









## **Technical Specifications**

System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	256MB
RAM	512MB

Camera Specifications	
Image Sensor	1/2.7" Progressive CMOS
Max. Resolution	2880×1616 (5MP)
Lens Type	Fixed-focal
Focal Length	f = 2.8 mm
Aperture	F1.6
Iris Type	Fixed iris
Field of View	111.0° (Horizontal) 59.0° (Vertical) 133.0° (Diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut filter	Yes
Illuminators	Built-in IR Illuminator up to 30 meters with Smart IR, IR LED*2
Minimum Illumination	0.055 lux @ F1.6 (Color) 0.005 lux @ F1.6 (B/W) 0 lux with IR illumination on
Pan Range	350°
Tilt Range	65°
Rotation Range	200°

Storage	Seamless Recording to MicroSD/SDHC/SDXC card (1TB capacity supported) and recording to network-attached storage (NAS)	
Built-in Installation Aids	Pixel Calculator	

Video		
Compression	H.265, H.264, MJPEG	
Maximum Frame Rate	30 fps @ 2880x1616	
Maximum Streams	3 video streams (Up to 7 configurable profiles)	
Main Stream	30fps @2880x1616, 2688x1512, 2560x1440, 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)	
2nd Stream	30fps @1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)	
3rd Stream	30 fps @ 1280x720, 640x360, 480x272 (16:9)	
S/N Ratio	58 dB	
Dynamic Range	120 dB	
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III	
	General settings video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings	
	Illuminators illuminators, anti-overexposure/smart IR	
Image Settings	Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR	
	Exposure BLC, HLC, exposure control (exposure level, exposure time, gain control), AE speed adjustment, WDR	
	Privacy mask Pixel calculator Scheduled profile settings	

Audio	
Audio Capability	One-way Audio
Compression	MPEG-2 AAC-LC, G.711, G.726
Interface	Built-in microphone
Effective Range	5 meters

Network	
Users	Live viewing for up to 10 clients
Security	Access list, CSRF protection, digest authentication, HTTPS, IEEE 802.1x, Password protection, signed firmware, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), user access log, user account management
Protocols	802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP/SFTP, HTTP, HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTCIP, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2/1.3, UDP, UPnP
Interface	10 Base-T/100 Base-TX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
ONVIF	Profile G, S, T supported, Onvif 21.06

Al Analytics	
Compute Capability	SoC with built-in hardware deep learning accelerator
Vision Object Analytics	Object Detection People, Vehicle )
	Path Extraction
Application	Deep Learning VCA (Smart Motion Detection, Smart VCA) Smart Motion Detection (Five-window video motion detection, People detection, Vehicle detection, Time filter), Smart VCA (Intrusion detection, Loitering detection, Line crossing detection)

Solution Integration	
VADP Package	Trend Micro (Default, 1-year free trial)
Video Motion Detection	Motion Detection (Five-window video motion detection)

Alarm and Event	
Event Trigger	Periodically trigger, system boot, manual trigger, digital input, motion detection, tampering detection, recording notification
Event Action	Event notification via digital output, audio clips, camera link, email, HTTP, FTP/SFTP, NAS server, SD card File upload via email, HTTP, FTP/SFTP, NAS server, SD card

General	
Connectors	RJ-45 cable connector for 10/100/1000Mbps Network/PoE connection DC 12V power input Digital input
LED Indicator	System power and status indicator
Power Input	IEEE 802.3af PoE Class 3 DC 12V
Power Consumption	PoE: Max. 6.9W/ 5.8W (IR on/off) typical 3.0W/4.1W (IR on/off) DC12V: Max 6.5W/ 5.4W (IR on/off)
Dimensions	Ø 91 x 63 mm
Weight	156 g
Certifications	EMC CE (EN 55032/EN 55035 Class A), UKCA (BS EN 55032/BS EN 55035 Class A), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), IC (ICES-003 Issue 7, Class A) Safety: UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 62471), LVD (IEC/EN 62368-1), UKCA (BS EN 62368-1)  IA BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1)
Operating Temperature	Starting Temperature: $-10^{\circ}\text{C} \sim 55^{\circ}\text{C} \ (14^{\circ}\text{F} \sim 131^{\circ}\text{F})$ Working Temperature: $-10^{\circ}\text{C} \sim 50^{\circ}\text{C} \ (14^{\circ}\text{F} \sim 122^{\circ}\text{F}) \ (IR \ on)$ $-10^{\circ}\text{C} \sim 55^{\circ}\text{C} \ (14^{\circ}\text{F} \sim 131^{\circ}\text{F}) \ (IR \ off)$
Humidity	90% RH (non-condensing)

System Requirements	
Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above

Other Players	VLC: 1.1.11 or above		
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Included Accessories	
Packing Contents	Quick installation guide, alignment sticker, screw pack,

DORI (EN 62676-4 Standar	d)
Detection (25PPM/ 8PPF)	63.6m (208.5 ft)
Observation (63PPM/ 19PPF)	25.4 m (83.4 ft)
Recognition (125PPM/ 38PPF)	12.7 m (41.6 ft)
Identification (250PPM/ 76PPF)	6.3 m (20.7 ft)

