



## Microinverter Datasheet

**HMS-300-1A**  
**HMS-350-1A**  
**HMS-400-1A**

### Description

Hoymile HMS-400-1A series microinverter benefits from a new design architecture and is more suitable for AC module applications.

Each microinverter connects to one PV module. With module-level MPPT and real-time monitoring function, Hoymile HMS-400-1A series microinverter harvests more energy and offers more convenient operation and maintenance.

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

### Features

- 01 Suitable for AC module applications
- 02 Safer for rooftop solar stations with integrated rapid shutdown functionality and isolated transformer
- 03 With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, UL 1741, etc.

04 Grid protection relay integrated

05 Sub-1G wireless solution allows stable communication with Hoymiles gateway DTU

## Technical Specifications

Model	HMS-300-1A	HMS-350-1A	HMS-400-1A
<b>Input Data (DC)</b>			
Commonly used module power (W)	240 to 405+	280 to 470+	320 to 540+
Maximum input voltage (V)		60	
MPPT voltage range (V)		16-60	
Start-up voltage (V)		22	
Maximum input current (A)	12	13	14
Maximum input short circuit current (A)	20	20	25
Number of MPPTs		1	
Number of Inputs per MPPT		1	
<b>Output Data (AC)</b>			
Rated output power (VA)	300	350	400
Rated output current (A)	1.30	1.52	1.74
Nominal output voltage/range (V) <sup>1</sup>	230/180 ~ 275	230/180 ~ 275	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 12 AWG branch <sup>2</sup>	15	13	11
Maximum units per 10 AWG branch <sup>2</sup>	24	21	18
<b>Efficiency</b>			
CEC peak efficiency		96.70%	
Nominal MPPT efficiency		99.80%	
Night power consumption (mW)		< 50	
<b>Mechanical Data</b>			
Ambient temperature range (°C )		-40 to +65	
Storage temperature range (°C)		-40 to +85	
Dimensions (W×H×D [mm])		184.5 × 204.5 × 26	
Weight (kg)		1.71	
Enclosure rating		Outdoor-IP67 (NEMA 6)	
Cooling		Natural convection – No fans	
<b>Features</b>			
Communication		Sub-1G	
Topology		Galvanically Isolated HF Transformer	
Monitoring		S-Miles Cloud	
Compliance		EN 50549-1: 2019, VDE-AR-N 4105: 2018, UL 1741, 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 be changed due to the requirements of local power department.

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