

PWS2-30P-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

PWS2-30P-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
DC Bus Side	
Rated Power	45kW
Input Voltage Range	700V-830V
Maximum Input Current	32.5A*2
AC Grid-tied Output	
Rated Output Power	30kW
Maximum Apparent Power	33kVA
Maximum Active Power	33kW
Rated Grid Voltage	3P4W+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	3P4W+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%~130%, 1 min
	130%~150%, 200ms > 150%, 100ms

Specification

Off-grid and parallel mode																						
	Droop control parallel	Communication parallel																				
External transformer	Yes	Yes																				
Maximum number of parallel	10	10																				
Total length of parallel lines	No limit	7m																				
Efficiency																						
Efficiency curve	<p>Charging</p> <table border="1"> <tr><th>Load</th><th>200V</th><th>400V</th><th>600V</th><th>750V</th></tr> <tr><td>80%</td><td>93.2</td><td>95.45</td><td>96.37</td><td>96.47</td></tr> </table> <p>Discharging</p> <table border="1"> <tr><th>Load</th><th>200V</th><th>400V</th><th>600V</th><th>750V</th></tr> <tr><td>80%</td><td>95.45</td><td>96.42</td><td>96.45</td><td>96.45</td></tr> </table>		Load	200V	400V	600V	750V	80%	93.2	95.45	96.37	96.47	Load	200V	400V	600V	750V	80%	95.45	96.42	96.45	96.45
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Load	200V	400V	600V	750V																		
80%	95.45	96.42	96.45	96.45																		
Peak Efficiency	97.3%																					
CEC Measured Efficiency	95.5%																					
Communication																						
Communication Port	CAN/RS485/Ethernet/WIFI																					
General Specification																						
Dimension(W*H*D)	440*173*550mm 440*173*596mm (including handles)																					
Cooling	Forced Air Cooling																					
Weight	33kg																					
Topology	Non-isolation																					
Operation Altitude	3000m(>3000m derating)																					
Operation Environment Contamination Level	≤2																					
Temperature & Humidity	-30°C~60°C (>45°C derating) & 0-95%																					
Noise	≤75dB																					
IP Rating	IP20																					
Certification																						
Grid-tied Standard	EN50549-1, G99, VDE4105, VDE4110, AS477.2:2020 CEI 0-21, Poland Certification, R25, Synergrid listing																					
Safety Certification	IEC62477																					
EMC Standard	IEC61009																					