



5K-1P-N

UL Model:

**“5K-120V/
8K-230V-1P”**



Battery Input Data (Optional)

| | |
|---|-------------------------|
| Type | Lead-Acid or Li-Ion |
| Nominal DC Input | 48V |
| Capacity | 50 — 9900Ah |
| Voltage Range | 40V-60V |
| Continuous Battery Charging Output | 120A |
| Charging Curve | 3-Stage w/ Equalization |
| Grid to Batt Charging Efficiency | 96.0% |
| External Temperature Sensor | Included |
| Current Shunt for Accurate % SOC | Integrated |
| External Gen Start Based on Voltage or %SOC | Integrated |
| Communication to Lithium Battery | CanBus & RS485 |

Solar String Input Data

| | |
|--------------------------------|-----------------|
| Max Allowed PV Power | 10,400W |
| PV Input Voltage | 370V (100~500V) |
| PV Input Current | 20A + 20A |
| Starting Voltage / Min Voltage | 150V |
| Number of MPPT / Range (V) | 2 125-425V |
| Solar Strings Per MPPT | 2 + 2 |
| MPPT Efficiency | 99.90% |

General

| | |
|---------------------------|---------------------------|
| Dimensions (H x W x D) | 22.8 x 13 x 9.1 in |
| Weight | 51lbs (62lbs package) |
| Enclosure | IP65 / NEMA 3R |
| Ambient Temperature | -25~60°C, >45°C De-rating |
| Noise | <30 dB |
| Installation Style | Wall-Mounted |
| Wi-Fi & LAN Communication | Included |
| Standard Warranty | 5 Years |

AC Output Data

| | |
|---------------------------------------|--------------------------------------|
| Grid Type (Single Phase only) | 120V 1P |
| Rated AC Output | 4,800W |
| Peak Power (Off-Grid) | 10,000W 10S |
| Rated AC Output Current (A) | 40 A |
| Parallel Stacking | Yes - Up to 8 |
| Frequency | 60/50Hz |
| Max continuous AC passthrough (A) | 50A |
| Max Efficiency | 97.6% |
| Idle Consumption Typical—No Load | 60W |
| Sell Back Power Modes | Limited to Household/Fully Grid-Tied |
| Design (DC to AC) | Transformerless DC |
| Response Time (Grid-Tied to Off-Grid) | 5ms |
| Power Factor | +/- 0.8 - 1.0 |

Protections & Certifications

| | |
|---|-------------------------|
| PV Input Lightning Protection | Yes |
| Grid Sell Back — UL1741-2010/2018, IEE-E1547a-2003/2014, FCC 15 Class B | Yes |
| Anti-Islanding Protection | Integrated |
| PV String Input Reverse Polarity Detection | Integrated |
| PV Arc Fault Detection — NEC 690.11 | Integrated |
| Insulation Resistor Detection | Integrated |
| Residual Current Monitoring Unit | Integrated |
| Output Over Current Protection | Integrated |
| Output shorted Protection | Integrated |
| Surge Protection | DC Type II / AC Type II |