

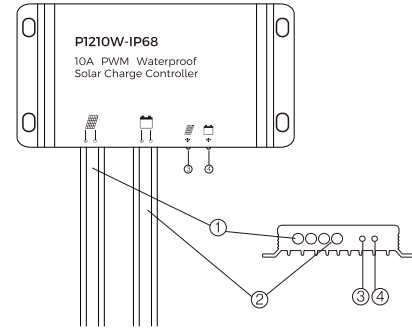
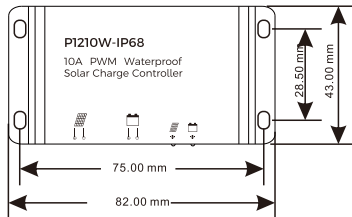
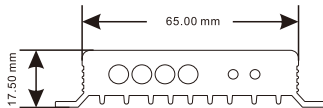
Quick Start Guide

Solar Charge Controller P1210W

◆ Controller Features

- IP68 waterproof design
- 12V battery system
- PWM 3-stage charge
- LED indication for charge status
- PV MC4 connector (optional)
- Long cable for connections (optional)

◆ Controller Dimensions



- ① Solar Input Cable
- ② Battery Cable
- ③ Solar Charge Indicator
- ④ Battery Status Indicator

◆ Wiring Notes

To connect the battery first, then battery indicator lights up. After using the PWM controller, to disconnect the solar input connector first, then disconnect the battery side.

◆ Status LED Indications

LED Indications	Status	Functions
Solar Charge Indicator	Off	Solar panel has no voltage
	Steady On	Solar panel has voltage
	Slow Flash	Charging in process
	Quick Flashing	System over voltage
Battery Status Indicator	Off	Battery is not connected
	Steady On	Battery is on
	Quick Flashing	Battery is over-discharged

◆ Use Suggestions

*As the controller generates heat during operation, you are advised to install it in an environment with good ventilation conditions.

*It's important to fully charge the battery regularly. At least one full charge every month is recommended, failure to do so may cause permanent damage to the battery. Only when inflow energy outpaces outflow energy can the battery be charged full. Users shall bear this in mind when configuring the system.

◆ Controller Specifications

ITEMS	PARAMETERS
Battery System Voltage	12V Only
Max System Current	10A
No-Load Loss	8mA
Max PV Input Voltage	< 30Voc
Max PV Input Power	170W
Equalize Charge Voltage	14.6V
Boost Charge Voltage	14.4V
Float Charge Voltage	13.8V
Boost Charge Recovery Voltage	13.2V
Over-discharge Recovery Voltage	12.6V
Over-Discharge Voltage	11.1V
Equalize Charge Duration	1Hour
Boost Charge Duration	2Hours
Operation Temperature	-31°F - 140°F / -35°C - 60°C
IP Protection	IP68