

PV-SMI Series: 1000VA & 2000VA Micro Inverter

Product Strategy Center/ Harvey He
hmc@meanwell.cc

Product Intro

Driven by the dual forces of carbon neutrality goals and energy structure transformation, the photovoltaic (PV) industry is shifting from rapid capacity expansion toward higher efficiency, intelligence, and enhanced scenario adaptability. Micro inverters, with module-level MPPT (Maximum Power Point Tracking) control and independent power optimization, maintain high tracking efficiency even under complex lighting conditions. They effectively address challenges such as shading and system mismatch. As technology advances and costs continue to decline across the PV industry, micro inverters are expanding beyond their traditional high-end niche markets into commercial, industrial, and residential applications. In the era of distributed photovoltaics, they have emerged as the optimal solution, combining superior efficiency, safety, and economic value.

As a global leader in standard power supplies, MEAN WELL has been deeply engaged in the field of power electronics for decades and now introduces the PV-SMI Series Micro Inverters. The PV-SMI series supports two or four photovoltaic (PV) input channels, with a maximum input power of up to 750W per channel, making it compatible with 99% of PV modules on the market. Equipped with independent MPPT (Maximum Power Point Tracking) technology, it achieves a tracking efficiency of up to 99.5%, ensuring maximum energy yield even under complex lighting conditions. Featuring built-in PLC/Wi-Fi communication, the system enables real-time monitoring of module performance via a mobile app or web platform, with automatic fault detection and localization to enhance operation and maintenance efficiency. The series adopts a standard plug-and-play QC4 connector, enabling zero-skill installation and expansion for ultimate simplicity and convenience. With an IP67 protection rating, the PV-SMI series is built to withstand extreme temperatures, humidity, salt spray, and dust, making it an ideal solution for a wide range of photovoltaic systems.

Technical Data:

Model		PV-SMI-1000A	PV-SMI-2000A	ISI-501-212
DC Input	PV Power	750W*2	750W*4	500W*1
	MPPT Voltage Range	22-55V		25-50V
	Operating Voltage Range	24-60V		10.5V~15V
	Current	18A*2	18A *4	11A
AC Output	Power	1000VA	2000VA	500W
	Voltage	230V	230V	230V
	THD	< 5%	< 3%	< 3%
	Type	Grid-Tied (Requires connection to the grid at the output)		Off-Grid
Efficiency	Peak	97.3%		88%
	MPPT	> 99.5%		98%
Environment	Operating Temperature	-40~65°C		-20-60°C
	Protection Rating	IP67	IP67	/
Others	DC Connector Type	QC4		TB Terminal
	Communication	WIFI (2.4G)	WIFI (2.4G)	/
	Weight	3.4kg	6kg	2.35kg
	Dimensions	268*250*46.5 mm	351*275.5*39.5 mm	205*158*67 mm
Warranty		10 Years	10 Years	3 Years

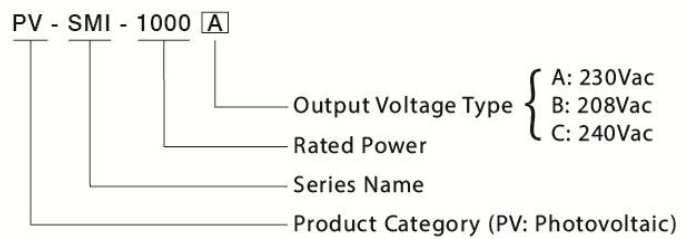
Features

- Pure sine wave output
- MPPT tracking efficiency up to 99.9%
- Maximum DC input voltage of 60V
- Multiple protections including GFDI and surge protection
- APP/Web monitoring with built-in Wi-Fi / PLC communication
- Wide operating temperature range: -40°C to 65°C
- IP67 protection rating
- Automatic high-temperature and fault alarms
- Real-time monitoring and control of plant operating status
- Plug-and-play design for easy installation

Applications



Order Information



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