



# Microinverter Datasheet

**HMS-1600**  
**HMS-1800**  
**HMS-2000**

## Description

With the output power up to 2000 VA, Hoymiles new microinverter HMS-2000 series rank among the highest for 4-in-1 microinverters.

All of these three models listed are equipped with reactive power control and can meet the requirements of EN 50549-1:2019, VDE-AR-N 4105:2018, UL 1741, etc.

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

## Features

01

High-powered microinverter with output power up to 2000 VA

02

Independent MPPT and monitoring ensure greater energy harvest and easier maintenance

03

With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, UL 1741, ABNT NBR 16150, etc.

04

4-in-1 design enables faster installation and comes with a lower cost

05

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

06

Sub-1G wireless solution allows stable communication in commercial and industrial settings

## Technical Specifications

| Model                                         | HMS-1600-4T |             |             | HMS-1800-4T                                                                                                                       |             |             | HMS-2000-4T |             |             |
|-----------------------------------------------|-------------|-------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Input Data (DC)                               |             |             |             |                                                                                                                                   |             |             |             |             |             |
| Commonly used module power (W)                | 320 to 500+ |             |             | 360 to 565+                                                                                                                       |             |             | 400 to 625+ |             |             |
| Maximum input voltage (V)                     |             |             |             | 65                                                                                                                                |             |             |             |             |             |
| MPPT voltage range (V)                        |             |             |             | 16–60                                                                                                                             |             |             |             |             |             |
| Start-up voltage (V)                          |             |             |             | 22                                                                                                                                |             |             |             |             |             |
| Maximum input current (A)                     | 4 × 12.5    |             |             | 4 × 13.3                                                                                                                          |             |             | 4 × 14      |             |             |
| Maximum input short circuit current (A)       |             |             |             | 4 × 20                                                                                                                            |             |             |             |             |             |
| Output Data (AC)                              |             |             |             |                                                                                                                                   |             |             |             |             |             |
| Rated output power (VA)                       | 1600        |             |             | 1800                                                                                                                              |             |             | 2000        |             |             |
| Rated output current (A)                      | 7.27        | 6.96        | 6.67        | 8.18                                                                                                                              | 7.83        | 7.5         | 9.09        | 8.7         | 8.33        |
| Nominal output voltage/range (V) <sup>1</sup> | 220/180–275 | 230/180–275 | 240/180–275 | 220/180–275                                                                                                                       | 230/180–275 | 240/180–275 | 220/180–275 | 230/180–275 | 240/180–275 |
| Nominal frequency/range (Hz) <sup>1</sup>     |             |             |             | 50/45-55 or 60/55-65                                                                                                              |             |             |             |             |             |
| Power factor (adjustable)                     |             |             |             | > 0.99 default<br>0.8 leading...0.8 lagging                                                                                       |             |             |             |             |             |
| Total harmonic distortion                     |             |             |             | < 3%                                                                                                                              |             |             |             |             |             |
| Maximum units per 10AWG branch <sup>2</sup>   | 4           | 4           | 4           | 3                                                                                                                                 | 4           | 4           | 3           | 3           | 3           |
| 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)                     |             |             |             | 331 × 218 × 34.6                                                                                                                  |             |             |             |             |             |
| Weight (kg)                                   |             |             |             | 4.7                                                                                                                               |             |             |             |             |             |
| Enclosure rating                              |             |             |             | Outdoor-IP67 (NEMA 6)                                                                                                             |             |             |             |             |             |
| Cooling                                       |             |             |             | Natural convection-No fans                                                                                                        |             |             |             |             |             |
| Features                                      |             |             |             |                                                                                                                                   |             |             |             |             |             |
| Communication                                 |             |             |             | Sub-1G                                                                                                                            |             |             |             |             |             |
| Type of isolation                             |             |             |             | Galvanically Isolated HF Transformer                                                                                              |             |             |             |             |             |
| Monitoring                                    |             |             |             | S-Miles Cloud <sup>3</sup>                                                                                                        |             |             |             |             |             |
| Compliance                                    |             |             |             | EN 50549-1: 2019, VDE-AR-N 4105: 2018, UL 1741, ABNT NBR 16150, 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 vary depending on local requirements.

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

\*3 Hoymiles Monitoring System