



# Microinverter Datasheet

- MIS-300-1T**
- MIS-350-1T**
- MIS-400-1T**
- MIS-450-1T**
- MIS-500-1T**

## Descriptions

The MIS-500-1T series microinverter represents Hoymiles' latest breakthrough in residential energy solutions. It is lighter, safer and offers power options ranging from 300 W to 500 W.

Optimally tailored to handle larger PV models and equipped with the innovative MiS Cable System for easy, fast, and reliable installation, the MIS-500-1T Series is the ideal solution for effectively harnessing energy while keeping costs low.

## Features

**01 Easier Installation**  
*Plug & play connection, eliminates complex wiring and crimping*  
*Lightweight and compact*

**02 Time-Saving**  
*Plug & play connection speeds up the installation, cutting installation by 70%*

**03 Higher Yields**  
*Max. efficiency 97.5%, small in size, massive in power*  
*Compatible with high-powered PV modules*

**04 Safe & Reliable**  
*Class II double-insulated enclosure, no grounding needed*  
*Comply with EN 50549-1: 2019, VDE-AR-N 4105: 2018, UL 1741, etc.*

# Technical Specifications

Model	MIS-300-1T	MIS-350-1T	MIS-400-1T	MIS-450-1T	MIS-500-1T
<b>Input Data (DC)</b>					
Commonly used module power (W)	240 to 405+	280 to 470+	320 to 540+	360 to 605+	400 to 670+
Maximum input voltage (V)	60	60	65	65	65
MPPT voltage range (V)	16 to 58				
Peak power MPPT voltage range	27 to 48	29 to 48	30 to 48	32 to 48	33 to 48
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
Number of MPPTs	1				
Number of inputs per MPPT	1				
<b>Output Data (AC)</b>					
Peak output power (VA)	300	350	400	450	500
Maximum continuous output current (A)	1.30	1.52	1.74	1.96	2.17
Nominal output voltage/range (V)*	230/180 to 275				
Nominal frequency/range (Hz)*	50/45 to 55				
Power factor (@nominal power)	>0.99 default 0.8 leading ... 0.8 lagging				
Total harmonic distortion (@nominal power)	<3%				
Maximum units per branch (2.5 mm <sup>2</sup> ) **	18	15	13	12	11
Maximum units per branch (4 mm <sup>2</sup> ) **	24	21	18	16	14
<b>Efficiency</b>					
Peak efficiency	97.50%				
European weighted efficiency	96.70%				
Nominal MPPT efficiency	99.80%				
Night power consumption (mW)	<50				
<b>Mechanical Data</b>					
Operating temperature range (°C)	-40 to +65				
Storage temperature range (°C)	-40 to +85				
Dimensions (W × H × D) [mm]	224.2 × 165.3 × 28.5 (without bracket)				
Weight (kg)	1.1				
Enclosure rating	Outdoor-IP68				
Cooling	Natural convection (no fans)				
<b>Features</b>					
Communication	Sub-1G				
Type of isolation	Galvanically Isolated HF Transformer				
Monitoring platform	Hoymiles 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				

\* : Nominal voltage/frequency range can vary depending on local requirements.

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