dahua
TECHNOLOGY

KIT/DH-PFM378-B125-CB/DH-SD49425DB-HNY-GQ-EAU
Integrated Solar Monitoring System(Without Lithium Battery)

Series Overview

Dahua 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

Integrated Solar Power System (Without Lithium Battery)

Model	DH-PFM378-B125-CB

Solar Panel

Type	Monocrystalline silicon
Max. Power	125 W
Output Voltage	18.8 VDC
Solar Cell Efficiency	0.21
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	125 W
Over-discharge Protection Voltage	11.1 VDC
Others	Over-temperature, over-discharge, over-voltage and low-temperature protection of battery; overload and short circuit protection of load.

- Angle flexible adjustment of solar panel and camera mount.
- 125 W Monocrystalline solar panel.
- Aluminum alloy frame.
- Built sturdy to resist storms with sustained winds up to 117 km/h. (Note: The following four functions are only supported when battery power is used.)
- Remote monitoring available through the mobile app.
- Maximum Power Point Tracking (MPPT) charging controller.
- RS-485 communication.
- Electric protection.
- 1/2.8" 4Megapixel STARVIS CMOS.
- 25x optical zoom.
- Starlight technology.
- Max. 25/30fps@4M.
- IR distance up to 100 m.
- Perimeter protection.
- Face detection.
- SMD 3.0.
- IP66 rated.
- 4G.

Port

Power Output	Φ5.5 mm × Φ2.1 mm × 12 mm (Φ0.22" × Φ0.08" × 0.47")
RS–485	Red: RS-485-A Black: RS-485-B
Output Port	CSA authorized M15 2-core waterproof connector (connected to lithium battery)
RS-485	1 (baud rate: 1200 bps–9600 bps)
Alarm Linkage	Capture; recording; send email; preset; pattern; tour; alarm digital input
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Alarm I/O	2/1
Audio I/O	1/1

General

Main Body Material	Q235 steel/aluminum
IP Rating	IP65
Installation	Pole mount, Φ80 mm–Φ150 mm
Adjustable Angle	Solar panel: H: 360°, V: 10°/20°/30°/40°/50°
Product Dimensions	875 mm × 761.9 mm × 951.9 mm (34.45" × 30.00" × 37.48")
Packaging Dimensions	930 mm × 825 mm × 275 mm (36.61" × 32.48" × 10.83")
Packaging Method	1 pc in each carton

Net Weight	20.1 kg (44.31 lb)
Gross Weight	26 kg (57.32 lb)

Environment

Operating Altitude	< 3,000 m (9,842.5 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)
Operating Temperature	−40 °C to +65 °C (−40 °F to +149 °F)
Operating Humidity	≤ 95%
Protection	IP66, TVS 6000 V lightning proof; surge protection; voltage transient protection

Certifications

Certifications	CE: EN 55032:2015+A11:2020, EN 55030-4:2011+A1:2014, EN 55024:2010+A1:2015, EN 55035:2017+A11:2020 FCC: 47 CFR Part 15, Subpart B UKCA: EN 55032:2015+A11:2020, EN 55030-4:2011+A1:2014, EN 55024:2010+A1:2015, EN 55035:2017+A11:2020

Camera

Model	DH-SD49425DB-HNY-GQ-EAU
Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	256 MB
RAM	512 MB
Electronic Shutter Speed	1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 lux@F1.6; B/W:0.0005 lux@F1.6; 0 lux (illuminator on)
Illumination Distance	100 m (328.08 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	3 (IR)

Lens

Focal Length	5 mm–125 mm
Max. Aperture	F1.6–F3.6
Field of View	H: 51.9°–3.0°; V: 39.7°–2.2°; D: 63.1°–3.7°
Optical Zoom	25×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.1 m–0.5 m (0.33 ft–1.64 ft)

Iris Control	Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	2,500 m (8208.10 ft)	987.5 m (3239.83 ft)	500 m (1640.42 ft)	250 m (820.21 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless; Tilt: −15° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–80°/s; Tilt: 0.1°/s–80°/s
Preset Speed	Pan: 80°/s; Tilt: 80°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern; Preset; Scan; Tour
PTZ Protocol	DH-SD Pelco-P/D (Auto recognition)

Intelligence

IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification
Face Detection	Supports face detection, capturing snapshots, and enhancing face images. Face cutout is also offered, where you can cutout one face at a time and customize the size to be a one-inch photo. The supported methods for capturing snapshots are real-time capturing and quality first.
SMD	Yes

Video

Video Compression	H.264H; H.264B; Smart H.265+; H.264; H.265; MJPEG (Sub Stream); Smart H.264+
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Video Frame Rate	Main stream: 4M/3M/1080p/1.3M/720p @(1–25/30 fps) Sub stream 1: D1/CIF/VGA@ (1–25/30 fps) Sub stream 2: 720p@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 2,816 Kbps–13,056 Kbps H.265: 1,024 Kbps–7,936 Kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual

Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic (EIS)
Defog	Electronic
Digital Zoom	16 ×
Image Rotation	180°
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view; multiple colors available
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; PCM

Network

Network Port	RJ-45 (10/100 Base-T)
Carrier Network System	4G; 3G; 2G
Wireless Carrier Frequency Band	LTE-TDD: Dual-band Band 38/40 LTE-FDD: Hepta -band Band 1/3/5/7/8/20/28 WCDMA: Tri-band Band 1/5/8 GSM: Tri-band Band 850/900/1800
Network Protocol	FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	CGI; SDK; ONVIF (Profile S&G&T)
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB); NAS
Management Software	DSS; DMSS; NVR; Smart PSS; IVSS
Mobile Client	iOS; Android
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Audio Input	1 channel
Audio Output	1 channel

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Power

Power Supply	12 VDC, 3 A (−10% to +25%)
Power Consumption	Deep sleep: 0.05 W light sleep: 2.5 W Basic: 3.75 W (not pulling stream in 4G); 4.54 W (pulling stream in 4G); 7.98 W (illuminator + not pulling stream in 4G); 8.77 W (illuminator + pulling stream in 4G) Max: 15.49 W (illuminator + PTZ + pulling stream in 4G)

Structure

Product Dimensions	270.4mm × Φ160 mm (10.65" × Φ6.30")
Net Weight	2.6 kg (5.73 lb)
Gross Weight	4.2 kg (9.26 lb)

Ordering Information

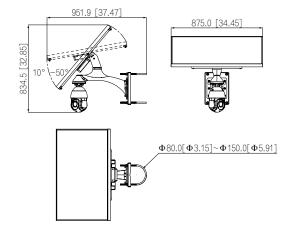| Type	Model	Description
Solar Power Supply System	KIT/DH-PFM378-B125-CB/DH-SD49425DB-HNY-GQ-EAU	Integrated Solar Monitoring System(Without Lithium Battery)
Accessories (Optional)	PFM372-L45-4S14P	Integrated solar lithium battery

Accessories

Optional:

PFM372-L45-4S14P
Integrated solar lithium battery

Dimensions (mm[inch])