

Residential Storage Inverter

SQ 6kW-LV-1P Hpro | Single Phase



Stronger Compatibility

- IP65 design, more installation scenario
- Smart fan control, less noise



Scalable & Flexible

- 10 units in parallel (single-phase) in on/off grid mode
- 3 units in parallel to built three phase in on/off grid mode



Easy Installation

- Opened front panel for wiring easily
- Wireless current limiter (CT) on grid side



Smart Home

- Multiple operating modes to optimize energy utilization
- Remote real-time monitoring via WiFi/Bluetooth

Datasheet



Model	SQ 6kW-LV-1P Hpro
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Battery Input Parameters

Supported battery type	Li-Ion or Lead-acid
Nominal battery voltage	48 V
Battery input voltage range	40~60 V
Max. charge voltage	≤60 V (Configurable)
Max. charge / discharge current	120 A / 130 A / Configurable
Battery capacity (Recommend)	100~2000 Ah
Battery Communication	CAN

PV String Input Parameters

Max. DC input power	4000 × 2=8000 W
Max. DC input voltage	500 V
MPPT voltage range	120 ~ 450 V
Start-up voltage	150 V
Max. input current	15 × 2 =30 A // 2 MPPT channels
PV Switch	Yes

AC Output Parameters (Back-Up) (Feed to essential load)

Max. output power	6000 W
Max. / Peak output apparent power	6000 VA / 12000 VA
Max. output current	28 A
Nominal output voltage	220 V / 230 V / 240 V (Configurable) 1 phase
Nominal output frequency	50Hz / 60Hz (±0.2%) (Configurable)
Max. bypass current	40 A
Shift time (Bypass and inverter)	10ms
Output THD (Resistor load)	<3%

AC Input Parameters (On-grid) (Bypass to essential load & Charge the battery/ Feed to home load) (GEN)

Max. (apparent) power for bypass/ battery charging/home load feeding	6000 W
Nominal input/output voltage	220 V / 230 V / 240 V (Auto adjusted)
Nominal input/output frequency	50Hz / 60Hz (Auto adjusted)
Max. bypass current	40 A
Shift time (Bypass and inverter)	10ms
Sell Power to Grid	Yes
Parallel Function	Max. 10 units in parallel
Indepent Generator Port	Yes

Efficiency

Max. efficiency	97.60%
Max. battery to load efficiency	94.00%
Europe efficiency	97.00%
MPPT efficiency	99.90%

Protection

Protection	Battery over charge / discharge, Over temperature, Output over load, Output short circuit, Output over voltage
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Monitoring&HMI

Monitoring	WIFI / Bluetooth
HMI	3.5 inch touchscreen interface

Certifications & Standards Compliance

Grid regulation	IEC 61727 / IEC 62116 / EN50549 / ABNT NBR / MEA,PEA (more available upon request)
Safety regulation	IEC / EN62109-1/2, IEC 62477-1
EMC	IEC / EN61000-6-1/3

General Parameters

Ingress protection	IP65
Operating temperature range	-25°C~60°C
Net weight / Gross weight	25 kg / 27 kg
Product size / Packing size (WxDxH)	402×227×536 mm / 460×315×640 mm