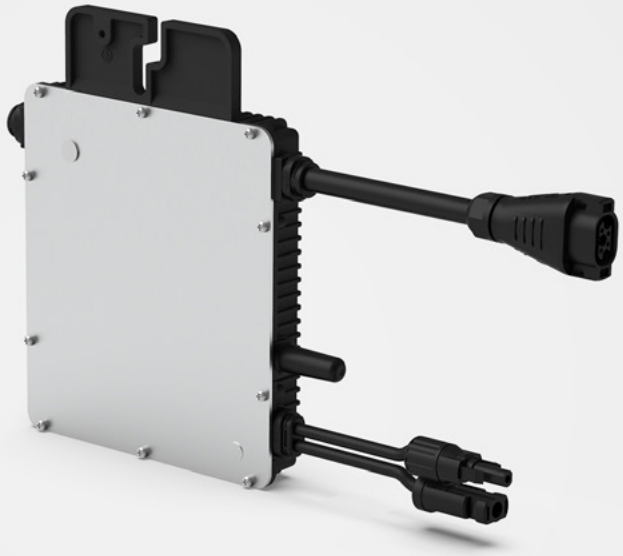

# Microinverter Datasheet

## HMS-450
## HMS-500

## Description

With the output power up to 500VA, Hoymiles new microinverter HMS-500 ranks among the highest for 1 in 1 microinverters.
Each microinverter connects up to 1 PV modules with independent MPPT and monitoring, makes greater energy harvest and easier maintenance.
New Sub-1G wireless solution enables more stable communication when installed for any installation environment.

## Features

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

02 With Reactive Power Control, meets the requirements of EN50549-1:2019, VDE-AR-N 4105:2018, UL1741, etc.

03 Safer for rooftop solar stations with rapid shutdown compliant and isolated transformer

04 Excellent flexibility, faster installation and good adaptability to all kinds of module arrangement

05 Sub-1G wireless solution enables the stable communication when installed for commercial and industrial stations



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# Technical Specifications

| Model | HMS-450-1T | | | HMS-500-1T | | |
|---|---|---|---|---|---|---|
| **Input Data(DC)** | | | | | | |
| Commonly used module power(W) | 360~565 | | | 400~625 | | |
| Peak power MPPT voltage range(V) | 36~48 | | | 38~48 | | |
| Start-up voltage(V) | 22 | | | | | |
| Operating voltage range(V) | 16~60 | | | | | |
| Maximum input voltage(V) | 60 | | | | | |
| Maximum input current(A) | 13.3 | | | 14 | | |
| **Output Data(AC)** | | | | | | |
| Rated output power(VA) | 450 | | | 500 | | |
| Rated output current(A) | 2.05 | 1.96 | 1.88 | 2.27 | 2.17 | 2.08 |
| Nominal output voltage/range(V)[1] | 220/180-275 | 230/180-275 | 240/180-275 | 220/180-275 | 230/180-275 | 240/180-275 |
| Nominal frequency/range(Hz)[1] | 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 [2] | 15 | 16 | 17 | 14 | 14 | 15 |
| Maximum units per 12AWG branch [2] | 9 | 10 | 10 | 8 | 9 | 9 |
| **Efficiency** | | | | | | |
| CEC peak efficiency | 96.5% | | | | | |
| Nominal MPPT efficiency | 99.8% | | | | | |
| Night power consumption(mW) | < 50 | | | | | |
| **Mechanical Data** | | | | | | |
| Ambient temperature range(℃) | -40 ~ +65 | | | | | |
| Dimensions(W×H×D mm) | 182*164*30 | | | | | |
| Weight(kg) | 1.75 | | | | | |
| Enclosure rating | Outdoor-NEMA6(IP67) | | | | | |
| Cooling | Natural convection-No fans | | | | | |
| **Features** | | | | | | |
| Communication | Sub-1G | | | | | |
| Monitoring | Hoymiles Monitoring System | | | | | |
| Compliance | EN 50549-1: 2019, VDE-R-N 4105: 2018, UL1741,<br>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 exact number of microinverters per branch.