



Microinverter Datasheet

HMS-300

HMS-350

HMS-400

HMS-450

HMS-500

Description

With the output power up to 500 VA, Hoymiles new microinverter HMS-500 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, VFR2019, etc.

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

Features

High-powered microinverter for 1-in-1 with output power up to 500 VA

With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, VFR2019, etc.

O3 Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer

O4 Connected to one panel, flexible for various applications

O5 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-500-17 |
|---|---|-------------|-------------|-------------|-------------|
| 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 |
| 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) ¹ | 230/180-275 | | | | |
| NNominal frequency/range (Hz) ¹ | 50/45-55 | | | | |
| Power factor (adjustable) | > 0.99 default 0.8 leading0.8 lagging | | | | |
| Total harmonic distortion | < 3% | | | | |
| Maximum units per 10AWG branch ² | 24 | 21 | 18 | 16 | 14 |
| Maximum units per 12AWG branch ² | 15 | 13 | 11 | 10 | 9 |
| Efficiency | | - | _ | - | |
| CEC 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 \times H \times D mm) | 182 × 164 × 30 | | | | |
| Weight (kg) | 1.75 | | | | |
| Enclosure rating | Outdoor-IP67 (NEMA 6) | | | | |
| Cooling | Natural convection-No fans | | | | |
| Features | | | | | |
| Communication | Sub-1G | | | | |
| Type of isolation | Galvanically Isolated HF Transformer | | | | |
| Monitoring | Hoymiles S-Miles Cloud ³ | | | | |
| Compliance | EN 50549-1: 2019, VDE-AR-N 4105: 2018, VFR2019, 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