

TR-CE3147G3-FZ

4 MP Dual Illumination Fixed Mini Dome Network Camera



Key Features

- High quality imaging with 4 MP resolution
- 24/7 colorful imaging via NightEye technology
- Smart Hybrid Light: Integrates IR and White lights
- Scene-adaptive WDR
- Clear imaging against strong back light due to 130 dB WDR technology
- Focus on human and vehicle targets classification based on deep learning
- Audio and alarm interface available
- Water and dust resistant (IP67) and vandal-resistant (IK10)



Introduction

Powered by advanced deep learning algorithms, this camera delivers precise classification of human and vehicle targets across both front-end and back-end systems. By focusing exclusively on relevant targets, the device significantly enhances alarm accuracy and operational efficiency in complex environments.

NightEye technology provides 24/7 vivid colorful images with advanced F1.0 lenses, high performance sensors and friendly lighting. F1.0 super-aperture collects more light to produce brighter images. Advanced sensor technology can vastly improve the utilization of available light.

Specifications

Camera sensor

Sensor Size	1/1.8" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Color Sensitivity	Color: 0.0001 Lux @ (F1.0, AGC ON), 0 Lux with light
Day & Night	IR cut filter
Shutter Speed	1 s to 1/100,000 s

Camera lens

Lens Focal Length	Fixed focal lens, 2.8, 4 mm optional
Focal Length & FOV	2.8 mm, horizontal FOV 111.1°, vertical FOV 57.6°, diagonal FOV 138.5° 4 mm, horizontal FOV 95.2°, vertical FOV 48.3°, diagonal FOV 117.4°
Depth of Field	2.8 mm: 2.5 m to ∞ 4 mm: 3.1 m to ∞
Aperture	F1.0
Lens Mount	M16
Iris Type	Fixed
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°
DORI	2.8 mm: D: 61 m, O: 24 m, R: 12 m, I: 6 m 4 mm: D: 75 m, O: 30 m, R: 15 m, I: 7 m

Supplement Light

Supplement Light Type	IR, White Light
Supplement Light Distance	Up to 40 m
Wavelength	850 nm

Day/Night Switch	Day, Night, Auto, Schedule
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Video

Wide Dynamic Range (WDR)	130 dB
Image Enhancement	BLC, HLC, 3D DNR, Distortion Correction, Defog, EIS
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
Video Compression	Main stream: H.265/H.264/H.264+/H.265+, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, Fourth stream: H.265/H.264/MJPEG, *Third stream and fourth stream are supported under certain settings.
Simultaneous Live View	Up to 6 channels
Privacy Mask	8 programmable polygon privacy masks
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	5 fixed regions for main stream and sub-stream
e-PTZ	Support Patrol and Auto Tracking settings
SNR	≥ 52 dB
Video Bit Rate	32 Kbps to 8 Mbps
Bit Rate Control	CBR, VBR
Audio Type	Mono sound
Audio Compression	G.711 / G.722.1 / G.726 / MP2L2 / PCM / MP3 / AAC-LC
Environment Noise Filtering	Yes

Frame Rate

Main Stream	50 Hz: 25 fps (2688 × 1520) 60 Hz: 30 fps (2688 × 1520) 50 Hz: 50 fps (1920 × 1080, 1280 × 720) 60 Hz: 60 fps (1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) *The third stream is supported under certain settings.
Fourth Stream	50 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360) *Fourth stream is supported under certain settings.

Network

Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
Protocols	TCP/IP, ICMP, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets, SRTP, SFTP
User/Host	Up to 32 users 3 user levels: administrator, operator, and user
Web Browser	Plug-in free live view: Chrome 91+, Firefox 88+, Edge 91+, Safari 13+ Local service: Chrome 91+, Firefox 88+, Edge 91+
Network Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)

Security	Password protection, complicated password, watermark, IP address filter, basic and digest authentication, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP, control timeout settings, security audit log, TLS 1.1/1.2/1.3, host authentication (MAC address)
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I/O interface

Power Input Connection	Ø 5.5 mm coaxial power plug, reverse polarity protection
Power Output	12 VDC, max. 100 mA
Reset Key	Yes
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 512 GB
Alarm	2 inputs, 2 outputs (max. 24 VDC/24 VAC, 1 A)
Audio	Built-in Microphone Arrayed dual - microphone 1 line in + 1 line out mono sound, two-core terminal block connector

Features & Performance

Detection	Face Capture, people counting, line crossing, intrusion, region entrance, region exiting Support alarm triggered by specified target types (human and vehicle)
Smart Event	Scene change detection, audio exception detection, defocus detection, motion detection, video tampering alarm, exception
General Function	Heartbeat, anti-banding, mirror, flash log, password reset via email, pixel counter
Event Actions	Upload to FTP/NAS/memory card, notify surveillance center, trigger recording, trigger capture, send email, audible warning
API	ONVIF (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP

HEOP

Open Resources	Memory: 60 MB, Smart RAM: 450 MB, eMMC: 2 GB
Computing Power	1.5 TOPS
Open Capability	HEOP 2.0 OpendevSDK
Deep Learning Structure	Caffe, PyTorch, TensorFlow, PaddlePaddle, ONNX
Programming Language	C, C++

General

Dimension	234 mm × 120 mm × 117 mm (9.2" × 4.7" × 4.6")
Weight	Approx. 630 g (1.4 lb.)
Material	Base: aluminum alloy, cover: aluminum alloy Appearance: White and black
Power supply	12 VDC ± 25%, 0.8 A, max. 9.6 W, Ø 5.5 mm coaxial power plug, reverse polarity protection, PoE: IEEE 802.3af, Class 3, max. 11 W
Available Languages	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian

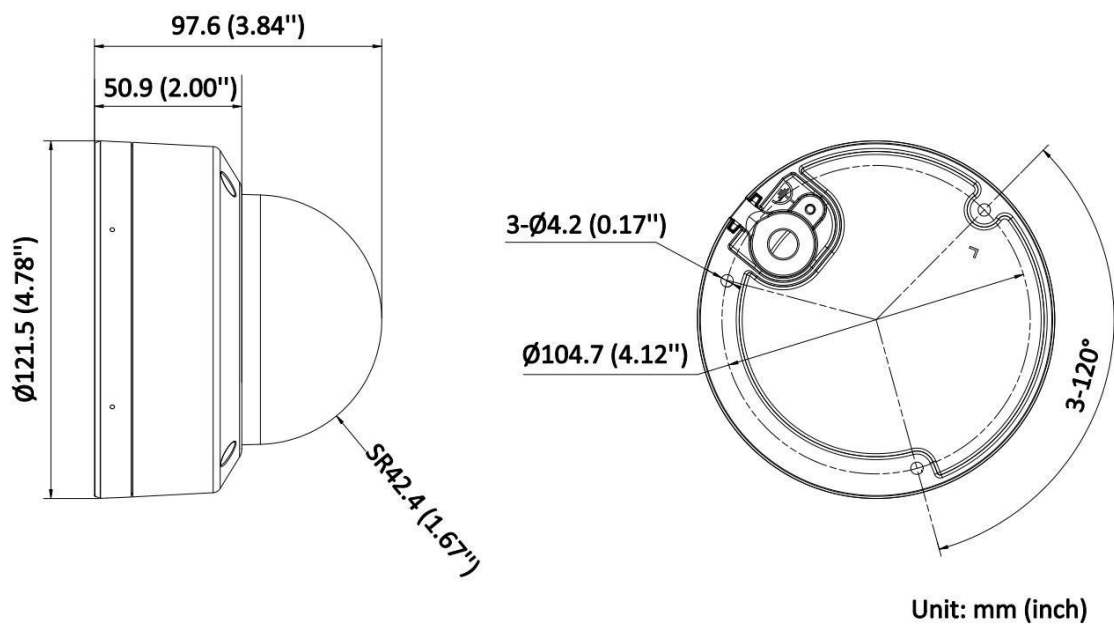
Environmental

Operating Temperature	-30 °C to 60 °C (-22 °F to 140 °F)
Humidity	Less than 95% non condensing

Approval

Protection	IP67: IEC 60529-2013, IK10: IEC 62262:2002
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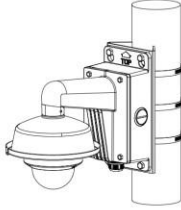
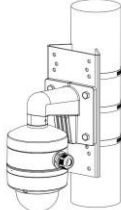
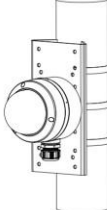
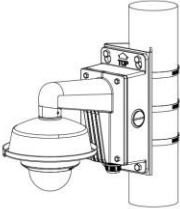
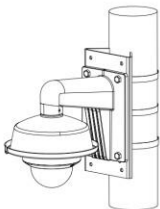
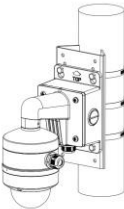
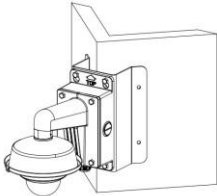
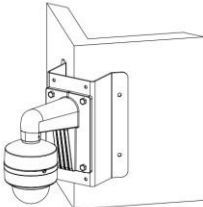
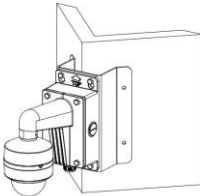
Dimension



Accessory (Optional)

Vertical Pole Mounting	Pendant Mounting	Junction Box	TR-ZI1272(120B)	Vertical Pole Mounting
				
Junction Box	Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting	Pendant Mounting
				

Installation Methods

Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting
				
Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting	Vertical Pole Mounting
				
Vertical Pole Mounting	Pendant Mounting	Pendant Mounting	Pendant Mounting	Junction Box
				
Wall Mounting	Wall Mounting	Wall Mounting	Wall Mounting	Wall Mounting
				
Wall Mounting	Corner Mounting	Corner Mounting	Corner Mounting	Corner Mounting
				

Note: Specifications are subject to change without notice.