

PWS2-30M-EX Bi-directional Storage Inverter



Features



Flexible Configuration

- Wide voltage range of 150~750V
- Parallel in both AC side and DC side for larger power & energy



High Efficiency & Stability

- Compatible with 19-inch rack for easy integration and installation



Extensive Use

- Droop control/communication control
- Optional PV charger for DC-coupled hybrid system
- Optional smart transfer switch for auto-backup.



Safety & Compatibility

- Global grid certified & listed
- Support lead-acid batteries, lithium batteries & sodium ion batteries & fly-wheel.

Specification

	PWS2-30M-EX
Battery Side	
Charging and Discharging voltage range	150V-750V(350V-750V @full load)
Rated Power	30kW
Maximum Power	33kW
Maximum Charging and Discharging Current	90A
Battery Switch-off Mode	Relay
Over Voltage Protection	Software Protection
Over Current Protection	Software Protection & DC Fuse
AC Grid-tied Output	
Rated Output Power	30kW
Maximum Apparent Power	33kVA
Maximum Active Power	33kW
Rated Grid Voltage	3W4P+PE, 400 (±15%) Vac
Rated frequency	50 (±2.5) Hz
Power Factor	Listed: 0.8~1 leading or lagging Actual:0.1~1 leading or lagging
THDi	<3%
AC Off-grid Output	
Rated Output Power	30kW
Maximum Apparent Power	33kVA
Maximum Active Power	33kW
Rated Grid Voltage	3W3P+PE, 400 (±20% configurable) Vac
Rated frequency	50 (±5 configurable) Hz
Power Factor	Listed: 0.8~1 leading or lagging Actual:0.1~1 leading or lagging
Overload Capacity	110%~120%, 10 min 120%~150%, 200 ms

Specification

Physical	
Cooling	Forced air cooling with replaceable fan module
Noise	<75dB
Enclosure	IP20/NEMA1
Max elevation	3000m/10000feet (> 2000m/6500feet derating)
Operating temp.	-20°C to 60°C (De-rating over 45°C)
Humidity	0~95% (No condensing)
Size (W*H*D)	440*173*596mm
Weight	43kg
Installation	Rack-mounted
Other	
Efficiency curve	Charging Discharging
Peak efficiency	97.3%
CEC efficiency	96.5%
Protection	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, Fan/Relay Failure, OLP, GFDI, Anti-islanding
Configurable protection limits	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.
AC connection	3-Phase+N+PE
Isolation	Non-isolation
Compliance	IEC62477-1:2012 EN62477-1:2012+A11 IEC62040-1-1: 2002 EN62040-1-1:2003 EN61000-6-2:2005 EN61000-6-4:2007+A1 AS/NZS 4777.2:2015 AS 62040.1.1-2003 VDE-AR-N 4105/08.11 E DIN VDE V 0124-100/10.13 G99 TOR Erzeuger

Specification

Short Circuit Current	
Peak short circuit current	62A@20ms
Initial value of aperiodic current	62A@100ms
Initial symmetrical short circuit current	54A@250ms
Decaying component of short circuit current	54A@500ms
Time to trip	119ms
Communication	
Ethernet port	x1 RJ45 slot, for EMS, via MODBUS TCP/IP
RS-485 port	x1 RJ45 slot, for EMS or BMS, EMS via MODBUS RTU. two kinds of BMS communication protocol supported
Remote emergency power off input	x1 RJ45 slot, adapts to NC switch input.