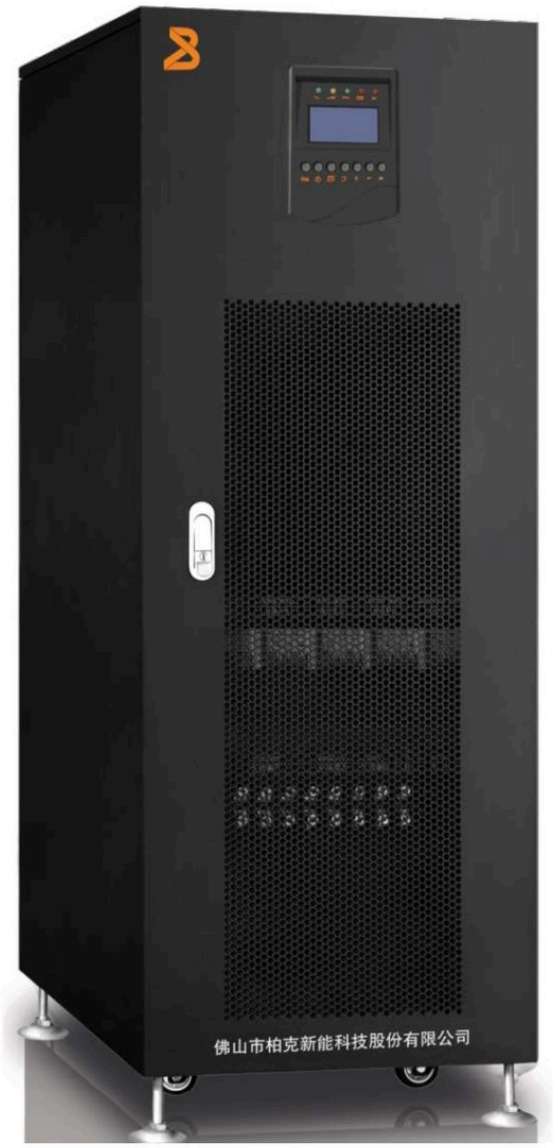
BAYKEE
Provide High-quality Power For Global Industry

MP 3100 Series

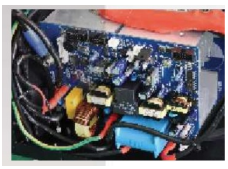
Online UPS 6kVA-120kVA, Three Phase / Single Phase




Input and output breakers



Baykee battery bank


Control and power boards


Distribution panel

MP3100 Series Brief

MP3100 series UPS is the new generation of transformer-based true online double-conversion, fully digitally controlled UPS. It uses a high-speed microprocessor (MCU) and a programmable logic device (CPLD) controlled by software, with sixth-generation low-loss, high-power IGBTs and a static switch as power components. It combines the newest control parts with advanced software to meet the high availability and power quality needs of a wide variety of critical applications.

MP3100 is widely used in telecom, banking, security, transport, utilities, manufacturing, industry, commerce, government and medical equipment.

Main Features

- LED + LCD display, easy operation from the LCD panel
- Wide input voltage range, compatible with different utilities
- Advanced, intelligent battery management extends battery life
- High-precision SMD technique for circuit reliability and precision
- Static bypass: safe transfer to mains on overload or fault
- 256 real-time event log with detailed parameters
- 0-100% load step without switching to bypass
- Selectable UPS, ECO or inverter work mode
- Perfect generator compatibility
- Optional battery detecting module
- Low-frequency true online double-conversion technology
- Advanced digital circuit design for UPS stability
- Intelligent inspection system checks every UPS working state
- IGBT PWM inverter technology, efficiency up to 92%
- Manual bypass for safe maintenance of the inner units
- Standard RS232 & RS485, optional dry contacts or SNMP card
- Input/output voltage, battery, temperature, short-circuit and overload protection
- Auto restart
- Optional EPO function
- Optional N+1 redundant parallel for higher system reliability

Application

- Telecom and banking
- Utilities and manufacturing
- Medical equipment
- Security and transport
- Commerce and government



MP3100 Series Specifications

	Model	MP31 06K	MP31 10K	MP31 15K	MP31 20K	MP31 25K	MP31 30K	MP31 40K	MP31 50K	MP31 60K	MP31 80K	MP31 100K	MP31 120K
	Capacity	6kVA	10kVA	15kVA	20kVA	25kVA	30kVA	40kVA	50kVA	60kVA	80kVA	100kVA	120kVA
	Power Watt	4.8kW	8kW	12kW	16kW	20kW	24kW	32kW	40kW	48kW	64kW	80kW	96kW
	Working Principle	Low-frequency transformer-based true online double conversion											
Rectifier (Input)	Phase	Three phase											
	Input Power Factor	Standard >0.9 (6-pulse rectifier + filter); optional >0.96 (12-pulse rectifier + filter)											
	Input Voltage Range	220/380VAC (230/400VAC or 240/415VAC) ±25%, 3P+N+PE; 110V/208V (120V/220V or 277V/480VAC)											
	Input Frequency Range	50Hz ±10% / 60Hz ±10% (selectable)											
	Output Ripple	<2%											
	Soft Start	0~100% 5s											
Charging	Charging Mode	Constant current, then constant voltage, with temperature compensation; automatic switch between equalised and float charging											
	Float Charging Voltage	405VDC											
	Equalised Charging Voltage	432VDC											
	Temp. Compensated Voltage	-3mV/°C/cell											
	Charging Current	0.1C (automatically adjusted to battery capacity)											
Battery	Type	VRLA / AGM / Gel, optional lithium battery											
	Battery Capacity	7~999Ah settable (choose capacity according to back-up time)											
	Quantity	30 units 12V or 180 units 2V (nominal voltage 360VDC)											
	Temperature	20°C~25°C (for maximum efficiency)											
Inverter (Output)	Phase	Single phase											
	Nominal Voltage	220VAC (230VAC or 240VAC), 1P+N; optional 110V (120V or 277V)											
	Output Voltage Regulated Accuracy	±1% (stable load), ±3% (fluctuating load)											
	Output Frequency Range	50Hz / 60Hz <±0.5% (asynchronous)											
	Crest Factor	>3:1											
	Output Total Harmonic Distortion (THD)	Pure sine wave, linear load <3%, non-linear load <5%											
	Dynamic Characteristics	Instant voltage <±5% (0 to 100% load), recovery time <10ms											
	Unbalanced Load Voltage	<±5%											
	Overload Capacity	115%: normal operation; 125%: 10min; 150%: 1min; 200%: 1s											
	Inverter Efficiency	>93% (full load)											
Bypass	Phase	Single phase											
	Bypass Input Voltage	220/380VAC (230V/400VAC or 240V/415VAC); optional 110V (120V or 277V)											
	Bypass Output Voltage	220VAC (230VAC or 240VAC); optional 110V (120V or 277V)											
	Transfer Time	0ms (static switch)											
Protection	Input Protection	Input voltage and frequency over-limit, phase fault, phase loss											

	Model	MP31 06K	MP31 10K	MP31 15K	MP31 20K	MP31 25K	MP31 30K	MP31 40K	MP31 50K	MP31 60K	MP31 80K	MP31 100K	MP31 120K
Protection (cont.)	Output Protection	Over current, short circuit, over voltage, low voltage											
	Battery Protection	Over-charge, over-discharge protection											
	Temperature Protection	Environment over-temperature, inverter over-temperature											
	Hardware Fault Protection	Auxiliary power abnormal, breaker cut off, breaker overload, power device over-current / over-voltage, etc.											
General	Working Environment	-10~40℃, relative humidity 30%~90%, altitude <2000m (1% derating per 100m rise, max. 4000m)											
	Cooling Method	Forced ventilation											
	Communication Interface	RS232 / RS485, optional dry contact, SNMP card (remote control via internet)											
	Parallel Operation	Tandem hot backup or parallel connection											
	Anti-surge Capacity	10/700μs, 5kV; 8/20μs, 20kA											
	Protection Level	IP21											
	Safety Performance	Vin-n Vout-n 2000Vac, creepage <10mA, insulation resistance >2MΩ (500VDC)											
	Noise (dB)	6-10kVA: 45~50; 15-25kVA: 50~55; 30-40kVA: 55~58; 50-120kVA: 55~60											
	Dimension (W×D×H) mm	6-30kVA: 450×600×1200; 40-60kVA: 600×720×1520; 80-120kVA: 980×800×1800											
	Weight (kg)	65	168	183	210	241	246	338	388	420	570	640	720
	Voltage Versions	200V-208V-220V (Ph-Ph) input and 100V-110V-120V output version available											

Product specifications are subject to change without further notice.