PRIMAVERA TECHNOLOGY

PV-1228A
8MP Full-color Bullet Built-in-Mic

Launched by **Primavera** Technology, is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on **Primavera**'s advanced technologies, provides intelligent, simple and inclusive products and solutions.

Series Overview

With advanced deep learning algorithm , **Primavera** 3 Series network camera supports intelligent functions , such as perimeter protection and smart motion detection. In addition, with full-color technology , it provides a better image effect in the condition of low illuminance.

Functions

SMD Plus
With intelligent algorithm , **Primavera** Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

Smart H.265+ & Smart H.264+
With advanced scene-adaptive rate control algorithm, **Primavera** smart encoding technology realizes the higher encoding efficiency than H. 265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Full-color
With high-performance sensor and large aperture lens, **Primavera** Full-color technology can display clear colorful image in the environment of ultra - low illuminance . With this photosensitivity   technology , the camera can capture more available light , and display more colorful image details.

Siren and Light Active Deterrence
Primavera siren and light active deterrence network camera supports light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing

· 8MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
· Outputs max.8MP (3840 × 2160) @20 fps (AI function enabled by default)and supports 8MP (3840 × 2160) @25/30 fps (with AI function disabled)
· H.265 codec, high compression rate, low bit rate
· Built-in warm illuminator, and the max. illumination distance: 30 m
· ROI, Smart H.265+/Smart H.264+, flexible coding, applicable to various bandwidth and storage environments
· Rotation mode, WDR, 3D NR, HLC, BLC, digital · watermarking, applicable to various monitoring scenes
· Intelligent detection: Intrusion, tripwire (support the classification and · accurate detection of vehicle and human)
· Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
· Supports sound and light alarm linkage. When an alarm is triggered, the camera links sound alarm and light flashing
· Supports one-tap disarming. You can disarm the events of alarm output, sending email, audio, and light in the configured period
· Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card, built-in Mic and speaker
· 12V DC/PoE power supply
· IP67 protection
· SMD Plus
· Red and blue flashlight alarm

8Mp | Active Deterrence | Full-color | SMD Plus | Smart Codec | IP67

Cyber Security
Primavera network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

Protection (IP67, wide voltage)
IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.
Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/2.8" 8Megapixel progressive CMOS
Max. Resolution	3840(H) × 2160 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.007 Lux @ F1.4
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.4 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (Warm light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	F1.4
Field of View	2.8 mm: Horizontal 107° × Vertical 56° × Diagonal 127° 3.6 mm: Horizontal 89° × Vertical 46° × Diagonal 102°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 1.5 m (4.9 ft) 3.6 mm: 2.2m (7.2 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	87.7m (287.7 ft)	35.1 m (115.2 ft)	17.5m (57.4 ft)	8.8m (28.8 ft)
	3.6 mm	110.3m (361.8 ft)	44.1m (144.7ft)	22.1m (72.5 ft)	11m (36 ft)

Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion (support the classification and accurate detection of vehicle and human)
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+/Smart H.264+
Video Frame Rate	Main stream: 3840 × 2160 @(1–20 fps by default) 3840 × 2160 @(1–25/30 fps with AI function disabled) sub stream: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps) third stream:1280 × 1080 @ (1–25/30 fps)
Stream Capability	3 streams

Resolution	8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728/2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1(704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 12 kbps–8192 kbps
Day/Night	Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support with 1920 × 1080 resolution and lower)
Mirror	Yes
Privacy Masking	available

Audio

Built-in MIC	Yes
Audio Compression	PCM, G.711a, G.711Mu, G726

Alarm

Alarm Event	No SD card; SD card full; SD card error; service life warning (supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; external alarm; SMD; safety exception; light alarm; sound alarm (11 built-in sounds and custom voices importing)importing)

Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
User/Host	20 (Total bandwidth: 80 M)

Browser	IE: IE8 and later Chrome Firefox Safari: Safari 12 and later
Management Software	Xmeye: Xmeye pro, Primavera: Primavera view
Mobile Phone	IOS; Android

Certification

Certification	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC

Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	Basic power consumption: 3.1W (DC12V); 3.5W (POE) Max. power consumption (WDR + H.265 + red and blue lights flashing alternately + warm light + sound alarm): 7.8W (DC12V); 8.2W (POE)

Environment

Operating Conditions	−40°C to +60°C (−40°F to +140°F)/Less than 95% RH
Storage Conditions	−40°C to +60°C (−40°F to +140°F)
Protection Grade	IP67

Structure

Casing	Metal
Dimensions	Φ122.0 mm × 110.9 mm (4.8" × 4.4")
Net Weight	754 g (1.7 lb)
Gross Weight	915 g (2.0 lb)

	PFB205W	Wall Mount
	PFB220C	Ceiling Mount
	PFA152-E	Pole Mount
8MP Camera	PFM321D	12V DC 1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Ordering Information

Type	Model	Description
	PV-1228A	8MP Full-color Bullet Built-in-Mic , PAL
8MP Camera	PV-1228A	8MP Full-color Bullet Built-in-Mic, NTSC
	PV-1228A	8MP Full-color Bullet Built-in-Mic, PAL
	PV-1228A	8MP Full-color Bullet Built-in-Mic, NTSC
	PFA137	Junction Box

Dimensions (mm[inch])

⌀4.5 [⌀0.18]

⌀84.0 [⌀3.31]

105

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