# 2000VA PV Grid-tied Micro Inverter PV-SMI-2000 series

Video

(for A Type only) (for B/C Type only)

Household ECO Solar PV

## Features

- Pure sine wave output (THD <3%)
- MPPT tracking efficiency up to 99.9%
- CEC weighted average efficiency up to 96.5%
- Maximum DC input voltage is 60V
- Equipped with various protections such as GFDI, surge protection
- IP67 protection level
- -40°C to 65°C operating temperature
- APP monitoring with built-in WiFi or PLC communication methods
- Real-time control of plant operation status
- Automatic high temperature and fault warrning
- Easy Installation, MC4 Plug &Play
- 10-year warranty (25-year warranty for B/C type)

## Applications

- Small commercial photovoltaic system
- Rooftop Photovoltaic System
- Floating Photovoltaic System

## Global Trade Item Identifier

- MW Search: http://www.meanwell.com.cn/serviceGTIN.aspx

## Description

The PV-SMI-2000 is a 2000VA micro-inverter that supports four-channel input with up to 750W per solar module, compatible with 99% of PV module models on the market. Equipped with independent MPPT technology, it achieves 99.5% tracking efficiency to maximize power generation under complex lighting conditions. Featuring built-in PLC/Wi-Fi communication, it enables real-time monitoring via APP/Web interfaces and offers automatic fault alarm/localization to enhance operational efficiency. Its standardized plug-and-play QC4 interface ensures "zero professional expertise required" for installation and expansion. With IP67 protection rating, it withstands extreme temperatures, humidity, salt spray, and dusty environments, making it adaptable to various photovoltaic systems.

## Model Encoding

**PV - SMI - 2000 A**

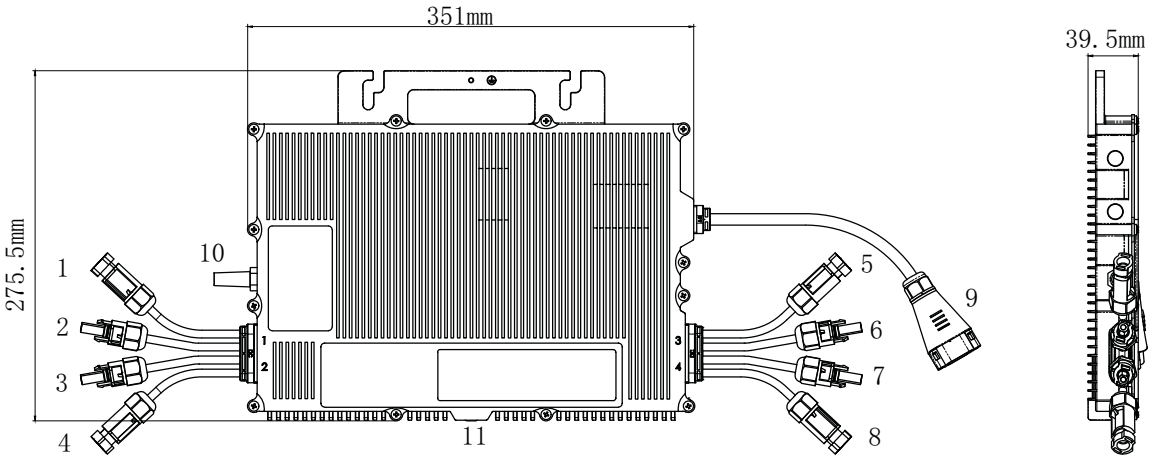
- A → Output voltage type: A: 230Vac, B: 208Vac, C: 240Vac
- 2000 → Rated power
- SMI → Series name
- PV → Product classification（PV：photovoltaics）

## SPECIFICATION

| MODEL | | PV-SMI-2000A | PV-SMI-2000B | PV-SMI-2000C |
|---|---|---|---|---|
| DC INPUT | PV POWER | 4x750W | | |
| | MPPT VOLTAGE RANGE | 22-55V | | |
| | STARTING VOLTAGE | 24V | | |
| | VOLTAGE(MAX.) | 60V | | |
| AC OUTPUT | CURRENT(MAX.) | 4x18A | 4x20A | |
| | POWER(PEAK) | 2000VA | | |
| | POWER(CONTINUOUS) | 2000VA | 1664VA | 1920VA |
| | VOLTAGE Note.1 | 230V | 208V | 240V |
| | CURRENT | 8.69A | 8A | |
| | POWER FACTOR | >0.99(full load) | 0.9leading…0.9lagging | |
| | THD(RATED POWER) | <3% | | |
| EFFICIENCY | EFFICIENCY(HIGHEST) | 97.30% | | |
| | MPPT EFFICIENCY | >99.5% | | |
| | NIGHT POWER CONSUMPTION | 110mW | | |
| ENVIRONMENT | WORKING TEMP | -40~65℃ | | |
| | WORKING HUMIDITY | 0-100% | | |
| | PROTECTION CLASS | IP67 | NEMA6 | |
| SAFETY & EMC | SAFETY STANDARDS | IEC 62109-1:2010/EN 62109-1:2010, IEC 62109-2:2011/EN 62109-2:2011, EN 62109-1:2010, EN 62109-2:2011 approved | | |
| | WITHSTAND VOLTAGE | I/P-O/P=4KVdc I/P-FG=0.8KVdc O/P-FG=4KVdc | | |
| | EMC EMISSION | Parameter | Standard | Test Level / Note |
| | | Conducted emission | EN 301489-17V3.2.4, EN IEC 61000-6-3:2021 | Class B |
| | | Radiated emission | EN 301489-17V3.2.4, EN IEC 61000-6-3:2021 | Class B |
| | ELECTROMAGNETIC RESISTANCE | Parameter | Standard | Test Level / Note |
| | | ESD | EN IEC 61000-6-1:2019, EN 301489-17V3.2.4 | Level 3, 8KV air ; Level 2, 4KV contact |
| | | RS | EN IEC 61000-6-1:2019, EN 301489-17V3.2.4 | Level 3 |
| | | EFT | EN IEC 61000-6-1:2019, EN 301489-17V3.2.4 | Level 2, 1KV |
| | | Surge | EN IEC 61000-6-1:2019, EN 301489-17V3.2.4 | Level 3, 2KV/Line-Line 2KV/Line-Earth |
| | | Conducted | EN IEC 61000-6-1:2019, EN 301489-17V3.2.4 | Level 3 |
| | | Magnetic Field | EN IEC 61000-6-1:2019, EN 301489-17V3.2.4 | Level 3 |
| OTHERS | DC CONNECTOR TYPE | QC4 | | |
| | COMMUNICATION | WiFi(2. 4G) | PLC | |
| | WEIGHT | 6.0kg | | |
| | DIMENSION | 351*275.5*39.5mm | | |
| NOTE | 1.After connecting to the gateway, the output voltage of the US version can be adjusted to 208Vac, and the continuous output power is 1664VA.<br>※Product Liability Disclaimer : For detailed information ,please refer to https://www.meanwell.com/serviceDisclaimer.aspx | | | |

## ■ Mechanism Specification

(unit: mm, tolerance: ± 1mm)




1: DC input 1 (+)
2: DC input 1 (-)
3: DC input 2 (+)
4: DC input 2 (-)
5: DC input 3 (+)
6: DC input 3 (-)
7: DC input 4 (+)
8: DC input 4 (-)

9: AC AC Output Terminal
10: WiFi Dongle (optional)
11: LED display

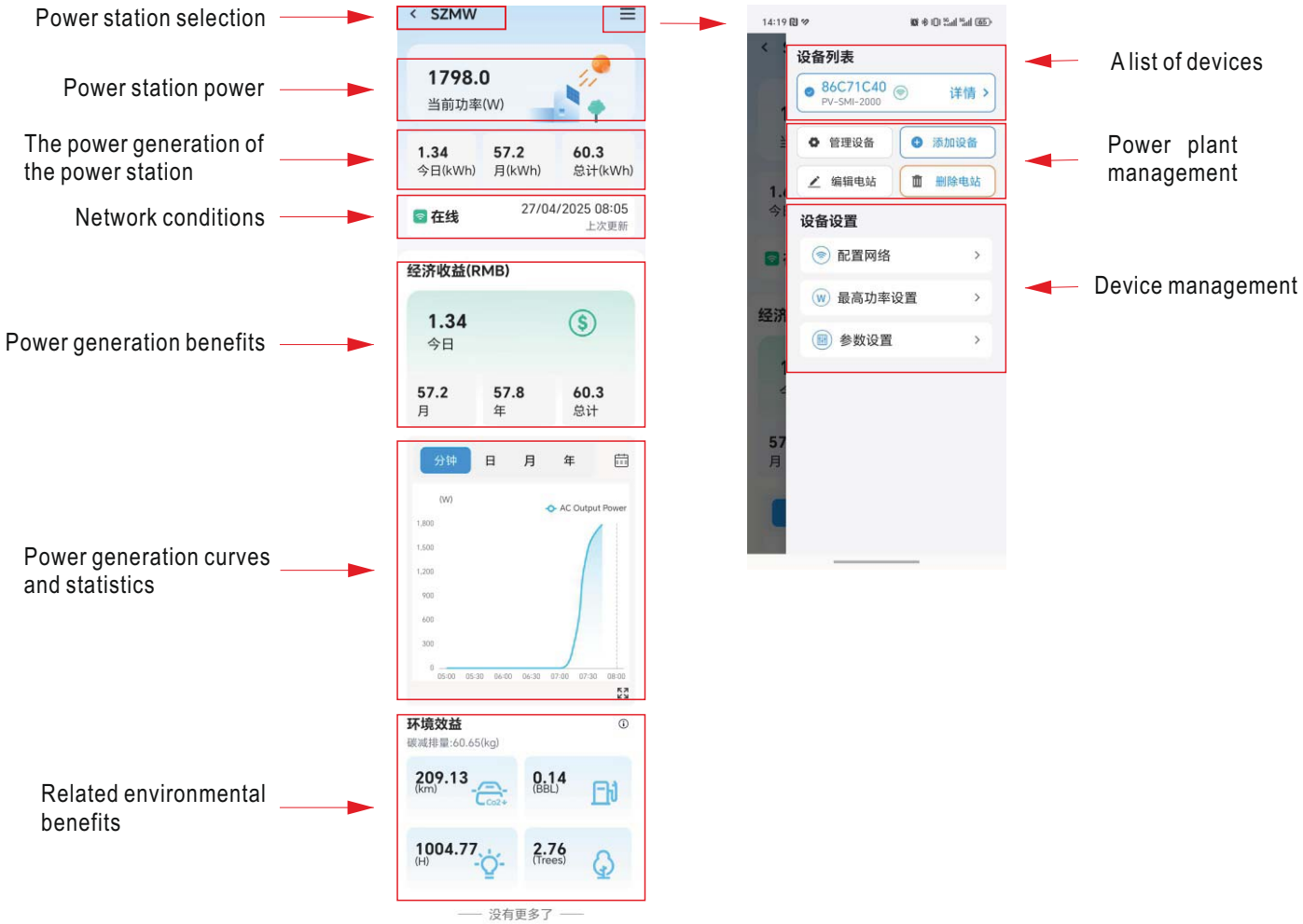
## ■ Light Color

| | Flashing per 1 sec | Flashing per 2 sec | Flashing per 4 sec |
|---|---|---|---|
| Green light | WiFi Connected<br>AC connected | WiFi Connected<br>Inverter Standby | WiFi Connected<br>Inverter Working |
| Red light | WiFi Connected<br>AC disconnected | Inverter Alert | Inverter Alert |
| Orange light | WiFi not Connected<br>AC connected | WiFi not Connected<br>Inverter Standby | WiFi not Connected<br>Inverter Working |

## ■ APP MONITORING

Introduction to the main interface of the APP:

Through the APP, you can remotely monitor the power generation data and equipment status of the power station in real time, allowing you to grasp the operation status of the power station anytime and anywhere, and improve the operation and maintenance efficiency.Helping users manage their energy systems efficiently.




Green Energy APP download point:

iOS APP　Android APP　Android APP

## ■ Accessory List

※ Standard accessories

| Install the tool |
| --- |
|  |

※ Optional accessories (Need to be ordered separately)

| MW's Order NO. | Item | Description |
| --- | --- | --- |
| PV-AC BUS-C |  | With Euro plug,<br>AC output cable<br>(The plug can be customized) |
| PV-AC BUS-T |  | Type T output bus |
| PV-SMG-001 |  | PLC communication<br>monitoring gateway |

## TYPICAL APPLICATIONS

※ Rooftop photovoltaic system: