

PV-ML Series:

20~60A MPPT Solar Charge Controller

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Product Intro

As global attention to climate change grows and carbon neutrality goals advance, renewable energy—especially solar power—continues to expand. The demand for off-grid solar systems and hybrid energy solutions is steadily increasing. As a global leader in power supply solutions with deep expertise in the industry, MEAN WELL is introducing the **PV-ML** series - MPPT solar controllers, available in three models ranging from 20A to 60A. These controllers support battery voltages from 12V to 48V and are compatible with multiple battery types, ensuring users can charge quickly and efficiently while driving broader adoption of clean energy.

The PV-ML series utilize Maximum Power Point Tracking (MPPT) technology, enabling automatic monitoring of sunlight conditions and real-time optimization of solar panel output power. This ensures maximum utilization of photovoltaic energy generation across various environmental conditions, improving charging efficiency by 20% to 30%. These controllers are widely applicable in residential, commercial, and portable solar power systems.

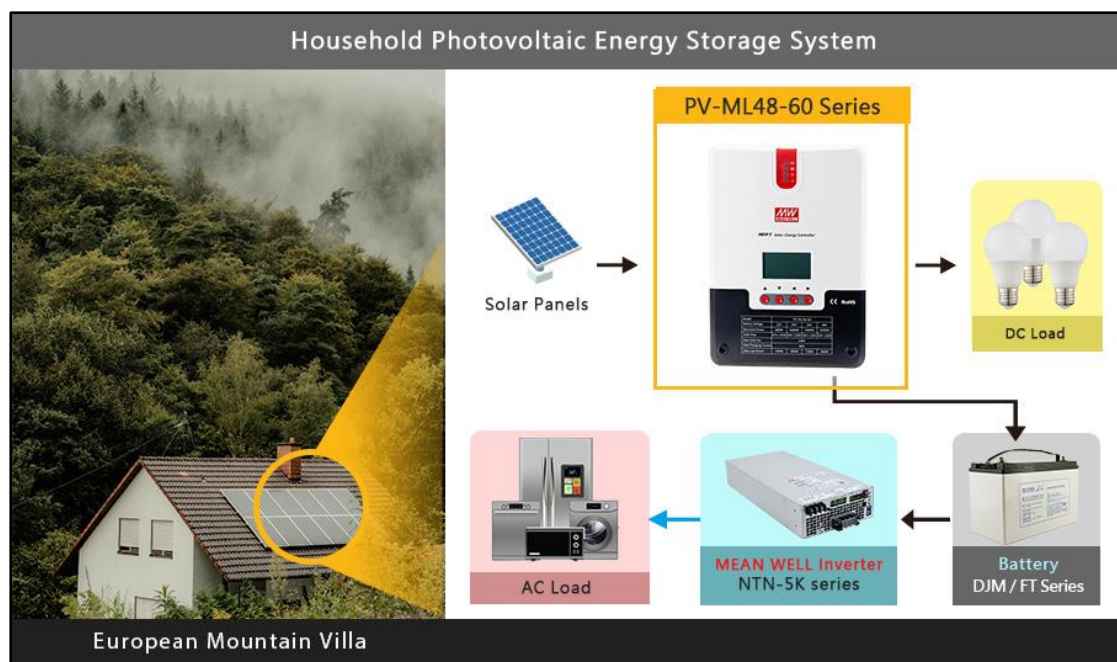
Technical Data:

Model	PV-ML24-20	PV-ML24-40	PV-ML48-60
Battery Type	Lead-Acid Battery / Lithium Battery / Customized		
System Voltage	12/24V Auto	12/24V Auto	12/24/36/48V Auto
Battery Voltage	9~35Vdc	9~35Vdc	9~70Vdc
Charging Current	20A	40A	60A
Load Current	20A	20A	20A
Max. PV Input Voltage	100Vdc	100Vdc	150Vdc
MPPT Voltage Range	Battery Voltage +2V~75V	Battery Voltage +2V~75V	Battery Voltage +2V~120V
Communication	RS232	RS232	RS232, RS485
Weight	1.4kg	2kg	3.6kg
Dimensions	210*151*59.5mm	238*173*72.5mm	285*205*93mm

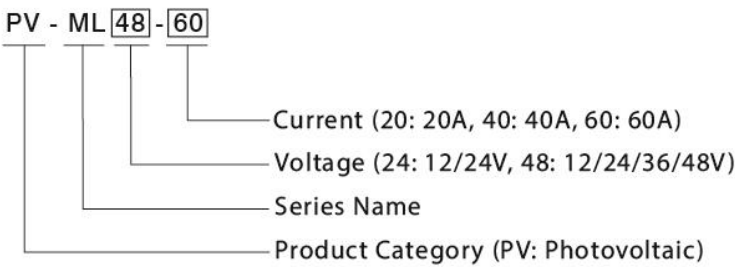
Features

- Supports simultaneous connection of PV, battery, and load
- Compatible with multiple battery types
- MPPT efficiency up to 99%
- Supports 2-string or multi-parallel PV module connections
- Comprehensive charge and discharge protection
- Free air convection
- 3 years warranty

Applications



Order Information



Download

[PV-ML24](#)

[PV-ML48](#)