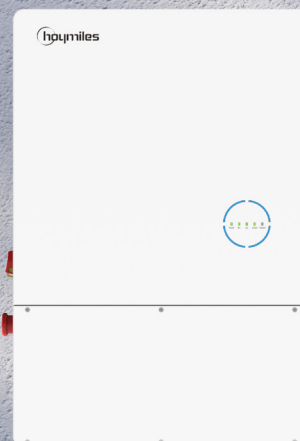




# Split-phase Hybrid Inverter

**HYS-7.5LV-USG1**

## Description

The HYS-7.5LV-USG1 series is a high-performance split-phase hybrid inverter with excellent reliability.

The intelligent EMS function supports self-consumption mode, economy mode, and backup mode for multi-scenario applications.

Monitoring management through S-Miles Cloud allows users to remotely diagnose and track individual system's performance over time, maximizing the total solar power production and battery utilization.

## Features

01

Max. efficiency 97.6%, CEC efficiency 97.0%

02

Double MPPT tracker, up to 32 A MPPT current

03

DC/AC ratio up to 150%

04

Ultralight for easy installation and space-saving

05

Seamless backup power for whole home or critical loads

06

Integrated arc fault protection and rapid shutdown function

## Technical Specifications

| Model                                       | HYS-75LV-USG1                                                       |
|---------------------------------------------|---------------------------------------------------------------------|
| <b>Battery</b>                              |                                                                     |
| Battery type                                | Li-ion/Lead-acid                                                    |
| Battery voltage range (V)                   | 40-60                                                               |
| Max. charge/discharge current (A)           | 200/200                                                             |
| Max. charge/discharge power (W)             | 9600/9600                                                           |
| Charging strategy for Li-ion battery        | Self-adaption to BMS                                                |
| Charging curve                              | 3 Stages/Equalization                                               |
| External temperature sensor                 | Optional                                                            |
| Communication                               | CAN                                                                 |
| <b>PV Input</b>                             |                                                                     |
| Recommended max. PV power (W)               | 11520                                                               |
| Max. input voltage (V)                      | 550                                                                 |
| Rated voltage (V)                           | 380                                                                 |
| Start-up voltage (V)                        | 150                                                                 |
| MPPT voltage range (V)                      | 125-500                                                             |
| Max. input current (A)                      | 32/32                                                               |
| Max. short circuit current (A)              | 40/40                                                               |
| MPPT number/Max. input strings number       | 2/4                                                                 |
| <b>AC Input and Output (On-grid)</b>        |                                                                     |
| Rated output power (W)                      | 7500                                                                |
| Max. output apparent power (VA)             | 7500                                                                |
| Max. input power (W)                        | 15000                                                               |
| Rated AC output voltage (V)                 | 2L/N/PE, 127/220                                                    |
| Rated grid frequency (Hz)                   | 60                                                                  |
| Max. output current (A)                     | 34.1                                                                |
| Max. input current (A)                      | 68.2                                                                |
| Power factor                                | >0.99 (0.8 leading ... 0.8 lagging)                                 |
| THDi (@rated output)                        | <3%                                                                 |
| <b>AC Output (Off-grid)</b>                 |                                                                     |
| Rated output power (W)                      | 7500                                                                |
| Max. output apparent power (VA)             | 15000, 10s                                                          |
| Rated output voltage (V)                    | 2L/N/PE, 127/220                                                    |
| Rated output frequency (Hz)                 | 60                                                                  |
| Max. continuous output current (A)          | 34.1                                                                |
| THDv (@linear load)                         | <3%                                                                 |
| <b>Efficiency</b>                           |                                                                     |
| MPPT efficiency                             | 99.9%                                                               |
| Max. efficiency                             | 97.6%                                                               |
| CEC efficiency                              | 97.0%                                                               |
| Max. battery discharge to AC efficiency     | 95.0%                                                               |
| <b>Protection</b>                           |                                                                     |
| Anti-islanding protection                   | Integrated                                                          |
| PV arc fault detection                      | Integrated                                                          |
| PV string input reverse polarity protection | Integrated                                                          |
| Compliant MLRSD products                    | Integrated                                                          |
| Insulation resistor detection               | Integrated                                                          |
| Residual current monitoring unit            | Integrated                                                          |
| AC overcurrent protection                   | Integrated                                                          |
| AC short current protection                 | Integrated                                                          |
| AC overvoltage and undervoltage protection  | Integrated                                                          |
| Surge protection                            | DC Type II/AC Type III                                              |
| <b>General</b>                              |                                                                     |
| Dimensions (W × H × D)                      | 19.8 × 29.1 × 7.95 inch (502 × 740 × 202 mm)                        |
| Weight                                      | 90.4 lbs (41 kg)                                                    |
| Mounting                                    | Wall mounting                                                       |
| Operating temperature                       | -13°F to +149°F (>113°F, derating)/-25°C to +65°C (>45°C, derating) |
| Relative humidity                           | 0-95%, no condensing                                                |
| Cooling                                     | Natural convection                                                  |
| Topology (Solar/Battery)                    | Transformerless/High-frequency isolation                            |
| Altitude                                    | ≤6562 ft (2000 m)                                                   |
| Protection degree                           | Type 4X                                                             |
| Noise (dB)                                  | <40                                                                 |
| User interface                              | LED, App                                                            |
| Digital input/output                        | 1 × DI, 2 × DO                                                      |
| Max. parallel                               | 10                                                                  |
| Communication                               | RS485, Wi-Fi/Ethernet/4G (optional)                                 |
| Warranty                                    | 10 Years                                                            |