



World's leading MLPE PV inverter brand

Safer · Stronger · Smarter · Smaller

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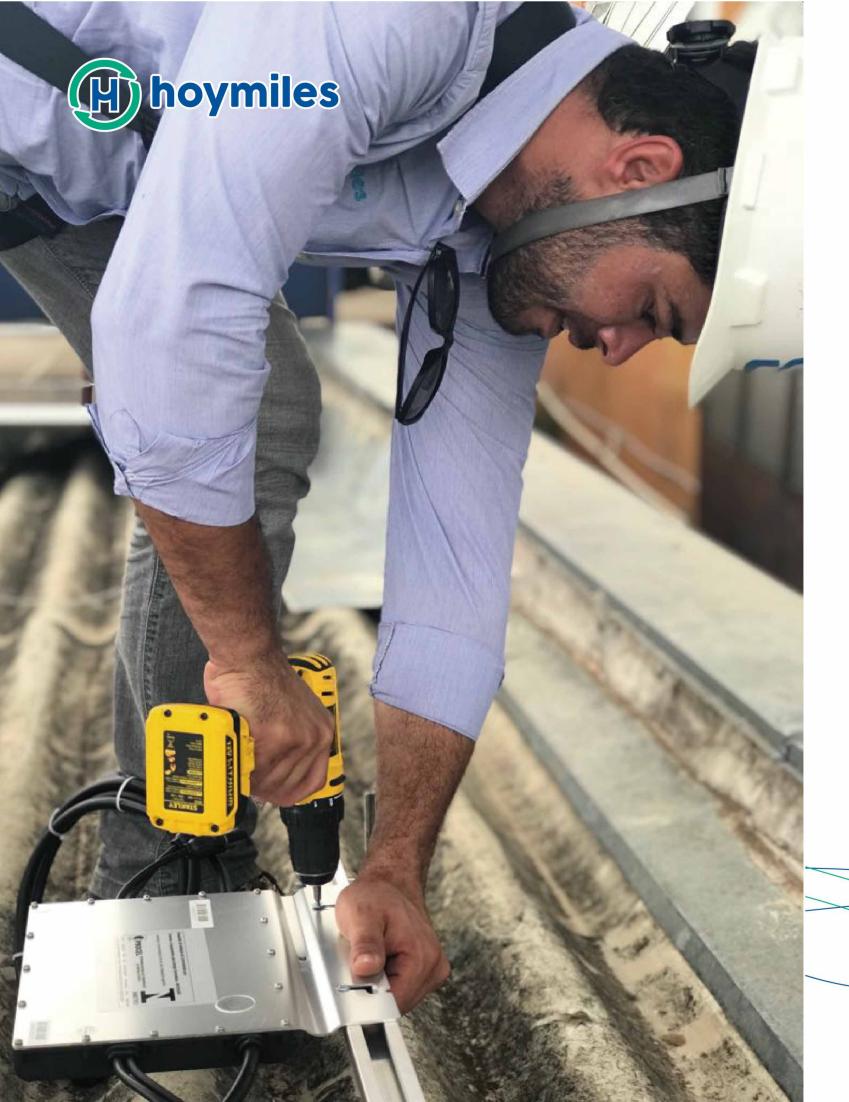
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Hoymiles Introduction

Hoymiles is a world leading microinverter company specialising in MLPE (Module-Level Power Electronics) solutions for global solar investors & end users.

As one of the fastest growing inverter brands globally, Hoymiles provides a safer and smarter module-level MPPT and monitoring microinverter in over 50 countries including the U.S., Europe, Australia, Latin America, India, Japan, Korea, South East Asia, the Middle East and South Africa.

Hoymiles was founded in 2008 by 3 post-doctors operating as an R&D team in China's National Power Electronics Laboratory, based at Zhejiang University, one of the top 3 universities in China and one of the top 60 in the world.

In 2015, Hoymiles microinverter achieved world's highest CEC peak efficiency - 96.7% in California, US, which ranked it as the most efficient microinverter globally when compared with other well known brands.

An interview-based article in 2017 by PV-Tech, the leading professional solar media organisation, entitled "The Biggest Microinverter Firm You Have Never Heard of", spread the Hoymiles name around the world as the "Invisible Champion" of microinverters in the Chinese PV market, now supplying over 50% of the world's solar installations with 53GW in 2017.

Today, 10,000+ commercial & residential rooftop installations (the biggest one 3.6MW) are built annually using different types of Hoymiles microinverters: single panel unit (MI-250/300), 2 in 1 unit (MI-500/600/700) & 4 in 1 unit (MI-1000/1200).

Thanks to the constant efforts of Hoymiles' 500+ staff, together with distribution and service partners all over the world, the company has established local logistics & service networks in over 20 countries, including Germany, the Netherlands, Poland, Estonia, Brazil, Mexico, South Africa, the U.S., Canada, Korea & India.

Localisation is the key to the company's ongoing success – the combination of local warehouses, local training and local service centres keeps Hoymiles together with its local customers 24/7, 365 days a year.

Our History



2008

Establish R&D team of PV inverters in the National Key Power Electronics Laboratory of P.R.China.

2010

Successful design of smart module on-grid inverter for PV power station in P.R.China.

。2011

Successful design of microinverter with multiple international certificates.

2012

All series of Hoymiles 50kW-500kW smart modular PV on-grid inverters gain the certification of "CQC-SOLAR"; Hoymiles becomes a member of Hangzhou PV Association.

2013

Hoymiles joins the writing of national compulsory standard of photovoltaic on-grid inverter.

2014

Hoymiles microinverters are certificatied by CSA, BV, SAA and CQC.

2015

Hoymiles 250W & 500W microinverters enter USA, Europe & Australia. Over 10,000 rooftops are installed by Hoymiles microinverters globally.

2016

Hoymiles R&D team wins the second prize of National Natural Science Award of P.R.China.

2017

World's largest microinverter project (3.6MW) is built by Hoymiles with 6,000 units of 2 in 1 unit MI-600; Hoymiles is authorized as CSA testing laboratory.





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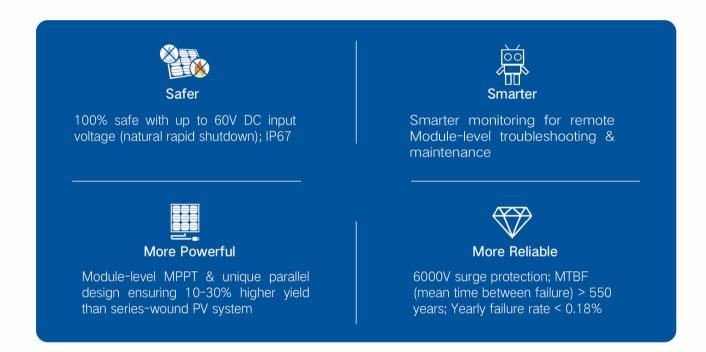


World's No.1 CEC Peak Efficiency for Microinverter - **96.7%** in 2015

The Biggest Microinverter Supplier in Chinese Market



Advantages of Hoymiles MLPE Microinverter







Microinverter 4 in 1 unit



MI-1000 / MI-1200

"The World's First Single-Phase Microinverter" designed for 4 solar panels with dual MPPTs, with wide DC input operating voltage range(16-60V) and low start-up voltage (22V only).

Hoymiles 4 in 1 microinverter MI-1000/MI-1200 is "The Best Power Density Microinverter" ever in solar industry with extremely light weight - only 3.75kG including integrated DC & AC cables; 3-phase wiring makes it easy to be configured by Hoymiles 4 in 1 microinverter for MW size commercial PV power stations (one of the world's biggest microinverter projects configured by Hoymiles microinverter is 3.6MW).

Highlights

- Maximum output power up to 1000/1200W; Adapted to 60 & 72 cells PV panels
- Peak efficiency 96.7%; CEC weighted efficiency 96.5%
- Static MPPT efficiency 99.8%; Dynamic MPPT efficiency 99.76% in overcast weather
- High reliability: NEMA6(IP67) enclosure; 6000V surge protection



Model		MI-1000 / MI-1200 (4X60 cells / 4X72 cells	5)
Input Data(DC)			
Recommended input power (W)		Up to 1240 / 1520	
Peak power MPPT voltage range (V)		27 ~ 48 / 32 ~ 48	
Start-up voltage(V)		22	
Operating voltage range (V)		16 ~ 60	
Maximum input voltage (V)		60	
Maximum input current (A)		10.5	
Output Data (AC)	@208V AC	@240V AC	@230V AC
Rated output power (W)	1000 / 1200	1000 / 1200	1000 / 1200
Rated output current (A)	4.81 / 5.76	4.16 / 5	4.35 / 5.22
Nominal output voltage/range (V)	208/183-250	240 / 211-264	230/180-275
Nominal frequency/range (Hz)	60/59.3-60.5	60 / 59.3-60.5	50/45-55
Power factor	> 0.99	> 0.99	> 0.99
Output current harmonic distortion	< 3%	< 3%	< 3%
Maximum units per 20A branch	3/3	4/3	4/3
Efficiency			
CEC peak efficiency		96.50%	
CEC weighted efficiency	96.00%		
Nominal MPPT efficiency	99.80%		
Night time power consumption (mW)	<50		
Mechanical Data			
Ambient temperature range (°C)		-40 ~ +65	
Operating temperature range (°C)	-40 ~ +85		
Dimensions (W×H×D mm)	280×176×33		
Weight (kG)	3.75(including 1.9m AC cable)		
Enclosure rating	NEMA6(IP67)		
Cooling	Natural convection - No fans		
Loading Quantity			
Container	1X20'GP		1X40'GP / 1X40'HQ
Pallet No.	10		22
Carton No.	360		756
Total Quantity	1800		3780
Other Features			
Communication		Wireless	
Design lifetime	> 25 years		
Standard Compliance			
EMC	EN61000-6-3:2007+A1:2011EN61000-6-2:2005EN61000-3-2:2014 EN61000-3-3:2013		
Safety	EN62109-1:2010EN62109-: UL Std No.1741-Second Edi	2:2011IEC 62109–1 Ed 1.0IEC tionEN 60529	62109-2 Ed 1.0
On-Grid	AS/NZS 4777.2:2015VDE-AR-N4105:2011-08DIN V VDE V 0126-1-1/A1:2012:02 IEC61727:2004EN50438:2013ANSI/IEEE 1547.1IEC62116:2011UTE C 15-712-1:2010-07 NBT32004-2013		



















Microinverter 2 in 1 unit

MI-500 / MI-600 / MI-700

"The World's First Daisy-Chain 2 in 1 Microinverter for Large Scale Commercial Application" is designed for dual solar panels with double MPPTs, with wide DC input operating voltage range (16-60V) and low start-up voltage (22V only).

Hoymiles 2 in 1 microinverter MI-500/MI-600/MI-700 is the world's most powerful microinverter solution for dual solar panels with CEC weighted efficiency as high as 96.5% (world's No.1 for 2 in 1 unit in 2015); with quicker installation and much higher power density compared with single unit, it's also one of the best-selling microinverters for Hoymiles up to now worldwide.

Highlights

- Maximum output power up to 500/600/700W; Adapted to 60 & 72 cells PV panels
- Peak efficiency 96.7%; CEC weighted efficiency 96.5%
- Static MPPT efficiency 99.8%; Dynamic MPPT efficiency 99.76% in overcast weather
- High reliability: NEMA6(IP67) enclosure; 6000V surge protection

Model	١	MI-500 / MI-600 / MI-70 (2X60 cells / 2X72 cells)	00
Input Data(DC)			
Recommended input power (W)		Up to 620 / 760 / 800	
Peak power MPPT voltage range (V)		27 ~ 48 / 29 ~ 48 / 33 ~ 48	
Start-up voltage(V)		22	
Operating voltage range (V)		16 ~ 60	
Maximum input voltage (V)		60	
Maximum input current (A)		10.5 / 11.5 / 11.5	
Output Data (AC)	@208V AC	@240V AC	@230V AC
Rated output power (W)	500 / 600 /700	500 / 600 / 700	500 / 600 / 700
Rated output current (A)	2.40 / 2.88 / 3.36	2.08 / 2.50 / 2.91	2.17 / 2.61 / 3.04
Nominal output voltage/range (V)	208/183-250	240 / 211-264	230/180-275
Nominal frequency/range (Hz)	60/59.3-60.5	60 / 59.3-60.5	50/45-55
Power factor	> 0.99	> 0.99	> 0.99
Output current harmonic distortion	< 3%	< 3%	< 3%
Maximum units per 20A branch	6/5/4	7/6/6	7/5/5
Efficiency			
CEC peak efficiency		96.7%	
CEC weighted efficiency	96.5%		
Nominal MPPT efficiency	99.8%		
Night time power consumption (mW)		< 50	
Mechanical Data			
Ambient temperature range (°C)		-40 ~ +65	
Operating temperature range (°C)	-40 ~ +85		
Dimensions (W×H×D mm)	250×170×28		
Weight (kG)	3.	00(including 1.9m AC cable)	
Enclosure rating	NEMA6(IP67)		
Cooling	Natural convection - No fans		
Loading Quantity			
Container	1X20'GP		1X40'GP / 1X40'HQ
Pallet No.	10		22
Carton No.	480		1008
Total Quantity	2400		5040
Other Features			
Communication		Wireless	
Design lifetime	> 25 years		
Standard Compliance			
EMC	EN61000-6-3:2007+A1:2011EN61000-6-2:2005EN61000-3-2:2014 EN61000-3-3:2013		
Safety	EN62109-1:2010EN62109-2 UL Std No.1741-Second Editi	:2011 EC 62109-1 Ed 1.0 EC 62 onEN 60529	109-2 Ed 1.0
On-Grid		-N4105:2011-08DIN V VDE V 0° 3ANSI/IEEE 1547.1IEC62116:20	

















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MI-250 / MI-300

"The World's First Daisy-Chain Single Unit Microinverter" with extremely wide DC input operating voltage range(16-60V) and low start-up voltage (22V only).

Hoymiles single unit microinverter MI-250/MI-300 is the perfect selection for PV system with uneven panel number with world's No.1 CEC weighted efficiency - 96.5% (peak efficiency - 96.7%) in 2015.

Highlights

- Maximum output power up to 250/300W; Adapted to 72 cells PV panels
- Peak efficiency 96.7%; CEC weighted efficiency 96.5%
- Static MPPT efficiency 99.8%; Dynamic MPPT efficiency 99.76% in overcast weather
- High reliability: NEMA6(IP67) enclosure; 6000V surge protection

Model		MI-250 / MI-300 (1X60 cells / 1X72 cells)		
Input Data(DC)				
Recommended input power (W)		Up to 310 / 380		
Peak power MPPT voltage range (V)		27 ~ 48 / 29 ~ 48		
Start-up voltage(V)		22		
Operating voltage range (V)		16 ~ 60		
Maximum input voltage (V)		60		
Maximum input current (A)		10.5/11.5		
Output Data (AC)	@208V AC	@240V AC	@230V AC	
Rated output power (W)	250/300	250/300	250 / 300	
Rated output current (A)	1.20/1.44	1.04/1.25	1.09 / 1.30	
Nominal output voltage/range (V)	208/183-250	240/211-264	230/180-275	
Nominal frequency/range (Hz)	60/59.3-60.5	60/59.3-60.5	50/45-55	
Power factor	>0.99	>0.99	>0.99	
Output current harmonic distortion	<3%	<3%	<3%	
Maximum units per 20A branch	13/12	14/12	14 / 11	
Efficiency				
CEC peak efficiency		96.7%		
CEC weighted efficiency	96.5%			
Nominal MPPT efficiency	99.8%			
Night time power consumption (mW)		< 50		
Mechanical Data				
Ambient temperature range (°C)		-40 ~ +65		
Operating temperature range (°C)	-40 ~ +85			
Dimensions (W×H×D mm)		178 X 153 X28		
Weight (kG)	1.98(including 1m AC cable)			
Enclosure rating	NEMA6(IP67)			
Cooling	Natural convection - No fans			
Loading Quantity				
Container	1X20'GP		1X40'GP / 1X40'HQ	
Pallet No.	10		22	
Carton No.	600		1260	
Total Quantity	3000		6300	
Other Features				
Communication		Wireless		
Design lifetime	> 25 years			
Standard Compliance				
EMC	EN61000-6-3:2007+A1:2011 EN61000-3-3:2013	EN61000-6-2:2005EN61000-3	3-2:2014	
Safety	EN62109-1:2010EN62109-2 UL Std No.1741-Second Editi	:2011IEC 62109-1 Ed 1.0IEC 6 onEN 60529	2109-2 Ed 1.0	
On-Grid		-N4105:2011-08DIN V VDE V (

















Microinverter

Accessories



















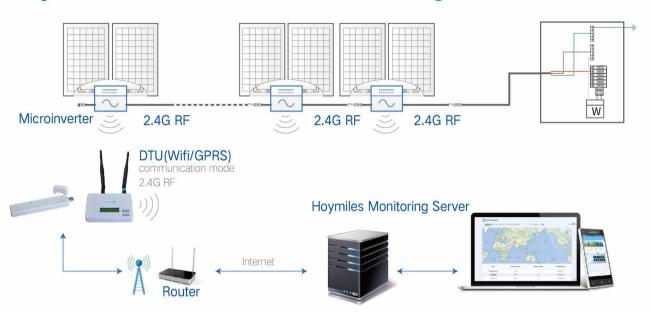




Name	Effect	Applicable Models
1 DC Extension Cable	Provide extended connection between microinverter & PV model; One end is MC4 male connector and the other end is MC4 female connector.	MI-1000/1200
2 AC Extension Cable	To extend cable length; One end is AC male connector and the other end is AC female connector.	ALL
3AC End Cable-F	Provide connection from last microinverter to distribution box; One female connector with 2m 12 AWG cable.	ALL
4AC Female Connector	AC female connector is provided to make AC end cable or AC extension cable.	ALL

Name	Effect	Applicable Models
5 AC Male Connector	AC male connector is provided to make AC end cable or AC extension cable.	ALL
6 AC Female End Cap	IP67 female end cap is provided to seal AC female connector of microinverter.	ALL
7 AC Male End Cap	IP67 male end cap is provided to seal AC male connector of microinverter.	ALL
8 DC Connector Unlock Tool	Used to remove DC connectors.	ALL
AC Connector Unlock Tool	Used to unlock AC connectors.	ALL
10 Screw	Install one microinverter on the rail by 2 pcs of M8*25 screws.	ALL

Hoymiles 3rd Generation Monitoring Platform



How to set up a Hoymiles monitoring system?

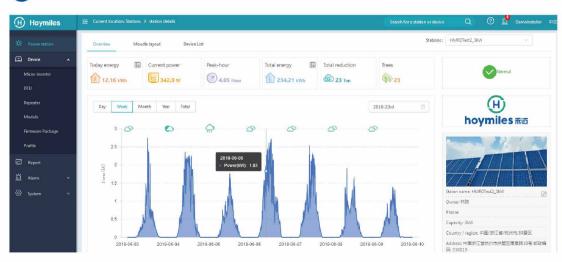
3 steps only to setup a power station!

Each Hoymiles PV monitoring station will be setup in 3 easy steps; Hoymiles monitoring application is even much more compatible for Smartphone/Pad by Hoymiles APP than through the PC webpage.

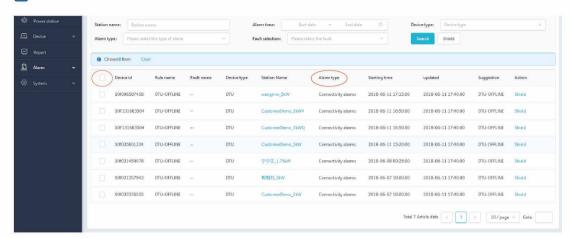


Key features of Hoymiles new smart monitoring system

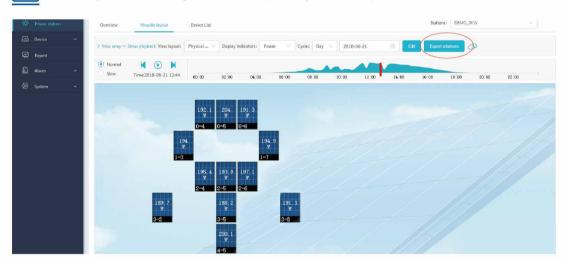
Module-level remote monitoring for microinverter's operating status in real time.



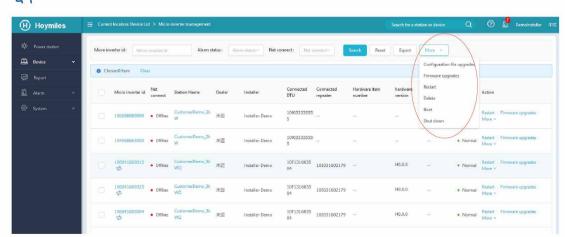
Module-level alert info in real time for easy troubleshooting & maintenance.



Availability for downloading module-level operating & failure report.



Smart operation for adding, cancelling, checking & revising power station data.





GPRS

Maximum distance (open space) 2000m

Wireless Communication for Both Microinverter & Cloud













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Standard Warranty

Repeater

2+ years

Model	DTU-G100 / DTU-W100 (Commercial use)	DTU-G20 / DTU-W20 (Residential use)
Communication to Microinverter		
Signal	2.4G	RF
Sample Rate	Per 15 n	ninutes
Maximum Distance(Open space)	200	m
Monitoring Data Limit from Solar Panels	100 panels (DTU-G100/W100)	20 panels (DTU-G20/W20)
Communication to Cloud		
Signal	GSM (frequency: 850/900/18	00/1900MHz) / Wi-Fi
Power Supply(Adapter)		
Туре	Wireless adapter	with USB port
Input Voltage / Frequency	100 to 240 V AC / 50 or 60Hz	
Output Voltage / Current	5V / 2A	
Power Consumption	1.0W(typical), 5W(maximum)	
Mechanical Data		
Ambient Temperature(°C)	-20 ~+55	
Dimensions (W×H×D mm)	143×33×12.5	
Weight (kG)	0.1	
Mounting System	Direct plugin	
Indicator Light	LEI	0
Others		
Compliance	EN 60950-1 EN 62311 EN 301 489-1 EN 301 489-3 EN 300	440 EN 55032 EN 55035 EN 61000-3-2 EN 61000-3-3

Model	DTU-MI
Communication to Microinverter	DTU-MI / DTU-MI-GPRS
Signal	2.4G RF
Sample Rate	Per 5 minutes
Maximum Distance (Open space)	200m
Monitoring Data Limit from Solar Panels	99
Communication to Cloud	

Power Supply

Туре	External plug-in adapter
Adapter Input Voltage / Frequency	100-240V AC / 50 or 60Hz
Adapter Output Voltage / Current	5V / 0.8A
Power Consumption	2.5W(typical)/ 5W (maximum)

RJ45 Ethernet 10M or 100M

Mechanical Data

Ambient Temperature Range(°C)	-20~+55
Dimensions (W×H×Dmm)	149×90×31
Weight (kG)	0.22
Mounting System	Wall mounted
Display	LCD

Others

Compliance	EN 60950-1 EN 62311 EN 301 489-1 EN 301 489-3 EN 300 440 EN 55032 EN 55035 EN 61000-3-2 EN 61000-3-3
Standard Warranty	2+ years

•		
Model	DTU-433	Repeater
Communication to Microinverter		
Signal	470M-LORA	2.4G RF
Sample Rate	Per 5-15minutes	Per 5 seconds
Maximum Distance (Open space)	500m	200m
Monitoring Data Limit from Solar Panels	299	N.A.
Communication to Router/PC		Communication to DTU
	RJ45 Ethernet 10M or 100M	470M-LORA

Power Supply

Туре	External plug-in adapter	100 - 240 V AC / 50 or 60Hz
Adapter Input Voltage / Frequency	100 - 240 V AC / 50 or 60Hz	N.A.
Adapter Output Voltage / Current	5V / 0.8A	0.5W (typical), 1W (maximum)
Power Consumption	2.5W (typical), 5W (maximum)	N.A.

Mechanical Data

Ambient temperature range (°C)	-20 ~ +65	-40 ~ +65
Dimensions (W X H X D mm)	149 X 90 X 31	145 X 125 X 60
Weight (kG)	0.22	0.35
Mounting System	Wall Mounted	N.A.
Display	LCD	N.A.

Others Con	nmunicatior	ı to	DT	U
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Compliance	EN 60950-1 EN 62311 EN 301 489-1 EN 301 489-3 EN 300 440 EN 55032 EN 55035 EN 61000-3-2 EN 61000-3-3
Standard Warranty	2+ years



Global Applications

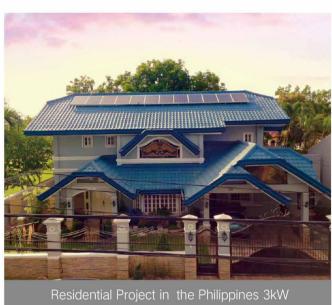
Asia





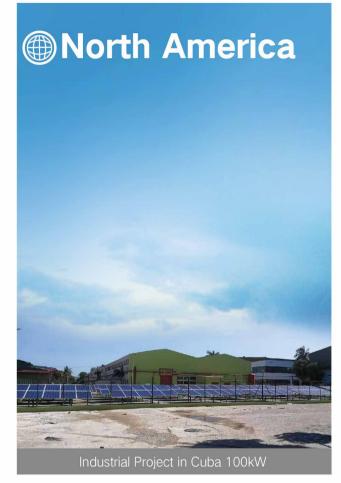






Africa

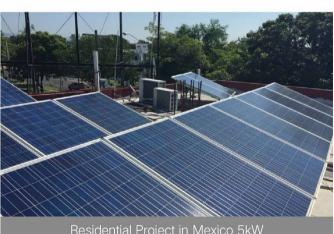










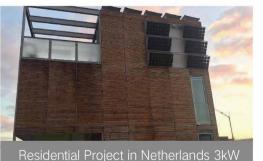












Local Service for Distributors/Installers





System Design

We provide customized service to customers in terms of system design of photovoltaic power station, the implementation, equipment selection, optimization, consultation and the necessary support, which help our customers optimize the PV power stations.



Regular Return Visit

Our after-service staff will give one return visit in the minimum annually within the warranty. We'll check the equipment to remove any hazards thus to reduce the chance of faults and guarantee the proper functioning of the equipment.



Hotline Service

Customers can reach us by the hotline in case of any equipment failure. The service is available 24/7. Our technical staff will be contacting the customer to analyze the fault, propose solutions, and consequently direct the customers in trouble shooting.



Customer Training

Hoymiles attaches much importance on customer training to effectively deliver the specialized knowledge to our customers. We provide timely on-site training programs according to varied requirements to share the specialized knowledge and rich experience. The regular training programs include fault diagnosis, device debugging, equipment maintenance etc.



On-site Service

If the problem can't be solved via hotline, engineers will be sent to the site in time to clear the fault and ensure the proper functioning of the equipment within the shortest possible time.



Customized Service

Customized service and corresponding agreements are available to meet the specific needs of customers. The services include system design secondary development, technique support to special tests, warranty service etc.

Global Service Networks

With the world leading cutting-edge technology of the Microinverter, Hoymiles developed a global market which covers more than 50 countries, including USA, Australia, Germany, France, Netherlands, Italy, Japan, Korea, Brazil, Mexico and India.

