

IPND-M80V-IRW1

4x5MP IR Dome Network Camera



Camera Specifications

Image Sensor	1/2.8" Progressive CMOS
Maximum Resolution	2560x1920 (5MP) x 4
Lens Type	Motorized, Vari-focal, Remote Focus
Focal Length	F = 3.2~7.7mm
Aperture	F1.85~F2.4
Iris Type	Fixed Iris
Field of View	94° ~ 43° (Horizontal) 67° ~ 33° (Vertical) 129° ~ 54° (Diagonal)
Shutter Speed	1/30 sec. to 1/32,000 sec.
WDR	WDR Pro
Day / Night	Yes
Removable IR-Cut Filter	Yes

Camera Specifications (cont'd)

Illuminators	8x LEDs - Up to 30 meters with Smart IR
Minimum Illumination	0.07 Lux @ F1.85 (Color) 0.005 Lux @ F1.85 (B/W) 0 lux with IR illumination on
Tilt Range	0° ~ 105° each lens
Rotation Range	±90° each lens
Pan / Tilt / Zoom	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
Storage	MicroSD up to 1TB capacity NAS (network attached storage)

Video Specifications

Compression	H265, H264, MJPEG
Maximum Frame Rate	H.265 & H.264: 30 fps @ (2560x1920) x 4 MJPEG: 15 fps @ (2560x1920) x 4
Number of Streams	3 streams each channel; (up to total 26 profiles)
Signal to Noise Ratio	64 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constrained bit rate control, Smart Stream III

Video Specifications (cont'd)

Image Settings

General settings

video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings

Illuminators

illuminators, anti-overexposure, VCA-based Smart IR III

Image settings

white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, HLM, scene mode (auto, deblur)

Exposure

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

Focus

zoom, focus

Privacy mask (Color, Mosaic)

Pixel calculator

Scheduled profile settings

Audio Specifications

Audio Capability

Two-Way Audio (full duplex)*

* Requires accessory cable

Audio Compression

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

Audio Interface

Built-in microphone

External microphone input*

External line output*

* Requires accessory cable.

Effective Range

5 meters

Network Specifications	
Users	Live streaming for up to 20 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, certificate management, Trusted Platform Module (TPM)
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, M supported

AI Analytic Specifications	
Processing Capability	Custom SoC with built-in hardware learning accelerator
Vision Object Analytics	Object Detection People, Vehicle (4-wheeled, 2-wheeled), Human / Vehicle Best shot, Path Extraction
	Attribute Extraction People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color)
	Human face Best shot, Re-Search Extraction

AI Analytic Specifications (cont'd)

IC Secure Analytics

Deep Learning VCA (Smart Motion Detection, Smart VCA)

Smart VCA - Package 1

Smart Motion Detection (Five-window video motion detection, People detection, Vehicle detection, Time filter), Smart VCA (Intrusion detection, Loitering detection, Line crossing detection, face detection)

Smart VCA - Package 2

Unattended object detection, Missing object detection, Crowd detection

RealSight Engine

Smart IR III, Deblur, WDR, White Balance, Exposure Control

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

* Requires accessory cable

Event Actions

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

File upload via email, HTTP, FTP/SFTP, NAS server, SD card

*Requires accessory cable

General Information	
Connectors	RJ45 cable connector, Audio line input*, Audio line output*, 24VAC power input, Digital input*, Digital output 1*, Digital output (DO+: 12V, 10mA; DO-: 30V, Open Drain, 1A)* * Requires accessory cable.
Indicators	System power and status indicator
Power Interface	24VAC *, IEEE 802.3 at PoE Class 4 * Requires accessory cable.
Power Consumption	Max 25.5W
Dimensions	Ø 275 x 118 mm
Weight	2.7 kg
Certifications	EMC CE (EN 55032 Class A, EN 55035), UKCA (BS EN 55032: 2015 +A11: 2020, BS EN 55035: 2017 +A11: 2020), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), ICES-003 Issue 7 Safety UL (UL 62368-1), CB (IEC/EN 62368-1 including annex Y, IEC/EN 62471) Environment IK10, IP66, NEMA 4X
Operating Temperatures	Starting Temperature: -30°C ~ 55°C (-22°F ~ 131°F) Working Temperature: -40°C ~ 55°C (-40°F ~ 131°F) (IR off) -40C ~ 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, desiccant bag, screw driver, screws pack
DORI (EN 62676-4 Standard)	
Detection (25PPM / 8PPF)	Wide: 68.5 m (224.8 ft) Tele: 136.9 m (449.1 ft)
Observation (63PPM / 19PPF)	Wide: 27.4 m (89.9 ft) Tele: 54.8 m (179.6 ft)
Recognition (125PPM/ 38PPF)	Wide: 13.7 m (44.9 ft) Tele: 27.4 m (89.8 ft)
Identification (250PPM / 76PPF)	Wide: 6.8 m (22.3 ft) Tele: 13.7 m (44.8 ft)