



Microinverter Datasheet

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

Description

With the output power up to 500 VA, Hoymiles new microinverter HMS-500-1T 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, VFR 2019, 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, VFR 2019, etc.

03

Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer

04

Connected to one panel, flexible for various applications

05

With Flex-S3 Cable System, installation is easier and faster than ever before

06

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
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)	16-60				
Start-up voltage (V)	22				
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)*	230/180-275				
Nominal frequency/range (Hz)*	50/45-55				
Adjustable power factor (@nominal power)	> 0.99 default 0.8 leading ... 0.8 lagging				
Total harmonic distortion (@nominal power)	< 3%				
Maximum units per 2.5 mm² branch**	19	16	14	12	11
Maximum units per 4 mm² branch**	26	22	19	17	15
Maximum units per 6 mm² branch**	30	26	23	20	18
Efficiency					
Peak efficiency	96.7%	96.7%	96.7%	96.5%	96.5%
Nominal MPPT efficiency	99.8%				
Night power consumption (mW)	< 50				
Mechanical Data					
Ambient temperature range (°C)	-40 to +65				
Dimensions (W × H × D [mm])	182 × 164 × 30				
Weight (kg)	1.75				
Enclosure rating	Outdoor-IP67				
Cooling	Natural convection-No fans				
Features					
Communication	Sub-1G				
Type of isolation	Galvanically Isolated HF Transformer				
Monitoring	S-Miles Cloud (Hoymiles Monitoring Platform)				
Compliance	EN 50549-1: 2019, VDE-AR-N 4105: 2018, 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 branch.