

Smart Solar CCTV

Solar Power System | 150 W Panel | LiFePO4 50 Ah

Product Overview

A solar-powered supply and monitoring system for CCTV equipment, combining photovoltaic generation, LiFePO4 energy storage and MPPT charging with CC/CV control.

Application

DC power supply for CCTV and associated equipment, with remote battery-status monitoring.



Illustrative pole-mounted installation

SOLAR GENERATION	LiFePO4 STORAGE	MULTIPLE DC OUTPUTS
Photovoltaic panel rated at least 150 W.	Battery capacity of at least 50 Ah.	5 VDC, 12 VDC and 24 VDC supply.

Technical Specifications

Item	Specification
Solar panel	Photovoltaic panel rated at least 150 W.
Battery	LiFePO4 battery with a capacity of at least 50 Ah.
Charging system	MPPT with constant-current (CC) and constant-voltage (CV) charging control. 12 V: 25 A / 375 W; 24 V: 25 A / 720 W.
Lightning and surge protection	Two circuit breakers and one surge protection device.
Thermal management	Automatic cooling controlled by configured settings or a temperature setpoint.
Network ports	At least two RJ45 network ports.
DC outputs	5 VDC, 12 VDC and 24 VDC; approximately 29 A at 12 VDC.
Remote monitoring	Battery status accessible via network and viewable on a mobile device.
AC input (External charger)	Approximately 90-264 VAC; regulated DC output.
External battery backup	Supports an external 12 V battery for continuous power during mains failure.
Electrical protection	Undervoltage protection with automatic cutoff; short-circuit, overload and overvoltage protection.