

# Microinverter Datasheet

- HMS-300W-1T**
- HMS-350W-1T**
- HMS-400W-1T**
- HMS-450W-1T**
- HMS-500W-1T**

## Description

Specifically designed for mini solar systems in open spaces like balconies, Hoymiles HMS-500W series microinverters feature integrated industrial+ grade Wi-Fi module. Their output power reaches up to 500 VA.

With the user-friendly HMS Plug and Play Cable, installation is effortless for users of all levels. Users can connect the microinverter directly to a socket—no complex wiring is required.

Additionally, system monitoring is simplified for the HMS-500W series with two convenient options: real-time monitoring via Direct Connection and remote control through the S-Miles Cloud platform.

## Features

- |  |   |
|--|---|
| <p><b>01</b> Plug-and-play design for balcony solar systems</p>                          | <p><b>04</b> 1-in-1 design to suit versatile installation scenarios</p>                         |
| <p><b>02</b> Built-in industrial+ grade Wi-Fi module for high reliability</p>            | <p><b>05</b> Output power setting function to customize performance</p>                         |
| <p><b>03</b> Enhanced safety with rapid shutdown compliance and isolated transformer</p> | <p><b>06</b> Two options for monitoring and management: Direct Connection and S-Miles Cloud</p> |

# Technical Specifications

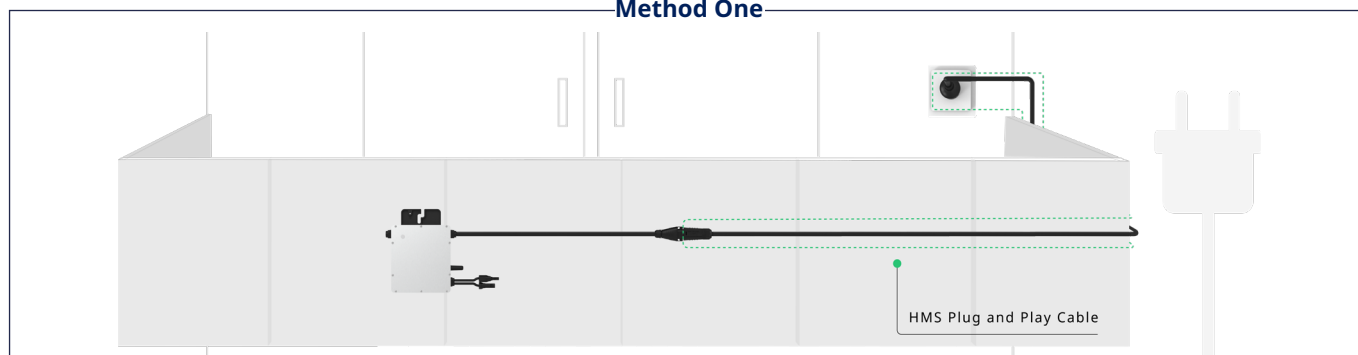
Model	HMS-300W-1T	HMS-350W-1T	HMS-400W-1T	HMS-450W-1T	HMS-500W-1T
<b>Input Data (DC)</b>					
Commonly used module power (W)	240 to 405+	280 to 470+	320 to 540+	360 to 600+	400 to 670+
Maximum input voltage (V)	60	60	65	65	65
MPPT voltage range (V)	16-60				
Min./Max. start voltage (V)	22/60				
Maximum input current (A)	12	13	14	15	16
Maximum input short circuit current (A)	20	20	25	25	25
Number of MPPTs	1				
Number of inputs per MPPT	1				
<b>Output Data (AC)</b>					
Rated output power (VA)	300	350	400	450	500
Rated output current (A)	1.30	1.52	1.74	1.96	2.17
Nominal output voltage/range (V)*	230/180-275				
Nominal frequency/range (Hz)*	50/45-55				
Adjustable power factor (@nominal power)	>0.99 default 0.8 leading ... 0.8 lagging				
Number of microinverter per 2.5 mm <sup>2</sup> line**	18	15	13	12	11
Total harmonic distortion (@nominal power)	< 3%				
<b>HMS Plug and Play Cable (Optional)</b>					
Connector type	HMS Field Connector				
Cable size	1.5 mm <sup>2</sup>				
Cable length	5 m (Customizable)				
Plug type	Schuko				
<b>Efficiency</b>					
CEC peak efficiency	96.70%	96.70%	96.70%	96.50%	96.50%
Nominal MPPT efficiency	99.80%				
Night power consumption (mW)	< 50				
<b>Mechanical Data</b>					
Ambient temperature range (°C )	-40 to +65				
Storage temperature range (°C )	-40 to +85				
Dimensions (W × H × D [mm])	182 × 164 × 30				
Weight (kg)	1.75				

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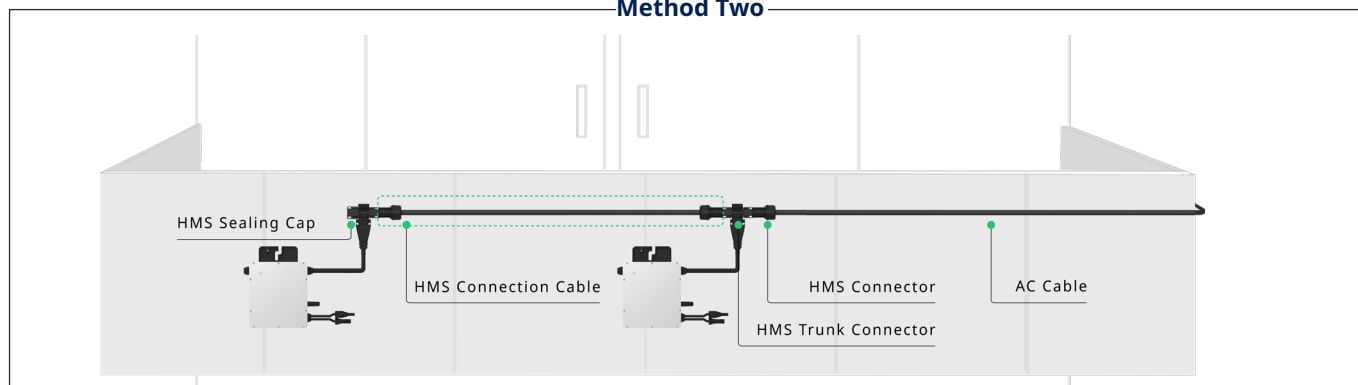
Model	HMS-300W-1T	HMS-350W-1T	HMS-400W-1T	HMS-450W-1T	HMS-500W-1T
Enclosure rating	Outdoor - IP67				
Cooling	Natural convection – No fans				
<b>Features</b>					
Communication	Built-in Wi-Fi				
Topology	Galvanically Isolated HF Transformer				
Monitoring	Toolkit or S-Miles Cloud				
Compliance	VDE-AR-N 4105: 2018, EN 50549-1: 2019, VFR 2019, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3				
* : Nominal voltage/frequency range can vary depending on local requirements.					
** : Refer to local requirements for exact number of microinverters per AC output line.					

## Wiring Diagram

**Method One**

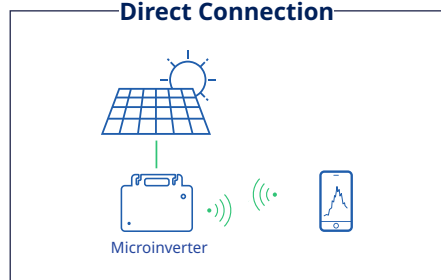


**Method Two**



## Communication Diagram

**Direct Connection**



**Remote Connection**

