

# BESS Data Sheet

Model	PST-BESS 50KW/51.2kWh
<b>Battery Configuration</b>	
Battery Chemistry	LiFePO <sub>4</sub> (Lithium Iron Phosphate)
Battery Capacity	100Ah
Nominal Voltage	512V
Total Energy	51.2kWh
Operating Voltage Range	448V – 584V
Max charging current	50A
Max Discharging current	100A
Cycle Life	≥4000 Cycles (25 °C, 0.5C Chg. & Dis chg., 70% EOL)
Depth of Discharge (DoD)	90%
Communication Protocol	CAN / RS485 / Modbus
Safety Protection	OV, UV, SC, OC, OT
System Expansion	Scalable Architecture
<b>Inverter Configuration</b>	
Inverter Type	3-Phase HV (Hybrid)
Rated Inverter Power	50KW
Rated AC Voltage	3P+N+PE, 230/400V
Rated AC frequency	50-60 Hz
Rated AC Output Current	72.5A
Power factor	0.8 leading to 0.8 lagging
Communication with BMS	RS485, CAN
Battery voltage range	160v ~ 800v
Max. Charging current	50A + 50A
Max. Discharging current	50A + 50A
<b>General Data</b>	
Dimensions (LxWxH)	1250x1200x1750 (mm)
Weight	1000kg ± 5%
Protection Level	IP54
Operating Temperature	-10°C to 55°C
Cooling Method	Air Cooling
Installation Type	Floor Mounted
<b>Standard Warranty</b>	5 Years or 4000 cycle life whichever comes first due for warranty