

PWM Series Modular Online UPS 60-600kVA (380V/400V/415V)

The PWM Series are modular online UPS with brand new topology, bidirectional DC-DC Converter circuit, which greatly improve the system performance and guarantees high efficiency.
Its compact design ensures the power density, achieve this 600kW system occupies only an area of 0.92m². PWM series is considered to be an excellent power supply solution for large data centres and facilities.



Power Module

The cabinet of PWM600/60D 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 hot-swappable without power outage of the load, make it available for redundancy and maintenance online.

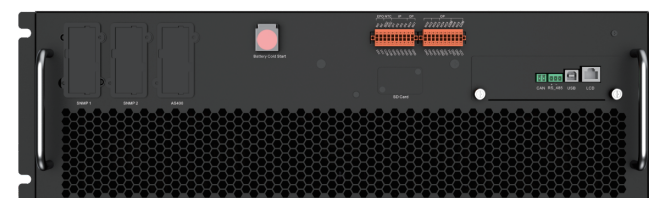
- Modular Compact Cabinet Design contains maximum 10 slots.
- Module Status LED Indicator show the status of each power module.
- Bidirectional DC-DC converter circuit achieve 30% charger which greatly improve the system performance.
- Overall efficiency reaches 97%, the collaboration between batteries and power grid improve the UPS utilisation significantly.



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, providing comprehensive monitoring.

- Diverse communication interface and multiple standard part
- Convenient CAN communication 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.



Application

All kinds of medium and large data centre, network servers, control system, precision instruments and intelligent equipments.

- Financial institution
- Education, office & PC
- Military and government
- Communications
- Medical
- Power supply manufacture



Friendly Interface

Provide graphical and text based information of alarms, status data, and instructions that users can have more friendly display and safer operation.



High Density, Flexible, Artistic

- High power density, 60kW power modules and 2U-high body footprint for 600kVA is 0.88m², power density. 682kW/m², saving great space of data centre.
- Flexible capacity expansion and redundancy from 60kVA to 1.8MW, max 30 power modules, 3 cabinets in parallel.



3 Units in parallel

- Ultra large 10.1 inch colour touch LCD display for IoT application and intelligent monitoring.



10 Inch LCD

Features

- High efficiency, up to 97%
- Support Lithium battery
- Intelligent staggering power consumption, become more flexible and save more energy
- Double side DC-DC topology platform, support charging power reaching 30%
- High power density
- BMS lithium battery data can be seen on the screen including the temperature and voltage of each cell
- Friendly interface with 10" touch colour LCD with graphic display, intuitive information and easier to operate
- Modular design, up to 30 power modules in parallel online hot-swappable N+X redundancy

Specification			
MODEL			PWM600/60
System Capacity			600kVA
Power Module Capacity			600kVA/60kW
Input	Dual Input		Standard
	Phase		3 Phase+Neutral+Ground, 380V/400V/415V(line-line)
	Input Voltage Range		323~478Vac (line-line),full load; 323V~138Vac (line-line),load decreases linearly from 100% to 30% according to min phase voltage
	Rate Frequency		50/60Hz
	Input Frequency Range		40Hz ~ 70Hz
	Input PF		>0.99
	Input THDi		<3% (100% Linear load)
Bypass	Rate Voltage		380/400/415VAC (line-line)
	Rate Frequency		50/60Hz
	Input Voltage Range		Settable default, -20% ~ + 15% Up limit: +10%, +15%, +20%, +25% / Down limit: -10%, -15%, -20%, -30%, -40%
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz
	Bypass Overload		110% long term operation; 110% ~125% for 10 mins; 125% ~150% for 1min; >150% for 200ms
Output	Rate Voltage		380/400/415VAC (line-line)
	Voltage Regulation		±1%
	Rate Frequency		50/60Hz
	Frequency Precision		±0.1%
	Output PF		1
	Output THDu		<1% , Linear load; <5%, Non-linear load
	Inverter Overload		110% for 1 hour; 110% ~125% 10 mins; 125% ~150% for 1 min; >150% for 200ms
Battery	Voltage		±180 ~ 264VDC
			30 pcs derate to 0.7 32~ 34 pcs derate to 0.8
			36~ 38 pcs derate to 0.9 40 ~44 pcs
	Voltage Precision		1%
	Charge Power		up to 30% * Output active power
System	Efficiency	AC Mode	>97%
		Battery Mode	>96%
	Display		LED+ Colour touch LCD screen
	Interface		Standard: RS485, USB, CAN, Programmable Dry Contact
			Intelligent card slots *2, Extendable dry contact slot
	Option		SNMP Card, AS400 Card, Parallel kit, SPD, Dual input kit, LBS,
	Temperature		Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C
	Relative Humidity		0 ~ 95% Non-condensing
	Altitude		<1000m. Within 1000m to 2000m, 1% power derating for every 100m
	Noise (1 meter)		75dB @ 100% load, 70dB@ 45% load
	Application Standard		Safety: IEC/EN 62040-1 EMC:IEC/EN62040-2 Performance: IEC/EN 62040-3
Physical	Dimension	Cabinet	800*1100*2000
	W*D*H(mm)	Power module	550*750*85
	Weight (kg)	Cabinet	443
		Power module	35.7