







5MP Outdoor Bullet AI Camera

Technical Specifications

System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	8GB
RAM	2GB

Camera Specifications	
Image Sensor	1/2.8" Progressive CMOS
Max. Resolution	2560x1920 (5MP)
Lens Type	Motorized, Vari-focal, Remote Focus
Focal Length	f = 2.8 ~ 12mm
Aperture	F1.6 ~ F3.3
Iris Type	DC-iris
Field of View	95.4° ~ 28.7° (Horizontal) 68.8° ~ 21.5° (Vertical) 129.6° ~ 35.9°(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	0.04 lux @ F1.6 (Color) 0.005 lux @ F1.6 (B/W) 0 lux with IR illumination on
Tilt Range	90°
Rotation Range	180°
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom(4x on IE plug-in, 12x built-in)

Storage	Seamless Recording to MicroSD/SDHC/SDXC card (1TB capacity supported) and recording to network-attached storage (NAS)
Built-in Installation Aids	Remote focus, remote zoom, pixel calculator

Video	
Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30 fps @ 2560x1920
Maximum Streams	3 video streams (Up to 8 configurable profiles)
Main Stream	30fps @2560x1920,2048x1536,1920x1440,1600x1200,1280x960,800x600,640x480 (4:3) 30fps @ 2560x1440, 1920x1080, 1600x904, 1360x768,1280x720, 640x360 (16:9) 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
2nd Stream	30fps @ 1920x1440, 1600x1200, 1280x960, 640x480 (4:3); 30fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9) 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
3rd Stream	30fps @ 1280x960, 800x600, 640x480 (4:3); 30 fps @ 1280x720, 640x360 (16:9); 60 fps @ 1280x720, 640x360 (16:9)
S/N Ratio	59 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III
Image Settings	General settings video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings
	Illuminators illuminators, anti-overexposure/smart IR
	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), Image sharpener for motion blur, AE speed adjustment, WDR
	Focus zoom, focus
	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, secure boot, 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, , 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, specification available at www.onvif.org

Al Analytics	
Compute Capability	SoC with built-in hardware deep learning accelerator
Vision Object Analytics	Object Detection People, Vehicle (4-wheeled, 2-wheeled), Human / Vehicle Bestshot, Path Extraction
	Attribute Extraction People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color)
	Human face Bestshot, Re-Search Extraction
Application	Deep Learning VCA (Smart Motion Detection, Smart VCA) Smart VCA - Group 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)
Application available with license	Smart VCA - Group 2 Unattended object detection, Missing object detection, Crowd detection
	Smart VCA - Group 3 Running detection, Parking Violation Detection, Restricted Zone Detection
	*Support for more analytic applications and free trial, please visit VIVOTEK website.
RealSight Engine	Smart IR III, Deblur, WDR, White Balance, Exposure Control

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	Audio detection, camera tampering detection, cybersecurity events (brute force attack event, cyberattack event, quarantine event), manual trigger, motion detection, periodical trigger, recording notification, SD card life expectancy, shock detection, system boot
Event Action	Event notification via 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 10/100Mbps Network/PoE connection
LED Indicator	System power and status indicator
Power Input	IEEE 802.3af PoE Class 3
Power Consumption	Max. 12.4 W/ 8.0 W (IR on/off)
Dimensions	ø 91.0 x 226.6 mm
Weight	940 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 60950-22, IEC/EN 62471), LVD (IEC/EN 62368-1), UKCA (BS EN 62368-1) Environment IK10 (IEC 62262), IP66 (IEC 60529) IA BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1)
Operating Temperature	Starting Temperature: $-10^{\circ}\text{C} \sim 50^{\circ}\text{C} \ (-14^{\circ}\text{F} \sim 122^{\circ}\text{F})$ Working Temperature: $-30^{\circ}\text{C} \sim 55^{\circ}\text{C} \ (-22^{\circ}\text{F} \sim 131^{\circ}\text{F}) \ (IR \ off)$ $-30^{\circ}\text{C} \sim 50^{\circ}\text{C} \ (-22^{\circ}\text{F} \sim 122^{\circ}\text{F}) \ (IR \ on)$
Humidity	90%

System Requirements	
Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 11
Other Players	VLC: 1.1.11 or above

Included Accessories	
Packing Contents	Quick installation guide, alignment sticker, screw pack, cable gland

DORI (EN 62676-4 Standard)		
Detection (25PPM/ 8PPF)	Wide: 67.0 m (219.9 ft) Tele: 205.7 m (674.8 ft)	
Observation (63PPM/ 19PPF)	Wide: 26.7 m (87.5 ft) Tele: 81.6 m (267.8 ft)	
Recognition (125PPM/ 38PPF)	Wide: 13.3 m (43.7 ft) Tele: 41.0 m (134.4 ft)	
Identification (250PPM/ 76PPF)	Wide: 6.6 m (21.7 ft) Tele: 20.5 m (67.1 ft)	

