



Microinverter Datasheet

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 and 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 SA, CA Rule21, etc.

04

1-in-1 design enables most flexible applications

Technical Specifications

Model	HMS-450-1T-NA		HMS-500-1T-NA	
Input Data(DC)				
Commonly used module power (W)	360 to 560+		400 to 625+	
Maximum input voltage (V)			65	
MPPT voltage range (V)			16–60	
Start-up voltage (V)			22	
Maximum input current (A)	13.3		14	
Output Data(AC)				
Peak output power (VA)	450		500	
Maximum continuous output power (VA)	410		475	
Maximum continuous output current (A)	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
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 10AWG branch ²	14	12	12	10
Maximum units per 12AWG branch ²	9	8	8	7
Efficiency				
CEC peak efficiency			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-NEMA6	
Cooling			Natural convection (no fans)	
Features				
Communication			Sub-1G	
Type of isolation			Galvanically Isolated HF Transformer	
Monitoring			S-Miles Cloud ³	
Compliance			UL 1741, IEEE 1547, UL 1741 SA, CA Rule21, CSA C22.2 No. 107.1-16 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