



Joy Sunny Day With JSD

3.6kW Single-Phase Hybrid Solar Inverter (120V A C | 51.2V Battery)



Technical Data

Model	JB3K6LP
Parallel Mode	
Parallel Capability	1-6
Utility Mode	
Rated Input Voltage	120Vac(L1/N)
Input Voltage Range	(85Vac~140Vac)±2%
Frequency	50Hz/60Hz (Auto detection)
Frequency Range	47±0.3Hz~55±0.3Hz (50Hz); 57±0.3Hz~65±0.3Hz (60Hz);
Overload/Short Circuit Protection:	Circuit Breaker
Maximum Efficiency	>95%
Transfer Time (Bypass <-> Inverter)	10ms (Typical)
Anti-Reverse Power Protection	Yes
Max Bypass Overload Current	40A
Inverter Mode	
Output Voltage Waveform	Pure Sine Wave
Rated Output Power (VA)	3600 Single Phase
Rated Output Power(W)	3600 Single Phase
Power Factor	1
Rated Output Voltage (Vac)	120Vac(L1/N)
Output Voltage Deviation	±5%
Output Frequency Range (Hz)	50Hz±0.3Hz/60Hz±0.3Hz
Maximum Efficiency	>91%
Overload Protection	(105% load <110%) ±5%: Alarm, shutdown after 5 minutes; (110% load < 125%) ± 5%: Alarm, shutdown after 10 seconds; (Load >125%)±5%: Alarm, shutdown after 5 seconds;
Surge Power	Single Phase: 7200VA
Motor Load Capability	2HP
Output Short Circuit Protection	Shutdown after 1 second of continuous short circuit
Bypass Circuit Breaker	40A
Rated Battery Input Voltage	51.2V (Min. Start Voltage 44V)
Battery Voltage Range	40.0Vdc~58.6Vdc±0.6Vdc (Low Voltage Alarm / Shutdown / Over voltage Alarm / Recovery Voltage all configurable via screen)

Power Saving Mode	Enters Power Saving Mode when per-phase load is 0 or <25W
Utility Charging	
Supported Battery Types	Lead-acid or Lithium
Max A C Charging Current (Configurable)	40A
Charging Current Accuracy	±5A _{dc}
Charging Voltage Range	40 –58.6V _{dc}
Short Circuit Protection	Circuit breakers and blown fuses
Circuit breaker specifications	40A
PV Charging	
Number of MPPT	1
Max PV Open Circuit Voltage	300V _{dc}
PV operating voltage range	80V _{dc} ~300V _{dc}
MPPT voltage range	90V _{dc} ~260V _{dc}
Charging Voltage Range	40-58.6V _{dc}
Max PV Input Power	4000W
Max PV Input Current	22A
PV Charging Current Range (Configurable)	80A
Charging Short Circuit Protection	Blown fuse
Wiring Protection	Reverse Polarity Protection
Max Hybrid Charging Current (AC+PV)	
Max Hybrid Charging Current (AC+PV): Configurable	80A
Certification & Environmental	
Product Certification	UL1741
EMC certification level	FCC part15, CLASS B
Operating Temperature	-10°C to 55°C(Derating >45°C)
Storage Temperature	-25°C ~ 60°C
Humidity Range	5% to 95%Conformal Coating
Noise Level	≤60dB
Cooling	Forced Air Cooling, Adjustable Fan Speed
Communication Interface	USB / RS485 (/WiFi / GPRS) / Dry Contact Control
Dimensions (L × W × H)	415mm*280mm*100mm
Weight (kg)	7.8KG

