

## PSHI-50KW3#HVPS

### Features:

- 2 seconds of 160% overload capability
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Supports peak shaving features in "self-use" and "generator" modes
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- A wide battery voltage range accommodates the prevalent high-voltage lithium batteries found in the market
- Battery charging/discharging current 140A/70A+70A, suitable for 280Ah cell standard 0.5C application condition
- Supports 200% DC/AC ratio and makes full use of PV charging, providing a long backup



### Applications



FINANCE



Telecom



MEDICAL



INDUSTRIAL

## Technical Specifications

Models	PSHI-50KW3#HVPS
<b>Input DC (PV side)</b>	
Recommended max. PV array size	100 kW
Max. usable PV input power	96 kW
Max. input voltage	1000 V
Rated voltage	600 V
Start-up voltage	180 V
MPPT voltage range	150 - 850 V
Max. input current	4 × 40 A
Max. short circuit current	4 × 60 A
MPPT number / Max. input strings number	4 / 8
<b>Battery</b>	
Battery type	Li-ion
Battery voltage range	150 - 800 V
Max. charge / discharge power	55 kW
Max. charge / discharge current	70 A × 2 <sup>(1)</sup>
No. of battery inputs	2
Max. charge / discharge power of each input	35 kW
Communication	CAN / RS485
<b>Output AC (Grid side)</b>	
Rated output power	50 kW
Max. apparent output power	50 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V
Rated grid frequency	50 Hz / 60 Hz
Rated grid output current	76 A / 72.2 A
Max. output current	76 A / 72.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
<b>Input AC (Grid side)</b>	
Max. AC passthrough current	152 A / 144.4 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V
Rated input frequency	50 Hz / 60 Hz
<b>Input Generator</b>	
Max. input power	50 kW
Rated input current	76 A / 72.2 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V
Rated input frequency	50 Hz / 60 Hz
<b>Output AC (Back-up)</b>	
Rated output power	50 kW
Max. apparent output power	1.6 times of rated power, 2 s
Back-up switch time	< 10 ms
Rated output voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V
Rated frequency	50 Hz / 60 Hz
Rated output current	76 A / 72.2 A
THDv (@linear load)	< 2%
<b>Efficiency</b>	
Max. efficiency	97.8%
EU efficiency	97.4%
BAT charged by PV max. efficiency	98.5%
BAT charged / discharged to AC max. efficiency	97.5%
<b>Protection</b>	
Anti-islanding protection	Yes
Output over current protection	Yes
Short circuit protection	Yes
Integrated DC switch	Yes
DC reverse-polarity protection	Yes
Surge protection	DC Type II / AC Type II
Integrated AFCI 2.0	Optional
<b>General Data</b>	
Dimensions (W × H × D)	530 × 880 × 290 mm
Weight	73 kg
Topology	Transformerless
Self-consumption (night)	< 35 W
Operating ambient temperature range	-25 ~ +60°C
Relative humidity	0 - 95%
Ingress protection	IP66
Cooling concept	Intelligent fan-cooling
Max. operation altitude	4000 m
<b>Features</b>	
PV connection	MC4 Quick connection plug
Battery connection	Terminal connector
AC connection	Terminal Block
Display	7.0" LCD display & Bluetooth + APP
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN