

Microinverter Datasheet

HMT-1800
HMT-2250

Description

The world's first three-phase microinverter with Reactive Power Control, can be widely used in the general 230V/400V three-phase electric power distribution.

Each microinverter, with up to 6 PV modules connected, simplifies the installation process and ranks among the most cost effective solutions for commercial and industrial installations.

Features

01

Three-phase output, more suitable for commercial and industrial applications

02

Up to 2250VA output, adapted to mainstream high-powered PV modules

03

Each microinverter, with up to 6 PV modules connected, simplifies the installation process and ranks among the most cost effective solutions for commercial and industrial installations

04

With Reactive Power Control, meets the requirements of EN50549-1:2019, VDE-AR-N 4105:2018, TOR Erzeuger : 2019-12, etc.

05

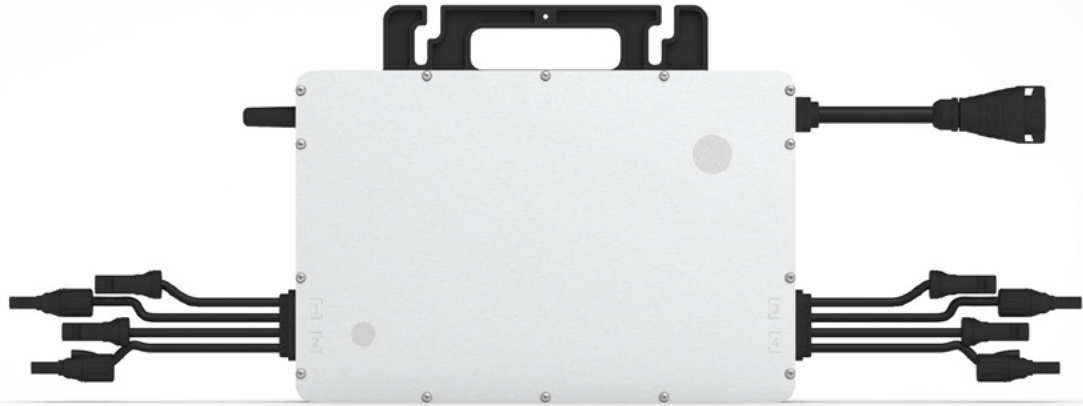
The Sub-1G wireless solution enables the stable communication when installed for commercial and industrial stations

Technical Specifications

Model	HMT-1800-6T	HMT-2250-6T
Input Data(DC)		
Commonly used module power(W)	240~380	300~470
Peak power MPPT voltage range(V)	29~48	36~48
Start-up voltage(V)	22	
Operating voltage range(V)	16~60	
Maximum input voltage(V)	60	
Maximum input current(A)	6*11.5	
Output Data(AC)		
Grid connection	Three phase	
Rated output power(VA)	1800	2250
Rated output current(A)	2.61*3	3.26*3
Nominal output voltage/range(V) ¹	230Vac/400Vac, 3W+N+PE	
Nominal frequency/range(Hz) ¹	50/60	
Power factor(adjustable)	>0.99 default 0.8 leading...0.8 lagging	
Total harmonic distortion	<3%	
Maximum units per 12AWG branch ²	7	6
Maximum units per 10AWG branch ²	11	9
Efficiency		
CEC peak efficiency	96.5%	
Nominal MPPT efficiency	99.8%	
Night power consumption(mW)	< 50	
Mechanical Data		
Ambient temperature range(°C)	-40 ~ +65	
Dimensions(W×H×D mm)	330*250*35	330*250*37
Weight(kg)	5.5	6.0
Enclosure rating	Outdoor-NEMA6(IP67)	
Cooling	Natural convection-No fans	
Features		
Communication	Sub-1G	
Monitoring	Hoymiles Monitoring System	
Compliance	VDE-R-N 4105: 2018, EN 50549-1: 2019, TOR Erzeuger : 2019-12, IEC/EN 62109-1/-2, IEC/EN 61000-3-2/-3, IEC/EN 61000-6-1/-2/-3/-4	

*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.



Microinverter Datasheet

HMS-1800
HMS-2000

Description

With the output power up to 2000VA, Hoymiles new microinverter HMS-2000 ranks among the highest for 4 in 1 microinverters. Each microinverter connects up to four 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 with output power up to 2000VA

02

Independent MPPT and monitoring makes greater energy harvest and easier maintenance

03

With Reactive Power Control, meets the requirements of EN50549-1:2019, VDE-AR-N 4105:2018, UL1741, ABNT NBR 16150, etc.

04

Each microinverter supports up to 4 modules, faster installation and lower cost

05

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

06

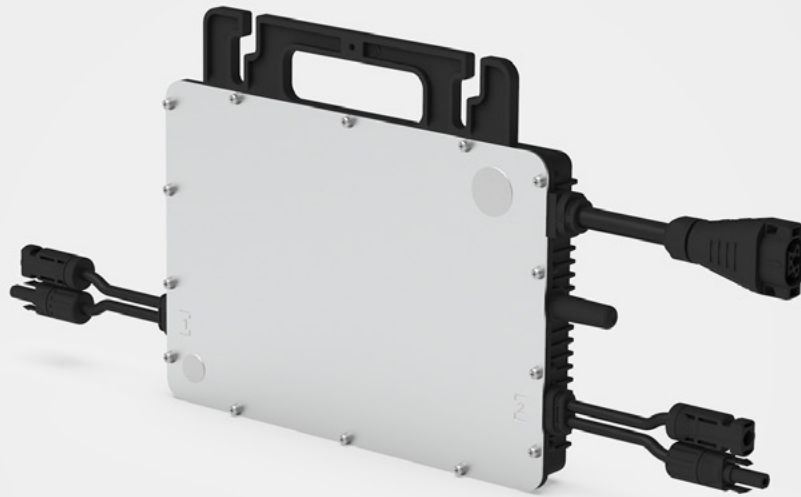
Sub-1G wireless solution enables the stable communication when installed for commercial and industrial stations

Technical Specifications

Model	HMS-1800-4T			HMS-2000-4T		
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)	4*13.3			4*14		
Output Data(AC)						
Rated output power(VA)	1800			2000		
Rated output current(A)	8.18	7.83	7.5	9.09	8.70	8.33
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 0.8 leading...0.8 lagging					
Total harmonic distortion	<3%					
Maximum units per 10AWG branch ²	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 ~ +65					
Dimensions(W×H×D mm)	331*218*34.6					
Weight (kg)	4.7					
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, 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 be changed due to the requirements of local power department.

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



Microinverter Datasheet

HMS-900
HMS-1000

Description

With the output power up to 1000VA, Hoymiles new microinverter HMS-1000 ranks among the highest for 2 in 1 microinverters. Each microinverter connects up to 2 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 2 in 1 with output power up to 1000VA

02

With Reactive Power Control, meets the requirements of EN50549-1:2019, VDE-AR-N 4105:2018, UL1741, ABNT NBR 16150, etc.

03

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

04

Independent MPPT and monitoring makes greater energy harvest and easier maintenance

05

Each microinverter supports up to 2 modules, faster installation and good adaptability to all kinds of module arrangement

06

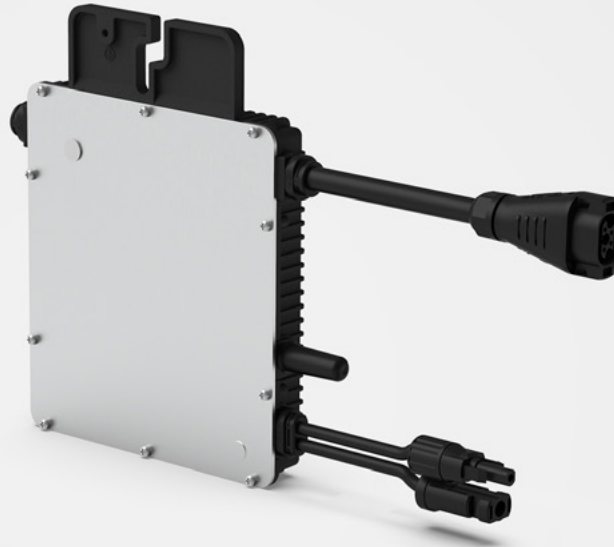
Sub-1G wireless solution enables the stable communication when installed for commercial and industrial stations

Technical Specifications

Model	HMS-900-2T			HMS-1000-2T		
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)	2*13.3			2*14		
Output Data(AC)						
Rated output power(VA)	900			1000		
Rated output current(A)	4.09	3.91	3.75	4.55	4.35	4.17
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 0.8 leading...0.8 lagging					
Total harmonic distortion	<3%					
Maximum units per 10AWG branch ²	7	8	8	7	7	7
Efficiency						
CEC peak efficiency	96.5%					
Nominal MPPT efficiency	99.8%					
Night power consumption(mW)	< 50					
Mechanical Data						
Ambient temperature range(°C)	-40 ~ +65					
Dimensions(W×H×D mm)	261*223*31					
Weight(kg)	3.0					
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, ABNT NBR 16150, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3					

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



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

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 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(°C)	-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, 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.



Data Transfer Unit Datasheet

DTU-Pro-S

Description

Hoymiles gateway DTU-Pro-S is a data transfer unit which collects the information and data of PV microinverter using the Sub-1G wireless solution and sends to Hoymiles Monitoring System, S-miles Cloud, using different communication options such as Ethernet, WiFi or 4G.

With DTU-Pro-S, users can easily read the module-level data and alarm, realize remote operation and maintenance of the microinverter system at any time and any place on S-miles Cloud.

Features

01**Reliable and Flexible**

- Sub-1G wireless solution enables stable communication with HMS, HMT series of microinverter
- More communication options with Ethernet, Wi-Fi or 4G
- Support of RS485, Ethernet to communicate with peripherals

02**Simple and Efficient O&M**

- Module-level monitoring and data storage
- Local configuration with S-miles Toolkit
- Support remote O&M including remote upgrading, parameter setting

03**Smart**

- Smart zero export control and power export limiting
- PV generation and load consumption monitoring

Technical Specifications

Model	DTU-Pro-S(WIFI Version)	DTU-Pro-S(4G Version)
Communication to Microinverter		
Signal		Sub-1G
Maximum distance (open space)		400m
Monitoring data limit from solar panels ¹		99
Communication to S-miles Cloud		
Ethernet		RJ45*1, 100Mbps
Wireless ²	WIFI:802.11b/g/n	4G:TDD-LTE, FDD-LTE 3G:SCDMA 2G:GSM/GPRS
Sample rate		Per 15 minutes
Communication to Peripherals		
RS485		COM*1, 9600bps, Modbus-RTU
Ethernet		RJ45*1, Modbus-TCP
DRM (For AU/NZ only)		RJ45*1, DRM0/5/6/7/8
Interaction		
LED		LED Indicator*4 – RUN, Cloud, MI, ALM
APP		S-miles Toolkit
Power Supply (Adapter)		
Type		External adapter
Adapter input voltage/frequency		100 to 240 V AC / 50 or 60Hz
Adapter output voltage/current		5V / 2A
Power consumption	Typ. 1.5W / Max. 3.0W	Typ. 2.5W / Max. 5.0W
Mechanical Data		
Ambient temperature(°C)		-20°C to 55°C
Dimensions(W×H×D)		200mm×101mm×29mm (without antennas)
Weight		0.20 kg
Installation method		Wall mounting / Desktop mounting
Environmental rating		Indoor-IP20
Compliance		
Certificates		CE, FCC, IC, RCM, Anatel
Microinverter Compatibility		
Microinverter model		HMT-2250/1800-6T HMS-2000/1800-4T, HMS-1500/1200-4T HMS-1000/900-2T, HMS-800/700/600-2T HMS-500/450/400/350/300-1T

*1 Depending on the installation environment, please refer to user manual for more details.

*2 If the DTU installation location is inside a metal box or under the metal/concrete roof, extended antenna will be suggested.