



# Microinverter Datasheet

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

## Description

With the output power up to 500 VA, Hoymiles new microinverter HMS-500 series rank among the highest for 1-in-1 microinverters.

All of these models listed are equipped with reactive power control and can meet the requirements of EN 50549-1:2019, VDE-AR-N 4105:2018, VFR2019, etc.

The new Sub-1G wireless solution enables more stable communication under various environmental conditions.

## Features

- 01** High-powered microinverter for 1-in-1 with output power up to 500 VA
- 02** With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, VFR2019, etc.
- 03** Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer
- 04** Connected to one panel, flexible for various applications
- 05** Sub-1G wireless solution allows stable communication with Hoymiles gateway DTU

# Technical Specifications

Model	HMS-300-1T	HMS-350-1T	HMS-400-1T	HMS-450-1T	HMS-500-1T
<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				
Start-up voltage (V)	22				
Minimum operating PV voltage (V)	16				
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) <sup>1</sup>	230/180-275				
Nominal frequency/range (Hz) <sup>1</sup>	50/45-55				
Power factor (adjustable)	> 0.99 default 0.8 leading...0.8 lagging				
Total harmonic distortion	< 3%				
Maximum units per 10AWG branch <sup>2</sup>	24	21	18	16	14
Maximum units per 12AWG branch <sup>2</sup>	15	13	11	10	9
<b>Efficiency</b>					
Maximum Efficiency	96.7%	96.7%	96.7%	96.5%	96.5%
Nominal MPPT efficiency	99.8%				
Night power consumption (mW)	< 50				
<b>Mechanical Data</b>					
Ambient temperature range (°C)	-40 to +65				
Dimensions (W × H × D [mm])	182 × 164 × 30				
Weight (kg)	1.75				
Altitude (m)	2000				
Enclosure rating	Outdoor-IP67 (NEMA 6)				
Cooling	Natural convection-No fans				
<b>Features</b>					
Series	HMS				
Communication	Sub-1G				
Type of isolation	Galvanically Isolated HF Transformer				
Monitoring	Hoymiles S-Miles Cloud <sup>3</sup>				
Country	Made in China				
Compliance	EN 50549-1: 2019, VDE-AR-N 4105: 2018, VFR2019, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3				

\*1 Nominal voltage/frequency range can vary depending on local requirements.

\*2 Refer to local requirements for exact number of microinverters per branch.

\*3 Hoymiles Monitoring System