

6kVA PF 0.9



Features

- Active power factor correction (PFC), input power factor up to 0.99
- High efficiency 95% (up to 98% in ECO mode)
- Advanced DSP digital control technology adopted for PFC rectifier, inverter, bidirectional DC-DC converter
- Complete software and hardware protection including battery reverse protection, short circuit, over temperature, overload protection, etc.
- Robust self-diagnosis function, abundant event log for check
- Advanced digital parallel technology, providing higher reliability than single system
- Either lithium battery or lead-acid battery configurable, wide battery voltage and high charging current, charging voltage and charging current settable
- Wide input voltage range 176V-280Vac, 50/60Hz grid network settable
- Battery cold start supported, UPS started by batteries when mains is abnormal to meet emergency need
- Open access to fuel generator or other power generation equipment
- Unattended function, automatic start when mains restores

- Intelligent battery management, automatic floating/equalizing charge control and charger hibernation control increase reliability of the charger and prolong battery life; the optimal charging method is also available by combining the features of lithium battery
- Battery discharge protection, low battery warning, discharge cut-off protection, maximum discharge time protection, battery self-test function, effectively extending the service life of the battery
- Fan speed varies automatically with temperature, reducing noise and energy consumption and extending its service life
- LCD+LED display combining with multi-functional keys, friendly human-machine interface
- Powerful background monitoring software for parameters configuration
- Rack-mounted design and compact internal layout achieves higher power density and miniaturized unit, reducing the footprint

Front and Rear Panel





Specifications

MODEL	6KVA
Capacity	6kVA / 5.4kW
INPUT	
Input wiring	Single-phase three-wire (10+N+PE)
Rated voltage	220 / 230 / 240 Vac
Voltage range	176~280Vac
Rated frequency	50 / 60 Hz
Frequency range	±4Hz ~ ±6Hz (settable)
Power factor	≥ 0.99
Bypass voltage range	-30% ~ +20% (settable)
Total harmonic distortion (THDi)	≤ 5%
OUTPUT	
Output wiring	Single-phase three-wire (10+N+PE)
Rated voltage	220 / 230 / 240 Vac
Voltage regulation	±1%
Rated frequency	Synchronized to bypass in mains mode 50 / 60 Hz $\pm 1\%$ in battery mode
Power factor	0.9
Total harmonic distortion (THDv)	≤2% (linear load); ≤5% (non-linear load)
Crest factor	3:1
Inverter overload	105% < load ≤ 125%: turn to bypass after 5 minutes; 125% < load ≤ 150%: turn to bypass after 1 minute; 150% < load: turn to bypass after 1 second
Bypass overload	105% < load ≤ 125%: cut off output after 5 minutes; 125% < load≤150%: cut off output after 1 minute; 150% < load: cut off output after 1 second
Short circuit protection	Mains mode / battery mode: automatic current limit; bypass mode: fuse protection
BATTERIES	
Battery type	Lithium battery / lead-acid battery
Rated voltage	48VDC
Voltage range	53.2VDC-60VDC / 40VDC-60VDC
Charging current	10A default (Max 60A, settable)
Charging efficiency	93%
SYSTEM	
Efficiency	Mains mode: 95% ECO mode: 98% battery mode: 94%
Transfer time	Mains mode<->battery mode: 0ms Mains mode / battery mode<->bypass mode: 4ms
Protections	Short-circuit, overload, output over / under voltage, battery low voltage, battery reverse, overtemperature, etc.
Communication	RS485 (standard), BMS (standard)
Accessories	EPO (optional), parallel connection (optional)
Display	LED+LCD
OTHERS	
Operating temperature	-20°C~50°C (≤ 45°C@100% load 50°C@90% load)
Storage temperature	-40°C~70°C (without battery)
Relative humidity	0%~95% (non-condensing)
Altitude	≤ 1000 m, derating 1% for each additional 100 m
IP rating	IP20
Noise level at 1 m	≤ 55dB
Dimensions (W × D × H) (mm)	442×425×88 8
Net weight (kg)	12

All specifications are subject to change without notice