



# Microinverter Datasheet

- HMS-300-1WB**
- HMS-350-1WB**
- HMS-400-1WB**
- HMS-450-1WB**
- HMS-500-1WB**

## Description

The HMS-500-1WB series microinverter is designed to fit various residential spaces such as balconies, terraces, and gardens. It features a built-in Wi-Fi & Bluetooth communication module and can deliver output power up to 500 VA.

Pairing perfectly with the HMS Cable System, the HMS-500-1WB series microinverter offers a hassle-free plug-and-play installation. No complicated wiring is needed - you can set it up within minutes.

Moreover, the new S-Miles Balcony App enhances functionality, enabling effortless customization of your smart home solar system.

## Features

- 01** Provides multiple installation options with its 1-in-1 design and plug-and-play functionality
- 02** Built-in Wi-Fi & Bluetooth module ensures wireless security and reliability
- 03** Supports cloud-based or local solar system configurations
- 04** Works with the S-Miles Balcony app to customize your smart home solar system
- 05** Meets ETSI EN 303 645 cybersecurity standards for enhanced privacy protection
- 06** Enhanced safety by using rapid shutdown compliance and an isolated transformer

# Technical Specifications

Model	HMS-300-1WB	HMS-350-1WB	HMS-400-1WB	HMS-450-1WB	HMS-500-1WB
<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 to 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 to 275				
Nominal frequency/range (Hz)*	50/45 to 55				
Adjustable power factor (@nominal power)	>0.99 default 0.8 leading ... 0.8 lagging				
Total harmonic distortion (@nominal power)	<3%				
<b>HMS Plug and Play Cable (Optional)</b>					
Connector type	HMS Field Connector				
Cable size (mm <sup>2</sup> )	1.5				
Cable length (m)	3 (customizable)				
Plug type	Schuko				
<b>Efficiency</b>					
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)	1.8				
Enclosure rating	Outdoor - IP67				
Cooling	Natural convection – No fans				
<b>Features</b>					
Communication with cloud	2.4G Wi-Fi				
Communication with local app	Bluetooth				
Topology	Galvanically Isolated HF Transformer				
Interface	LED & App				
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.