

HPM



ONLINE



Modular

3:3 60 kVA to 600 kVA UPS
60 kVA/kW PM
N+X Redundancy



HIGHLIGHTS

Utmost Availability

- Ultimate Scalability
- Un-matched Power Density
- Efficiency up to 97%
- Smart Sleep Function
- Multi Control
- Highly Flexible
- Cold Start Feature

HPM 600/60 series are modular online UPS with brand-new topology, a bidirectional DC-DC converter circuit, which greatly improve the system performance and guarantees high efficiency. Its compact design ensures the power density, achieve this 600 kW system occupies only an area of 0.9 m². HPM series is considered to be an excellent power supply solution for large data centers and facilities. High power density, 60 kW power modules and 2U-high body footprint for 600 kVA is 0.88 m², power density. 682 kW/m², saving great space of data center.

APPLICATION

- All kinds of medium and large data center, network servers, control system, precision instruments and intelligent equipments;
- Financial institution;
- Military and government;
- Communications, Medical;
- Power Supply Manufacture.

ADVANCED POWER MODULE TECHNOLOGY

The cabinet of HPM 600/60 contains 10 power modules, each of them is 60kVA power capacity in 2U height. With the knob on the front panel, the UPS can achieve hotswappable without power outage of the load, make it available for redundancy and maintenance online. Modular Compact Cabinet Design contains

maximum 10 slots. Module Status LED Indicator show the status of each power module.

Bidirectional DC-DC converter circuit achieve 30% charger which greatly improve the system performance.

Overall efficiency reaches 97%, the collaboration between batteries and power grid improve the UPS utilization significantly.

COMPREHENSIVE MONITORING MANAGEMENT & FRIENDLY INTERFACE

Provide graphical and text based information of alarms, status data, instructions that users can have more friendly and safer operation. In each power module, information of critical components is monitored and displayed in real time, giving customers a view of inner status of the system and providing reminder information for maintenance.

Maintenance reminder, running time of capacitors and fans displayed and recorded.

Comprehensive temperature monitoring for thermal abnormal detection. UPS can record and save the data of the main parameters automatically when faults happen for further analysis. It Can record data information and present as waveform for further analysis can easily spot the causes of the failures, avoid future similar faults.

SMART SLEEP FUNCTION

Smart Sleep function can intelligently make some power modules go to sleep when load is relatively low, improving the efficiency of the remaining power modules and saving customers on power and cooling costs.

- Improving efficiency, reducing power and cooling costs;
- Easy setting with just two steps. Customers can select sleep mode and rotation period;
- Power modules working in rotation, prolong the life time.



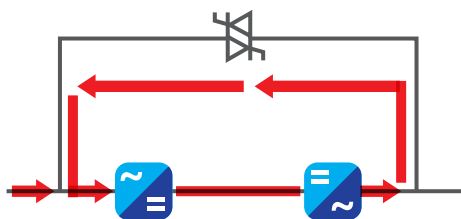
HPM PM with display.



HPM PM 15 kW.

SELF-LOADING

Self-aging is an advanced function and it can test UPS under different load situation without real load, saving more than 90% of energy. Its Simulate different load conditions without connecting to any real load, saving 90% of energy. On Site setting supported, easy for factory testing.



FLEXIBLE MODULARITY & SCALABILITY

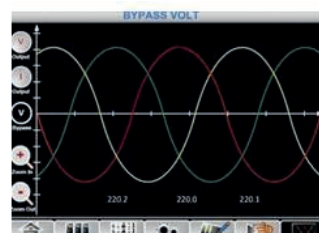
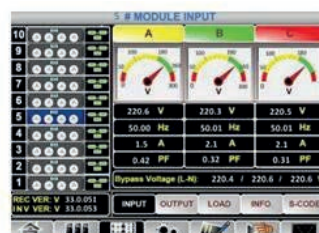
Flexible capacity expansion and redundancy from 60 kVA to 1.8 MW, max 30 power modules 3 cabinets in parallel. Three cabinets to select: 5/8/10 slots.

Multi Power provides a comprehensive, easy- to-integrate power protection solution for data centers and any critical IT application matching the evolving demands of a networked environment. The end user can easily increase power, redundancy level and battery autonomy by simply adding additional UPS Power Modules and Battery Units. Two different cabinet frames are available to build the system: The Power Cabinet and the Battery Cabinet. Power

cabinet system designed in various system ratings which provided flexibility to design solutions as per business need and can serve small scale to large scale business applications. Ultra-large 10.1 inch color touch LCD display for IoT application and intelligent monitoring. Furthermore, all power modules and critical components are easily accessible from the front of the unit as standard.

BYPASS MONITORING MODULE

This series are equipped with the bypass and monitoring module full of intelligent slots, communication interface, battery cold start buttons and adequate dry contacts. With these various ports, it can satisfy users a convenient data transfer service, provide comprehensive monitoring. Diverse communication interface and multiple standard part such as RS485, USB, CAN and programmable dry contacts. Convenient SD card slot, easy for software burning and version upgrade after transferring to maintenance mode. Isolation between LCD and monitoring board, connect them by network cable, significantly improve the reliability and prevent the damage of the DSP. The system is equipped with a Manual bypass change over switch and Back feed control with a mechanical interlock contactor inbuilt, eliminating any maintenance-related downtime.

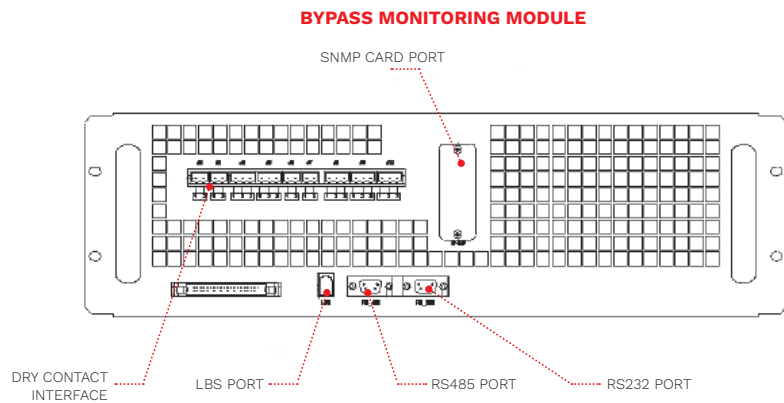


3 UNITS IN PARALLEL



All these features ensure easy UPS expansion, operation and maintenance; minimizing downtime, decreasing the Mean Time to Repair (MTTR) and removing any possible risk to power continuity, when carried out by authorized service personnel. Power cabinet system is integrated with Touch screen LCD display with advanced industry standard communication options available, like programmable dry contacts, Serial RS 232/RS 485 USB communication, SNMP & Modbus communications.

DETAILS



MODELS	HPM 600/60
Capacity [kVA/kW]	600
Power Module	60 kVA / 60 kW
INPUT	
Phase	3Phase+Neutral+Ground, 380/400/415VAC (line-line)
Voltage range	323~478 Vac (line-line) full load 323 V~138 Vac (line-line), load decrease linearly from 100% to 40% according to the min phase voltage
Frequency range [Hz]	40/70
THDi	<3% @ 100% Linear load
OUTPUT	
Voltage	380/400/415 Vac (line-line), 50/60 Hz
Voltage regulation	1% for balanced load
THDu	<1% Linear load; <5%, Non-linear load
Crest Factor	3:1
Overload Capability	110% for 60 minute, 125% for 10 minute, 150% for 1 minute
Battery	
Voltage	±180~288 Vdc, 30~32 pcs derate to 0.7; 34~36 pcs derate to 0.8; 38 pcs derate to 0.9; 40~48 pcs
Charger Power	Up to 30% * Output active power
Voltage Precision	0.01
SYSTEM	
Efficiency	AC Mode >97%, Battery Mode >96%
Display	LED+Color touch LCD
IP Class	IP 20
Interface	Standard: RS485, USB, CAN, Programmable Dry Contact Option(SNMP card, AS400 card, Parallel kit, SPD, Dual input kit, LBS, Common battery kit)
Operation/Storage Temperature	0-40 °C / -25-70 °C
Range of relative humidity	0-95% non-condensing
Noise [dB]	75 @ 100% load, 70 @ 45% load
Remote controls	EPO, bypass battery charge block (configurable)
Standards	Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3
OVERALL SPECIFICATIONS	
Weight [kg]	Cabinet: 443 / Power Module: 35.7
Dimension (WxDxH) [mm]	Cabinet: 800x1100x2000 / Power Module: 550x750x85

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