

## 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 |
|-------|-------------------|

## 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,<br>Over temperature,<br>Output over load, Output short circuit,<br>Output over voltage |
|------------|-------------------------------------------------------------------------------------------------------------------------|

## 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 |