DH-PFE221-LP1240CP-M100

Integrated Solar System(with battery)



- Integrated design simplifies the unified installation of camera, solar panel, and lithium battery.
- Heating starts when the battery temperature is 0 °C and stops at 5°C to ensure the normal working in low temperatures.
- Supports O&M for battery information, providing instant access to battery status and statistics.
- The indicator light shows the device status in real time.
- IP66 protection.

Series Overview

The Integrated Solar Power Supply System reliably provides stable power to devices when there is no mains power supply available. It is easy to install and use, and is highly durable and reliable.

Technical Specification

System

Output Voltage	12.8 VDC (11.2 VDC–14.6 VDC)
Output Current	Max 5 A
Standard Standby Time or Battery Life at 20°C (68°F)	Standby Time (h) = 512 (Wh)/Total Load Power Consumption (W); For example, if the total load power consumption is 5 W, then the standby time is 102 h.
Power Consumption In Idle	Standby status: <35 mA; Low power consumption status: 0.3 mA
Charging Method	PWM

Solar Panel

Type	Monocrystalline silicon
Max. Power	100 Wp (Power Tolerance: ±10%)
Efficiency	≥17%
Operating Voltage	18.40 VDC
Operating Current	5.64 A

Battery

Type	Lithium iron phosphate
Nominal Voltage	12.8 VDC
Nominal Capacity	40 Ah (+20 °C (+68 °F), 0.2 C) (Capacity tolerance: ±3%)



Low Temperature Discharge Performance	≥65% of nominal capacity (–20 °C (–4 °F), 0.2 C)
Normal Temperature Discharge Performance	≥99% of nominal capacity (+20 °C (+68 °F), 0.2 C)
High Temperature Discharge Performance	≥90% of nominal capacity (+55 °C (+131 °F), 0.2 C)
Upper Limit of Charging Voltage	14.6 VDC ± 0.1 VDC
Standard Charge Current	Max 10 A
Max. Charging Current	Max 10 A
Charge-discharge Cycle Life	2,000 times (Capacity ≥80% of initial capacity)

Protection

Over Discharge Protection Voltage	11.2 VDC ± 0.1 VDC
Low Temperature Charging Inhibition	0 °C (+32 °F)
Low Temperature Discharging Inhibition	–20 °C (–4 °F)
Protection	IP66
Others	Protection against overcurrent, overheating, overcharging, and short circuits.

Port

Power Output Port	2 waterproof ports; Φ5.5 mm × Φ2.1 mm × 10 mm (Φ0.22" × Φ0.08" × 0.39")
RS-485	1 terminal-type waterproof port.

Indicator Light

Indicator Light	1 × Solar panel indicator; 1 × Battery indicator; 1 × Load indicator

Structure

Main Body Material	Photovoltaic panel frame: Aluminum alloy; Battery compartment: PC; Bracket: Q235
Installation	Vertical pole mount Pole: Φ80 mm–Φ140 mm (Φ3.15"–Φ5.51")
Adjustable Angle	20°; 35°; 50°
Product Dimensions	930.0 mm × 607.8 mm × 473.4 mm (36.61" × 23.93" × 18.64") (L × W × H)
Appearance Color	White
Packaging Dimensions	1047 mm × 282 mm × 688 mm (41.22" × 11.10" × 27.09") (L × W × H)
Packaging Method	1 in one package
Net Weight	16.8 kg (37.04 lb)
Gross Weight	18.2 kg (40.12 lb)

Environment

Operating Altitude	≤3,000 m (9,842.52 ft)
Applicable Area	The device needs to be exposed to direct sunlight for at least 3.5 hours under standard lighting intensity to ensure it operates normally.
Operating Temperature	Charging: –20 °C to +50 °C (–4 °F to +122 °F); Self-heating starts when the battery temperature is 0 °C (+32 °F) and stops at +5 °C (+41 °F); Discharging: –20 °C to +55 °C (–4 °F to +131 °F)
Operating Humidity	10%–95%
Storage Temperature	–35 °C to +60 °C (–31 °F to +140 °F), the storage time is less than 3 months; –10 °C to +25 °C (+14 °F to +77 °F), the storage time is less than 6 months
Storage Humidity	65% ± 20% (RH)
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.

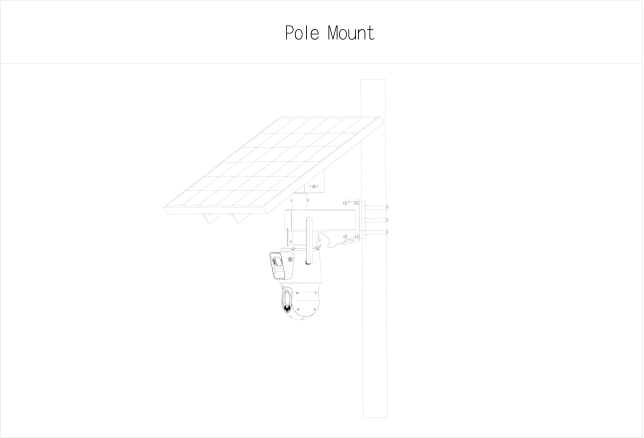
Certification

Certifications	CE EMC: EN IEC 61000-6-3:2021; EN IEC 61000-6-1:2019; EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019

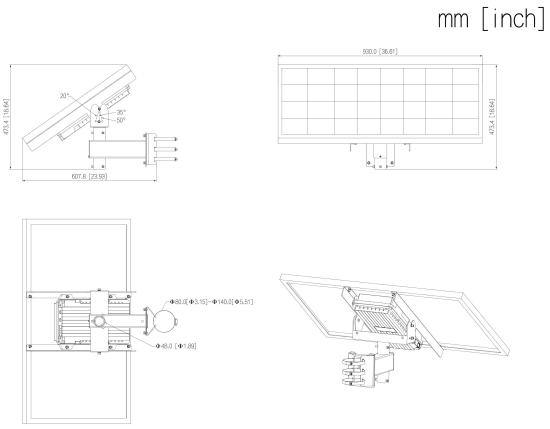
Ordering Information

Type	Model	Description
Integrated Solar System(with battery)	DH-PFE221-LP1240CP-M100	Integrated Solar System(with battery)

Installation



Dimensions (mm[inch])



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