

Microinverter Datasheet

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

Description

Hoymiles HMS-500W series microinverters are specially designed for small solar systems in open spaces like balconies. They come with a built-in industrial-grade Wi-Fi module and provide up to 500 VA of output power.

With the user-friendly Flex-S3 Plug and Play Cable, installation is effortless for users of all levels. You can connect the microinverter directly to a socket without complicated wiring.

For monitoring, the HMS-500W series offers two easy options: real-time monitoring with Direct Connection or remote control through the S-Miles Cloud platform.

Features

01 Plug-and-play design for balcony solar systems

02 Built-in industrial+ grade Wi-Fi module for high reliability

03 Enhanced safety with rapid shutdown compliance and isolated transformer

04 1-in-1 design to suit versatile installation scenarios

05 Output power setting function to customize performance

06 Two options for monitoring and management: Direct Connection and S-Miles Cloud

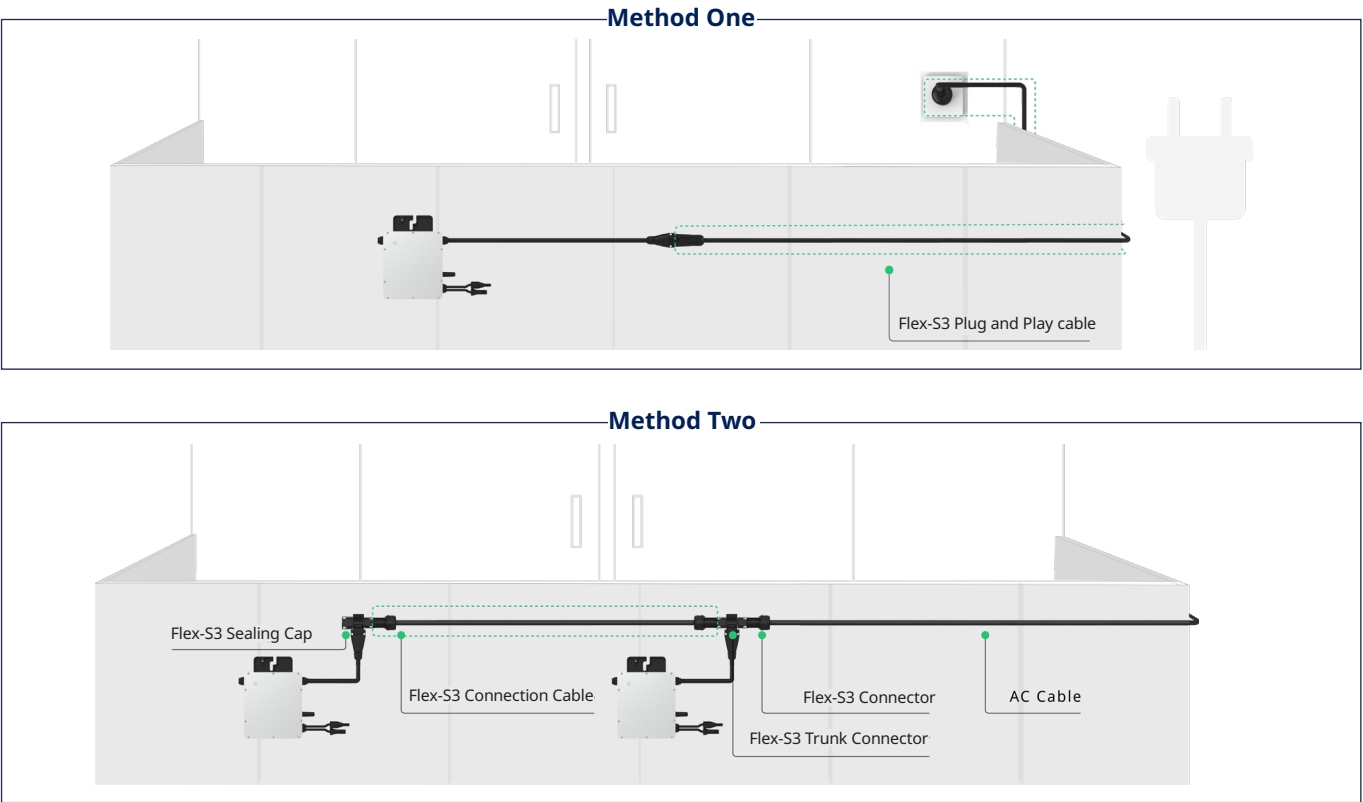
Technical Specifications

Model	HMS-300W-1T	HMS-350W-1T	HMS-400W-1T	HMS-450W-1T	HMS-500W-1T
Input Data (DC)					
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				
Output Data (AC)					
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				
Number of microinverters per 2.5 mm² line**	19	16	14	12	11
Total harmonic distortion (@nominal power)	< 3%				
Flex-S3 Plug and Play Cable (Optional)					
Connector type	Flex-S3 Field Connector				
Cable size	1.5 mm²				
Cable length	5 m (Customizable)				
Plug type	Schuko				
Efficiency					
Peak efficiency	96.70%	96.70%	96.70%	96.50%	96.50%
Nominal MPPT efficiency	99.80%				
Night power consumption (mW)	< 50				
Mechanical Data					
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				

Technical Specifications

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				
Features					
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 the exact number of microinverters per AC output line.					

Wiring Diagram



Communication Diagram

