



Microinverter Datasheet

- HMS-350-1T-NA**
- HMS-400-1T-NA**
- HMS-450-1T-NA**
- HMS-500-1T-NA**

Description

Hoymiles new microinverter HMS-500 series are suitable for high-powered solar panels, which rank among the highest for 1-in-1 microinverters.

Each microinverter can be connected to one panel and used in various applications, making it one of the most flexible solar solutions. With a maximum DC voltage of 65 volts, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017, NEC-2020 Article 690.12, and CEC-2021 Sec 64-218.

The new Sub-1G wireless solution enables more stable communication with Hoymiles gateway DTU.

Features

01

High-powered microinverter for 1-in-1 series with superior performance

02

Safer for rooftop solar stations with PV rapid shutdown compliance

03

With Reactive Power Control, compliant with UL 1741, IEEE 1547, UL 1741 SB, etc.

04

1-in-1 design enables most flexible applications

Technical Specifications

Model	HMS-350-1T-NA		HMS-400-1T-NA		HMS-450-1T-NA		HMS-500-1T-NA	
Input Data (DC)								
Commonly used module power (W)	280 to 470+		320 to 540+		360 to 600+		400 to 670+	
Maximum input voltage (V)	60		65		65		65	
MPPT voltage range (V)					16–60			
Start-up voltage (V)					22			
Maximum input current (A)	13		14		15		16	
Maximum input short circuit current (A)	20		25		25		25	
Number of MPPTs					1			
Number of inputs per MPPT					1			
Output Data (AC)								
Peak output power (VA)	350		400		450		500	
Maximum continuous output power (VA)	319		360		410		475	
Maximum continuous output current (A)	1.33	1.53	1.50	1.73	1.71	1.98	1.98	2.28
Nominal output voltage/range (V) ¹	240/211–264	208/183–228	240/211–264	208/183–228	240/211–264	208/183–228	240/211–264	208/183–228
Nominal frequency/range (Hz) ¹					60/55–65			
Power factor (adjustable)					> 0.99 default 0.8 leading ... 0.8 lagging			
Total harmonic distortion					< 3%			
Maximum units per 10 AWG branch ²	18	15	16	13	14	12	12	10
Maximum units per 12 AWG branch ²	12	10	10	9	9	8	8	7
Efficiency								
CEC peak efficiency	96.70%				96.50%			
Nominal MPPT efficiency					99.80%			
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 (NEMA6)			
Cooling					Natural convection (no fans)			
Features								
Communication					Sub-1G			
Type of isolation					Galvanically Isolated HF Transformer			
Monitoring					Hoymiles S-Miles Cloud ³			
Compliance					UL 1741, IEEE 1547, UL 1741 SB, CSA C22.2 No. 107.1-16, CA Rule 21 (240 Vac), FCC 15B, FCC 15C			
PV Rapid Shutdown					Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems.			

*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