

# DH-PFM378-B100-WB

Integrated Solar Monitoring System(Without Lithium Battery)



## System Overview

Integrated solar monitoring system (without lithium battery), all in one design, using 4G to transfer monitoring data and solar to power, which is easy/quick to install and can save wiring to the greatest extent, includes three parts: 4G network camera, integrated solar power system and camera's mounting bracket, which is more convenient for sale, order and transportation.

It is compact, portable, easy to install, disassemble and maintain compared with conventional system.

Camera supports multi-angle flexible adjustment.

## Features

### Integrated sheet metal bracket

The bracket is built of a Q235 steel that makes it both strong and durable. It is ideal for installing solar panels, lithium batteries and cameras, and is designed to make installation and maintenance of the solar system more convenient.

### Monocrystalline silicon solar panel

Adopt efficient monocrystalline silicon solar panel to greatly improve light absorbance efficiency and power generation performance with dusky light.

- Integrated design, easy to install.
- Pole mount.
- Flexible angle adjustment of the solar panel and the camera.
- 100W Monocrystalline solar panel.
- Built sturdy to resist storms with sustained winds up to 117 km/h.
- Remote monitoring available through the mobile app.
- Maximum Power Point Tracking (MPPT) charging controller.
- RS-485 communication function.
- Electric protection.



### Remote monitoring with APP

With Dahua cameras, it supports real-time remote monitoring of the system operation status and alarm prompts of battery with APP.

### Maximum Power Point Tracking (MPPT) charging controller

MPPT controller helps significantly improve the energy utilization efficiency of the system, and raise the charging efficiency by 10%–30% compared with conventional PWM controller.

### RS-485 communication

RS-485 port and standard Modbus protocol can satisfy communication requirements in various scenarios.

### Electronic protection

Comprehensive electronic protection: Current limiting, short circuit, and reverse current protection of the solar panel; reverse connection, overvoltage, over-discharge, and over-temperature protection of the lithium battery; overload and short circuit protection.

## Scene

General application

Suitable to be installed in places such as scenic spots, courtyards, roads, farms, communities, and small construction sites.

Small business application

Applicable to scenarios where power is difficult to obtain, such as mining areas, oil/power transmission lines, forest fire prevention, and water conservancy.

Special application

Temporary monitoring of mobile toilets, mobile garbage stations, outdoor small-scale competitions, and more.

## Technical Specification

### Solar Panel

Type	Monocrystalline silicon
Max. Power	100 W
Output Voltage	18.8 VDC
Solar Cell Efficiency	21%
Max. Mechanical Load	5400 Pa

### Controller

Type	MPPT
Operating Voltage	12 VDC
Rated Charging Current	10 A
Rated discharge current	10 A
MPPT Tracking Efficiency	≥ 99%
Communication Mode	RS485
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Rated Charging Power	130 W
Over-discharge Protection Voltage	11.1 VDC
Others	Over-temperature ,over-discharge,overa-voltage and low-temperature protection of battery; overload and short circuit protection of load.

### Port

Power Output	Φ5.5 mm × Φ2.1 mm × 12 mm (Φ0.22" × Φ0.08" × 0.47")
RS-485	Red: RS485-A Black: RS485-B
Output Port	CSA authorized M15 2-core waterproof connector (connected to lithium battery)

### General

Main Body Material	Q235
IP Rating	IP65
Installation	Pole mount, Φ80mm~Φ150mm
Adjustable Angle	Solar panel: H: 360°, V: 20°/40°/60° Camera: H: 360°, V: 0°-75°

Product Dimensions	815mm x 846.8mm x 893.3mm (32.1" x 33.3" x 35.2")
Packaging Dimensions	880 mm × 765 mm × 275 mm (34.65" × 30.12" × 10.83")
Packaging Method	1 pc in each carton
Net Weight	20.1 kg (44.31 lb)
Gross Weight	23.8 kg (52.47 lb)

## Environment

Operating Altitude	< 3000 m (9842.5 ft)
Applicable Area	Areas with daily exposure to solar radiation for more than 3.5 hours
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating Humidity	< 95% (RH)
Storage Temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage Humidity	< 95% (RH)

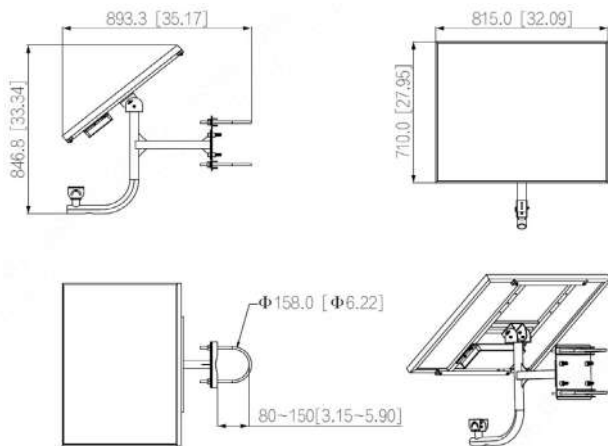
## Certifications

Certifications	CE: EN 55032:2015+A11:2020,EN 55035:2017+A11:2020,EN 55024:2010+A1:2015,EN 50130-4:2011+A1:2014 UKCA: EN 55032:2015+A11:2020,EN 55035:2017+A11:2020,EN 55024:2010+A1:2015,EN 50130-4:2011+A1:2014
----------------	--

## Ordering Information

Type	Model	Description
Solar Series	DH-PFM378-B100-WB	Integrated solar power system (Without Lithium Battery)
Accessories (Optional)	PFM372-L45-4S14P	Integrated Solar Lithium Battery
	IPC-HFW3241DF-AS-4G	4G Bullet Network Camera

### Dimensions (mm[inch])



### Accessories

Optional:



PFM372-L45-4S14P  
Integrated Solar  
Lithium Battery



IPC-HFW3241DF-AS-4G  
4G Bullet Network Camera

### Application

