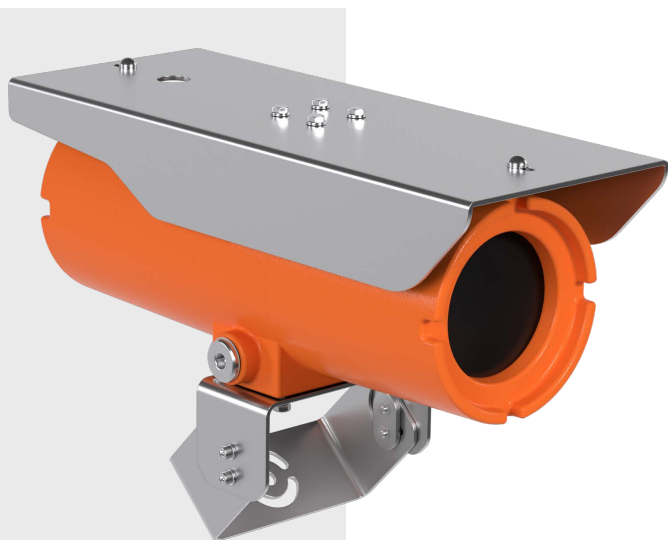




Explosion Proof

Network

TNO-X6074EPT1-Z

2MP Network Explosion Proof Fixed AI Camera



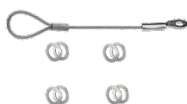
Key Features

- 2MP resolution
- Dual NPU for AI-based Image enhancement
- H.265/H.264: Max. 60fps/50fps(60Hz/50Hz)(WDR off)
- MJPEG: Max. 30fps
- Analytics events based on AI engine : Object detection (Person/Face/Vehicle/License plate), IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion), Slip&Fall detection, Face mask detection, Social distancing detection, Motion detection
- Business intelligence based on AI engine : People/Vehicle/Crowd counting, Queue management, Heatmap
- Support BestShot and full attributes
- Support Dynamic Privacy Masking
- extremeWDR, WiseNR II (Based on AI engine), WiseStream (Based on AI engine)
- Device certificate (Hanwha Vision Root CA), Secure storage (Secure element with FIPS 140-3 level3/CC EAL6+ certified), SBOM
- Powder-coated aluminum housing

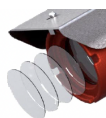
Cameras are supplied with the accessories shown below



HT-F2XX-GM
General Mount



HT-SF-FP
Protection Cable
supplied with
camera unit

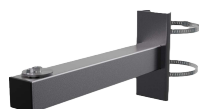


HT-F2XX-TO
Protective Lens
Film

Accessories (Optional)

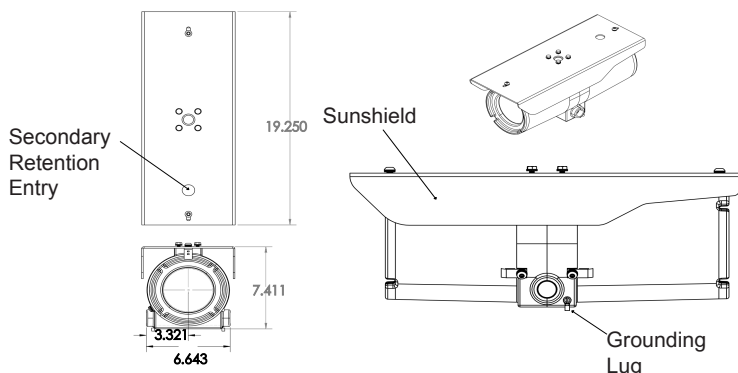


F2XX-WM
Wall Mount Bracket



F2XX-PM
Pole Mount Bracket

Dimensions



Model Number

TNO-X6074EPT1-Z

Body Style :
PTZ Bullet : O

Power :
P : PoE

Resolution :
6 : 6 Megapixel

Camera Series :
X : X series

Temperature Rating :
-40°C : T1

Certification :
cFmus C1/D1 : Z

TNO-X6074EPT1-Z

2MP Network Explosion Proof Fixed AI Camera

Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		1920x1080, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180
Max. Framerate	H.265/H.264	60fps/50fps(60Hz/50Hz)(WDR off) / 30fps/25fps(60Hz/50Hz)(WDR on)
	MJPEG	30fps
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.02
	BW(1/30sec, 30IRE)	0.002
Video Out		USB: USB Type C. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focus Control	Simple focus
Lens Type	DC auto iris, P iris(IR corrected), Manual, I-CS
Mount Type	C mount, CS mount

Operational

Day & Night		Auto(ICR)
Backlight Compensation		BLC, HLC, WDR, SSDR
Wide Dynamic Range (dB)		150
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization		Support
Defog		Support
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	8point Polygonal zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
	Dynamic Privacy Masking: Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
Gain Control		Off, Max gain, Manual

Operational

White Balance		ATW, NarrowATW, AWC, Manual, Indoor, Outdoor
LDC		Support(Fill/stretch mode)
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range	2~1/30,000sec
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Serial Interface		RS-485(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)
Alarm Interface	In/Out	2 configurable I/O ports
	Others	Support extra alarm I/O via optional I/O box
Alarm Triggers		Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription, Day/Night, Storage disruption
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP/SFTP, File upload(video clip): FTP/SFTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback, MQTT: publication
Audio In		Selectable(mic in/line in), Built-in mic
Audio Out		Line out

Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Person	Upper/Lower clothes color, Gender, Bag
	Vehicle	Type(car, bus, truck, motorcycle, bicycle), Color
	Face	Age, Gender, Face mask, Glasses
Thumbnail		BestShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Motion detection, Face mask detection, Social distancing detection, Slip & fall detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear)
	Normal	Defocus detection, Tampering, Audio detection, Shock detection
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap, Vehicle counting, Crowd counting

Network

Ethernet		Metal shielded RJ-45(10/100BASE-T)
Video Compression		H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression		G.711(PCM): 8kHz(64kbps), G.726(ADPCM): 8kHz(16/24/32/40kbps), AAC-LC: 16kHz(48kbps), OPUS: 48kHz(64kbps)
Smart Codec		WiseStream(Based on AI engine)
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR

Network

Streaming	Unicast	Up to 20 users
	Multicast	Support
	Multiple Streaming	Up to 5 profiles, 3 virtual channel support
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, SMTP(StartTLS), Syslog
Application Programming Interface	ONVIF	S, G, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Support

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure), SRTP, 802.1AE(MACsec)
Access Control	IP-based access control, MAC-based access control, Auto logout
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt(AES-256), Secure element
Supply Chain Security	SBOM
Security Certificate	Secure element(FIPS 140-3 level3, CC EAL6+), Consumer IoT Security Standard (ETSI EN 303 645), Security Built-in Process Certification (IEC 62443-4-1)

General

SoC	Type	Wisenet 9
	Dual NPU	Support
Memory	RAM	4GB
	Flash	8GB eMMC
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB x 2slot(Total 2TB)
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC	Max. 1TB x 2slots (Total 2TB) *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.

Environmental & Electrical

Operating Condition	Temperature	-50°C~+55°C(-58°F~+131°F)
	Humidity	0~95% RH(non-condensing)
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		Camera Only: PoE (IEEE 802.3af)
		Camera & Heaters: (IEEE 802.3af) PoE+ (IEEE802.3at) & PoE++ (IEEE 802.3bt)
Power Consumption		Camera Only: 7.5W Max.
		Camera & Heaters: 30W, 60W & 90W Max respectively as per input voltage above.
WisePower		Power monitoring, Eco mode
Power Redundance Failover		Support

Mechanical

Color		Black
Material		Aluminum
Material Management	Declaration	RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act)
RAL Code		RAL9005
Product Dimensions		81(W)x67(H)x165(D)mm(3.19x2.64x6.48")
Product Weight		851g(1.88lb)

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78



SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA

SERIAL:



MADE IN USA



MODEL: F203-XNB-A6004-01-01
POE INPUT: IEEE 802.3bt, 90W

ENTRY DEVICE US/Canada: Class I Division 1 Groups BCD [SEE TABLE 1](#), Type 4X, IP66

Class II/III Division 1 Groups EFG [SEE TABLE 2](#), Type 4X, IP66

Class I, Zone 1, AEx/Ex db IIB+H2 Gb [SEE TABLE 1](#), Type 4X, IP66

Zone 21, AEx/Ex tb IIIC Db [SEE TABLE 3](#), Type 4X, IP66

 II 2 G Ex db IIB+H2 Gb [SEE TABLE 1](#), IP66

 II 2 D Ex tb IIIC Db [SEE TABLE 1](#), IP66

CERT NO. FM24US0209X & FM24CA0056XIECEx FMG 24.0028X, & FM24ATEX0026X

WARNING: DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT. Install seal within 18 inches.

WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTION **NOTE:** FOR BATTERY REPLACEMENT DETAILS- SEE INSTRUCTION
AVERTISSEMENT: NE PAS OUVRIR LORSQU'ENERGISE OU QUAND UNE ATMOSPHERE EXPLOSIVE PEUT ETRE PRESENTE. Les joints de fermeture sont obligatoires dans une distance de 18 pouces.

AVERTISSEMENT - RISQUE DE CHARGE ÉLECTROSTATIQUE POTENTIEL - VOIR LES INSTRUCTIONS. REMARQUE : POUR LES DÉTAILS SUR LE REMPLACEMENT DE LA BATTERIE, VOIR LES INSTRUCTIONS

TABLE 1	
"T" CODE	AMB TEMP RANGE
T6/T85°C	-50°C TO +50°C
T5/T100°C	-50°C TO +55°C
T4/T125°C	N/A

TABLE 2		TABLE 3	
"T" CODE	AMB TEMP RANGE	"T" CODE	AMB TEMP RANGE
T6	-50°C TO +88°C	T87°C	-50°C TO +50°C
T5	-50°C TO +55°C	T102°C	-50°C TO +55°C
T4	N/A	T127°C	N/A