Vac (no derating)
Frequency range	40 ~ 70 Hz
Input power factor	Full load > 0.99; half load > 0.98
THDi	< 3% (linear full load); < 5% (non-linear full load)
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	Three-phase five-wire (3 φ + N + PE)
Rated voltage	380 Vac / 400 Vac / 415 Vac
Output voltage regulation accuracy	± 1%
Output frequency accuracy	Synchronized with utility in mains power mode; 50 Hz / 60 Hz ± 0.05% in battery mode;
Output power factor	1
Output waveform distortion (THDv)	≤ 1% (linear load); ≤ 4% (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 300 ms
Bypass overload capacity	Temperature ≤ 30°C, load ≤ 135% for long term; temperature ≤ 40°C, load ≤ 125% for long term; load > 1000% for 0.1 s
SYSTEM	
Efficiency	Up to 96%
Max. number of parallels	4
Transfer time	0 ms
Protection	Lack-phase protection, phase sequence error protection, short circuit protection, overload protection, over-temperature protection, battery low voltage protection, output undervoltage protection, fans failure protection etc.
Communications	RS485, dry contacts, SNMP
Display	7 inches LCD touch screen
ENVIRONMENT	
Operating temperature	0°C ~ 40°C
Storage temperature	-40°C ~ +70°C
Relative humidity	0% RH ~ 95% RH (non-condensing)
Altitude	≤1000 m, above 1000 m, derating 1% for each additional 100 m
Protection level	IP 20
Noise	≤ 65 dB (at 1 m)
OTHERS	
Cabinet dimensions (W × D × H) (mm)	600 × 850 × 2000
Module dimensions (W × D × H) (mm)	442 × 620 × 86
Cabinet weight (kg)	182.7
Power module weight (kg)	19.1

* All specifications subject to change without notice.