

5-15kW Three Phase Inverter LFP 10.8-16.2 kWh

PV Black Start

Photovoltaic can start in the dark

High conversion efficiency

MPPT efficiency can reach up to 99.9%

Change the CT Current

The direction of the CT current can be modified via the backend/system interface.

Scalability and Flexibility

Support up to 6 pcs inverters in parallel

Versatile configuration

Support parallel connection of three phases

Full power output

Parallel operation enables full power output.



FEATURES

1.6

DC side 1.6 times over matched, MPPT current up to 20A, suitable for high-power components

3

3 MPPT channels greatly increase power generation

2

The maximum output power off grid reaches 2 times per 20ms

100%

Support 100% three-phase unbalanced output

50A

The maximum charging and discharging current of the battery can reach 50A

160-800V

Battery input of inverter 160V-800V

● Technical Specifications

| | | |
|--------------------------------------|--|----------------|
| Product Image | | |
| Model | 5427P SHV(*2) | 5427P SHV(*3) |
| Battery Type | Semi-solid state Pouch | |
| Nominal Energy | 10.8kWh | 16.2kWh |
| Usable Energy* | 10.0kWh | 15.0kWh |
| Nominal Capacity | 53Ah | |
| Nominal Voltage | 204.8V | 307.2V |
| Operating Voltage | 192~224V | 288~336V |
| Recommended Charge&Discharge Current | 25A/25A | |
| Max Charge/Discharge Current | 50A/50 A | |
| Peak Discharge Current | 60A(3S) | |
| Peak Discharge Power | 12kW(3S) | 18kW(3S) |
| Recommended Depth of Discharge (DOD) | 93% | |
| Charging Temp. Range | From 0~55 °C | |
| Discharging Temp. Range | From -20~55 °C | |
| Cycle Life | >6000@25 °C | |
| Scalability | 6 Series | |
| WIFI Module | Uhome | |
| Communication | CAN/ RS485 | |
| IP Rating | IP65 | |
| Recommended Humidity | 5%~95%(No condensed water) | |
| Cooling Type | Natural cooling | |
| Color | White(optional) | |
| Installation | Ground Installation | |
| Net Weight | 100±1kg | 150±1kg |
| Dimension(L*W*H) | 660*178*820mm | 660*178*1230mm |
| Protection | Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature | |
| Warranty | 10 years* | |
| Certification | UN38.3/UL1973(Cell) | |

Testing conditions based on temperature 25 °C at the beginning of life.

*Total Energy/Usable Energy measured under specific conditions from Uhome 0.2C CC-CV and based on recommended DOD(93%);

Technical Specifications

Product Image



| Product Model | Uhome-HB -3P5K0H1 | Uhome-HB -3P6K0H1 | Uhome-HB -3P8K0H1 | Uhome-HB -3P10K0H1 | Uhome-HB -3P12K0H1 | Uhome-HB -3P15K0H1 |
|--|--------------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Input Parameters(DC) | | | | | | |
| Maximum Input Voltage | 1100V | | | | | |
| Maximum MPPT Current | 20A | | | | | |
| Maximum MPPT Short-Circuit Current | 40A | | | | | |
| Starting Voltage | 160V | | | | | |
| MPPT Voltage Range | 160~1000V | | | | | |
| Number of MPPT Trackers | 3 | | | | | |
| Number of Strings for Each MPPT | 1 | | | | | |
| Battery Parameters(DC) | | | | | | |
| Battery Type | Li-Ion/Lead-acid | | | | | |
| Battery Voltage Range | 160-800V | | | | | |
| Maximum Charging/Discharging Current | 50A | | | | | |
| Battery Communication | CAN/RS485 | | | | | |
| Output Parameters(AC) | | | | | | |
| Rated output power | 5000W | 6000W | 8000W | 10000W | 12000W | 15000W |
| Maximum Apparent Power | 5500VA | 6600VA | 8800VA | 11000VA | 13200VA | 15000VA |
| Rated Voltage | 3/N/PE,380/400v | | | | | |
| Rated Grid Frequency | 50Hz/60Hz | | | | | |
| Maximum Output Current | 8.3A | 10A | 13.3A | 16.7A | 20A | 22.7A |
| Power factor | 0.8 leading...0.8lagging | | | | | |
| Total Current Harmonic Distortion Rate | < 3%(Rated Power) | | | | | |
| Off-grid Parameters(AC) | | | | | | |
| Rated output power | 5000W | 6000W | 8000W | 10000W | 12000W | 15000W |
| Maximum Apparent Power | 5500VA | 6600VA | 8800VA | 11000VA | 13200VA | 15000VA |
| Rated Voltage | 3/N/PE,380/400v | | | | | |
| Rated Grid Frequency | 50Hz/60Hz | | | | | |
| Peak Power | 10000W for 10s | 12000W for 10s | 16000W for 10s | 20000W for 10s | 20000W for 10s | 20000W for 10s |
| Maximum Output Current | 8.3A | 10A | 13.3A | 16.7A | 20A | 22.7A |
| THDv | < 2%(Rated Power) | | | | | |
| Efficiency | | | | | | |
| Maximum Efficiency | >98.2% | >98.2% | >98.2% | >98.4% | >98.4% | >98.4% |
| European Efficiency | >97.6% | >97.6% | >97.6% | >97.8% | >97.8% | >97.8% |
| Charing/Discharging Efficiency | >97.6% | >97.6% | >97.6% | >97.8% | >97.8% | >97.8% |

● Technical Specifications

| Safety and Protection | |
|--|-----------------|
| DC Switch | Yes |
| Isolated Island Protection | Yes |
| Overcurrent Protection | Yes |
| PV/Battery Reverse Connection Protection | Yes |
| DC Surge Protection | II |
| AC Surge Protection | II |
| Insulation Resistance Testing | Yes |
| Display and Communication | |
| Display | LCD |
| RS485 | Yes |
| CAN | Yes |
| WiFi/4G/LAN | Yes |
| Bluetooth | Yes |
| General Parameters | |
| Max. Three-Phase Unbalanced Load-Carrying Capacity | 100% |
| Max. Single-Phase Load-Carrying Capacity | 33% |
| Dimension(W*H*D) | 650*420*262 mm |
| Weight | 33kg |
| Operation Temperature Range | -25~60℃ |
| Cooling Concept | Natural Cooling |
| Maximum Operation Altitude | 4000m |
| Relative Humidity | 0~100% |
| IP Rating | IP 66 |
| Noise | <45 dB |
| Topological Structure | Transformerless |

NOTE: The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.

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