

PROJOY
electric
— *Switch To Safety!* —



Micro Inverter

Superior · Safer · Smarter



Meet the requirements from Balcony PV System to C&I Project



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COMPANY BRIEF

Projoy Electric Co., Ltd (Projoy Electric) was founded in 2011 and headquartered in Suzhou, China. It is a pioneer manufacturer in China that focusing on providing protection, safety and metering products.

Today, Projoy has own two major business divisions – intelligent electrical and power electronics.

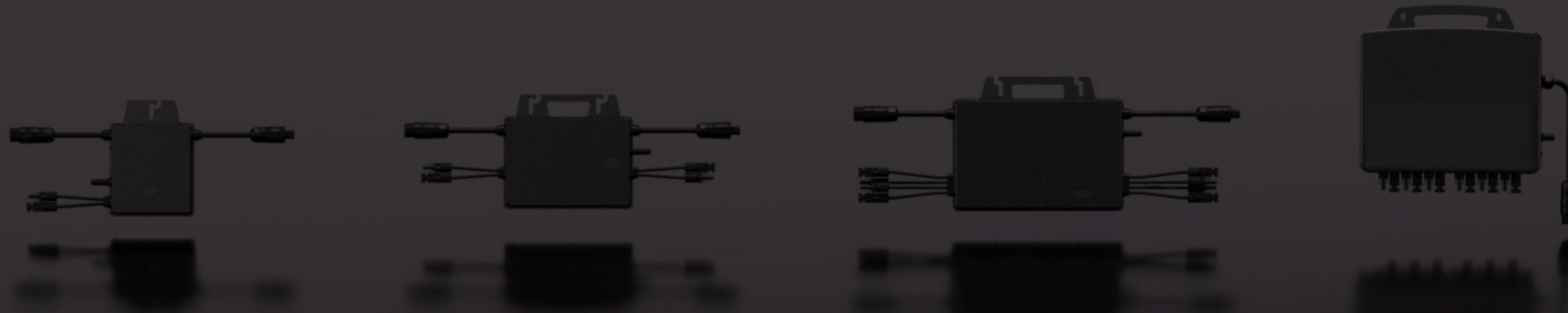


10 yrs+ Dedicated to the PV Solar industry

50+ Exporting to more than 50 countries and regions

6M+ Annual production capacity





Background of Micro Inverter

Micro Inverter, an emerging solar inverter technology, was commercialized in 2008. Its primary function is to convert the DC power generated through the panel into AC at each panel level and transmit it further for direct use or to a grid. The significant rise in demand for micro inverters can be attributed to a growing number of solar rooftop installations from residential to C&I project applications.

- ◆ 300~3000W power output, Max. input current of **18.5 A**
- ◆ Up to 6 MPPT, Max. efficiency up to **97.2%**
- ◆ Real-time monitoring via Projoy **M-Cloud V2** app and portal
- ◆ Suitable for various installation conditions
- ◆ Standard **12** years warranty, up to **25** years lifespan

A Full Range of Products



PSOL-MS300/MS350/MS400



PSOL-MS600/MS700/MS800



PSOL-MS1600/MS1800/MS2000



PSOL-MS2250H/MS3000H/MS3000L



For Balcony Solar System

For Balcony & Residential Application

For Residential & SMB Application

For C&I Solar Project

M-Cloud V2 Web/App
PEEM-S100/T300



M-cloud V2 Monitoring



Main Features

High Efficiency

In general, shade has an effect on current. When there is shade on solar panels, it will not only reduce the current of that panel, but affect the output of the whole PV solar systems.

As a representative technical route in MLPE, Projoy Micro inverter has multi-channel MPPT, which can track and converts power for single PV module. Which means solar panels will continue performing efficiently even if one panel isn't producing as much electricity as the others. To be more specific, if one of your panels is under-performing, you can identify and have your installer diagnose and fix the issue. On the other hand, if something's wrong with one micro inverter, this won't shut down your whole system, just the panel attached to that inverter.

High Flexibility

If you have a complex roof or one with partial shading, then Projoy micro inverter is the way to go. It is affixed to the back of every solar panel and maximize the output of each solar panel independent of the production of any neighboring panel, making them suitable for various installation conditions. Moreover, if you consider to expand your rooftop solar system in the future, simply added another pair of Projoy micro inverter to your existing solar array and that's it.

High Performance

Micro inverters have the ability to track the production of each individual panel. Projoy offers a real-time monitoring system called M-Cloud V2, simply download the M-Cloud V2 app via a smart phone, or sign in the M-Cloud V2 Portal on a computer, you will be able to visually compare how each panel is performing independently, and quickly identify if a particular panel or micro inverter is failing.

High Safety

PV modules output energy under sun radiation can lead to high DC voltage and easily cause DC arc, resulting in PV system fire accident. Meanwhile, if the PV array wire is damaged, the electric shock risk might exist, threatening the safety of firefighters.

Fortunately, Projoy Microinverter adopts multi-channel MPPT design, each inputs with low DC voltage to reduce the risk of DC high voltage and DC arc, and therefore to create a safe rescue environment for firefighters, reduce fire losses, and ensure the safety of people and property.

It is also worth to mention that Projoy micro inverters are built to last up to 25 years, featuring with IP67 high level of dust-proof and waterproof, unique radiating fin design and good heat dissipation. The company offers a minimum 12-year warranty, including the communication module.

On-grid Safety Solution with Micro Inverter

Low DC Voltage, Module-level MPPT, Efficient and Reliable

Safe and efficient PV system solution with Projoy micro inverter

Module-level MPPT to track the maximum efficiency

Low DC voltage to guarantee safety



Energy Storage Safety Solution with Micro Inverter

Safe and High Efficiency, Flexible and Multiple Use, Store your Home Energy

A perfect match to build your solar-ready home

Flexible and customizable to meet all users' need

Improving energy efficiency in your home



Product Datasheet

Model	MS300	MS350	MS400
Input Data (DC)			
Recommended Module Power (W)	300-550	300-550	300-550
Start up Voltage (V)	22	22	22
MPPT Voltage Range (V)	16~60	16~60	16~60
Max. Input Voltage (V)	60	60	60
Max. Input Current (A)	14	14	14
Max. Input Short-circuit Current (A)	20	20	20
Output Data (AC)			
Max. Continuous Output Power (VA)	300	350	400
Nominal Continuous Output Power (W)	300	350	400
Nominal Output Current (A)	1.3	1.52	1.74
Max. Output Current (A)	1.45	1.59	2
Nominal Output Voltage (V)	220/230/240, L/N/PE		
Nominal Frequency (Hz)	50/60		
Power Factor	>0.99 default , 0.8 leading ... 0.8 lagging		
Output Current Harmonic Distortion	<3%		
Max. Units Per Branch	12	10	9
Efficiency			
Peak Inverter Efficiency	96.7%		
CEC Weighted Efficiency	96.5%		
EU Efficiency	96.3%		
Nominal MPPT Efficiency	99.9%		
Night Time Power Consumption (mW)	< 50		
Mechanical Data			
Dimensions (W×H×D mm)	178 x 153 x 28		
Weight [kg]	1.98		

Appearance



Product Datasheet

Model	MS600	MS700	MS800
Input Data (DC)			
Recommended Module Power (W)	300-550	300-550	300-550
Start up Voltage (V)	22	22	22
MPPT Voltage Range (V)	16~60	16~60	16~60
Max. Input Voltage (V)	60	60	60
Max. Input Current (A)	2x14	2x14	2x14
Max. Input Short-circuit Current (A)	2x20	2x20	2x20
Quantity of MPPT	2	2	2
Output Data (AC)			
Max. Continuous Output Power (VA)	600	700	800
Nominal Continuous Output Power (W)	600	700	800
Nominal Output Current (A)	2.61	3.04	3.48
Max. Output Current (A)	3	3.19	4
Nominal Output Voltage (V)	220/230/240, L/N/PE		
Nominal Frequency (Hz)	50/60		
Power Factor	>0.99 default , 0.8 leading ... 0.8 lagging		
Output Current Harmonic Distortion	<3%		
Max. Units Per Branch	6	5	4
Efficiency			
Peak Inverter Efficiency	96.7%		
CEC Weighted Efficiency	96.5%		
EU Efficiency	96.3%		
Nominal MPPT Efficiency	99.9%		
Night Time Power Consumption (mW)	< 50		
Mechanical Data			
Dimensions (W×H×D mm)	250 x 170 x 28		
Weight [kg]	3		

Appearance



Product Datasheet

Model	PSOL-MS1600	PSOL-MS1800	PSOL-MS2000
Input(DC)			
Recommended Module Power [W]	300-550+	350-600+	400-700+
Start up Voltage [V]	22	22	22
MPPT Voltage Range [V]	16-60	16-60	16-60
Max. Input Voltage [V]	60	60	60
Max. Input Current [A]	16	16	16
Max. Input Short-circuit Current[A]	20	20	20
Quantity of MPPT	4	4	4
Output [AC]			
Max. Continuous Output Power [VA]	1600	1800	2000
Nominal Continuous Output Power [W]	1600	1800	2000
Nominal Output Current [A]	7	7.8	8.7
Max. Output Current [A]	8	9	10
Nominal Output Voltage [V]	220/230/240, L/N/PE		
Nominal Frequency [Hz]	50/60		
Power Factor	>0.99 default, 0.8 leading ... 0.8 lagging		
Output Current Harmonic Distortion	<3%		
Max. Units Per Branch	5	4	3
Efficiency			
Peak Inverter Efficiency	96.7%		
CEC Weighted Efficiency	96.5%		
Nominal MPPT Efficiency	99.9%		
EU Efficiency	96.3%		
Night Time Power Consumption [mW]	< 50		
Mechanical Data			
Dimensions [WxHxD mm]	331 * 261 * 44		
Weight [kg]	5.5		
Type of Enclosure	IP67		
Cooling	Natural Convection		
Environmental Data			
Operating Ambient Temperature Range [°C]	-40 °C to 65°C		
Operating Internal Temperature Range [°C]	-40 °C to 85°C		
Relative Humidity	0-100% condensing		
Max. Operating Altitude Without Derating [M]	2000		
Monitor	Integrated WiFi		

Appearance



Product Datasheet

Model	PSOL-MS2250H	PSOL-MS3000H	PSOL-MS3000L
Input(DC)			
Quantity of Input	4 inputs 4 Panels	6 inputs 5~6 Panels	4 inputs 7~8 Panels
Recommended Module Power [W]	480~700+	480~700+	380~600+
Start up Voltage per Input@Rated condition [W]	22	22	24
Operating Voltage Range [V]	18~60	18~60	22~120
Max. Input Voltage [V]	60	60	120
Max. Short-circuit Current Per Input [A]	20	20	16
Max. Input Current [A]	18.5	18.5	15
Quantity of MPPT	4	6	4
Output [AC]			
Max. Output Power [VA]	2250	3000	3000
Nominal Continuous Output Power [W]	2250	3000	3000
Nominal Output Current [A]	10.2	13.6	13.6
Max Output Current [A]	11	14	14
Nominal Output Voltage [V]	220/230/240, L/N/PE		
Nominal Frequency [Hz]	50/60		
Power Factor	>0.99 default, 0.8 leading ... 0.8 lagging		
Output Current Harmonic Distortion	<3%		
Efficiency			
Peak Inverter Efficiency	97.0%	97.1%	97.2%
CEC Weighted Efficiency	96.5%	96.6%	96.7%
Nominal MPPT Efficiency	99.9%	99.9%	99.9%
Mechanical Data			
Dimensions (WxHxD) [mm]	349 * 326 * 60		
Weight [kg]	6.4	6.8	6.8

Appearance



※ The AC voltage and frequency range may vary depending on specific country grid.



M-Cloud V2 Portal (Web page)



M-Cloud V2 (Mobile APP)

- ◆ Monitor Generation Data of Solar Plant
- ◆ Power Generation Statistics
- ◆ Module-level Monitoring System
- ◆ Fast Network Configuration



Model	PEEM-S100	PEEM-T300
Appearance		
AC Parameter		
Grid Type	Single phase	Three phase
AC Voltage	230V	230/400V
AC Frequency	50 / 60 Hz	50 / 60 Hz
Self-Consumption	< 1W	< 3W
Communication		
WiFi Type	WiFi (802.11 b/g/n)	WiFi (802.11 b/g/n)
WiFi Frequency Range	2412MHz-2472MHz	2412MHz-2472MHz
Maximum Distance to Router(Open Space)	100m	100m
Bluetooth Type	BLE 5.0	BLE 5.0
Bluetooth Frequency Range	2400MHz-2483.5MHz	2400MHz-2483.5MHz
Maximum Distance to mobile phone(Open Space)	50m	50m
Control		
Connection Limit	28 Microinverters	28 Microinverters
Communicate to Server	300 s	300 s
Communicate to Microinverter	300 ms	300 ms
Accessory		
External Antenna	Yes	Yes
Cable length of antenna	2m	2m
External CT	1	3
Cable length of CT	2m	2m
CT Type	φ16mm	φ16mm
Max. Current per CT	100A	100A
Mechanical Data		
Dimension(mm)	36 * 90 * 90	72 * 107 * 108
Weight (g)	130	230
Ambient Temperature(°C)	-20~+55	-20~+55
Mounting System	Rail mounted (35mm)	Rail mounted (35mm)
Indicator Light	1 * LED	1 * LED
Altitude(m)	< 2000	< 2000
Relative Humidity	0 - 95%, No condensation	0 - 95%, No condensation

