

IPND-PB18F-IRW1

18MP Multi-sensor Panoramic AI Camera



Camera Specifications

Image Sensor	1/2.8" Progressive CMOS
Maximum Resolution	6912x2624
Lens Type	Fixed-focal
Focal Length	f = 3.5mm
Aperture	F2.0
Iris Type	Fixed iris
Field of View	180° (Horizontal) 62.5° (Vertical) 180° (Diagonal)
Shutter Speed	1/30 sec. to 1/32,000 sec.
WDR	WDR Pro
Day / Night	Yes
Removable IR-Cut Filter	Yes
Illuminators	4x LEDs - Up to 30 meters with Smart IR

Camera Specifications (cont'd)

Minimum Illumination	0.055 lux @ F2.0 (Color) <0.005 lux @ F2.0 (B/W) 0 lux with IR illumination on
Pan Range	±90°
Tilt Range	90°
Storage	MicroSD up to 1TB capacity NAS (network attached storage)
Remote Tools	Pixel calculator

Video Specifications

Compression	H265, H264, MJPEG
Maximum Frame Rate	30fps @ 6912x2624 (WDR off) 20fps @ 6912x2624 (WDR on)
Number of Streams	4 video streams (Up to 9 configurable profiles)
Signal to Noise Ratio	54 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constrained bit rate control, Smart Stream III

General settings

video title and time stamp overlay, day/night settings

Illuminators

illuminators, anti-overexposure

Image Settings

Image settings

white balance (auto, fixed current, manual, panorama, snow - auto, snow-panorama), image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, highlight mask, 3DNR, scene mode (auto, delbur)

Video Specifications (cont'd)

Exposure

BLC, HLC, exposure control (exposure level, exposure time, gain control), AE speed adjustment, WDR

Image Settings

Privacy mask

Pixel calculator

Lens alignment (auto alignment)

Scheduled profile settings

Audio Specifications

Audio Capability

Two-Way Audio (full duplex)

Audio Compression

G.711, G.726, MPEG-2 AAC-LC

Audio Interface

Built-in microphone

External microphone Input

External line output

Effective Range

5 meters (internal mic)

Network Specifications

Users

Live streaming for up to 10 users / devices

Security

Access list, Account block , Audit log, Configurable password strength protection, CSRF protection, Digest authentication, HTTPS , IEEE 802.1x, Secure boot, Session timeout, Signed firmware, User access log, User account management

Protocols

802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP/SFTP, HTTP/HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2/1.3, UDP, UPnP

Interface

10Base-T/100Base-TX Ethernet (RJ-45)

Onvif

Profile G, S, T supported

AI Analytic Specifications

Processing Capability

Custom SoC with built-in hardware learning accelerator

Object DetectionPeople, Vehicle (4-wheeled, 2-wheeled), Human / Vehicle
Best shot, Path Extraction

Vision Object Analytics

Attribute Extraction

People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color)

Human face Best shot, Re-Search Extraction

IC Secure Analytics

Deep Learning VCA (Advanced Smart Tracking)

Smart VCA - Package 1

Smart VCA (Intrusion detection, Loitering detection, Line crossing detection, face detection)

Smart VCA - Package 2

Unattended object detection, Missing object detection

Alarm and Events

Event Triggers

Audio detection, camera tampering detection, cybersecurity events (brute force attack event, cyberattack event, quarantine event), digital input, manual trigger, motion detection, periodical trigger, recording notification, SD card life expectancy, shock detection, system boot, video loss, video restoration

Event Actions

Event notification via audio clip, camera link, digital output, email, HTTP, FTP/SFTP, NAS server, SD card, push notification
File upload via email, HTTP, FTP/SFTP, NAS server, SD card

General Information	
Connectors	RJ45 cable connector Audio input Audio output Digital input Digital output (DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A) AC 24V power input Micro USB
Indicators	System power and status indicator
Power Interface	AC 24V, IEEE 802.3at PoE Class 4 (Simultaneous Power Redundancy Supported)
Power Consumption	PoE: Max. 18.81 W AC 24V: Max. 26.4 W
Dimensions	308 x 167 x 130 mm
Weight	2.4 kg
Certifications	EMC CE (EN 55032 Class A, EN 55024), FCC (FCC Part 15 Subpart B Class A) Safety UL (UL 62368-1), CB (IEC/EN 62368-1 including annex Y, IEC/EN 60950-22) Environment IK10, IP66, IP6K9K
Operating Temperatures	Starting Temperature: -30°C ~ 55°C (22°F ~ 131°F) Working Temperature: -40°C ~ 55°C (-40°F ~ 131°F) (IR off) -40°C ~ 50°C (-40°F ~ 122°F) (IR on)
Humidity	98% RH (non-condensing)

System Compatibility	
Operating Systems	Microsoft Windows 11 / 10 / 8 / 7 MacOS 10.12 - 26 (Chrome only)
Web Browsers	Chromium 58.0 or above (Chrome, Edge, Brave) Internet Explorer 10 / 11
3rd Party Video Players	VLC: 1.1.11 or higher
Accessories	
In the box	Quick installation guide, alignment sticker, screw pack, junction box
DORI (EN 62676-4 Standard)	
Detection (25PPM / 8PPF)	73.3 m (240.5 ft)
Observation (63PPM / 19PPF)	29.3 m (96.2 ft)
Recognition (125PPM/ 38PPF)	14.7 m (48.1 ft)
Identification (250PPM / 76PPF)	7.3 m (24 ft)