

# DH-TPC-BF3221-T

Thermal Network Value Hybrid Bullet Camera



- 256x192 VOx uncooled thermal sensor technology
- Athermalized Lens (thermal camera), Focus-free
- 1/2.8" 2Megapixel progressive scan Sony CMOS
- Support ROI, Motion Detection, Color Palettes
- Support measure body temperature,
- Measurement Accuracy: Max ( $\pm 0.3^{\circ}\text{C}$ , with black-body)
- Active deterrence with white light & siren
- Built-in 2/2 alarm in/out
- Micro SD memory, IP67, PoE



## System Overview

Featuring a dual lens, fixed bullet camera, this series provides an all-in-one solution for capturing video surveillance for indoor and outdoor applications. Together with Thermal and Visible Technology, the camera is the perfect solution for dark, small area monitoring applications. The series combines one thermal camera for monitoring in total darkness and one visible camera with Smart IR for confirming details.

## Functions

### Uncooled Vox Technology

Dahua thermal cameras use uncooled Vox sensor technology. Because of small size and better performance, it's cost-effective solution for thermal security.

### High Sensitivity

High thermal sensitivity (<50mK) makes cameras capture more image details and temperature difference information.

### Active Deterrence

Active deterrence is to warn off intruders actively with white light and siren even before users are aware of the incidence. Once an intrusion is detected, the white light will turn on and the siren will buzz to alert the intruder. The white light and the content of siren is configurable.

### Technical Specification

#### Thermal Camera

Image Sensor	Uncooled VOx Microbolometer
Effective Pixels	256(H)x192(V)
Pixel Size	12um
Thermal Sensitivity (NETD)	<50mK@f/1.1
Spectral Range	8~14um
Image Setting	Brightness/Sharpness/ROI/AGC/FFC/3D DNR
Color Palettes	18(Whitehot/Blackhot/Ironrow/Icefire/Fusion/Rainbow/Globow/Iconbow1/Iconbow2 .etc)

#### Thermal Lens

Lens Type	Fixed	
Focus Control	Athermalized, Focus-free	
Focal Length	3.5mm	7.1mm
Angle of View	H: 50.6° V: 37.8°	H: 24° V: 18°

#### Visible Camera

Image Sensor	1/2.8" 2M CMOS
Effective Pixels	1920(H)x1080(V)
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.002Lux; B/W: 0.0002Lux; 0Lux (IR on)
IR Distance	35m
IR On/Off Control	Auto/Manual
IR LEDs	1

#### Visible Lens

Focal Length	4mm	8mm
Max Aperture	F2.0	F1.9
Angle of View	H: 84° V: 45°	H: 40° V: 22°

#### Temperature Measurement

Measurement Range	30°C ~+45°C
Measurement Accuracy	Max (±0.3°C, ±0.3%) with black-body Max (±1°C, ±1%) without black-body
Measurement Mode	Spot/Line/Area
Measurement Rule	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously

#### Video

Compression	H.265/H.264/MJPEG
Frame Rate	Main Stream: Thermal: 1280*960/1024*768/640*480/256*192@25fps Visible: 1080P (default)/720P@25fps  Sub Stream: Thermal: 640*480/256*192@25fps Visible: CIF(default)/D1@25fps
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 640 ~ 8192Kbps
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC/HLC/WDR
White Balance	Auto, Manual
Noise Reduction	Ultra DNR
Motion Detetion	Off/On (4 zone, Rectangle)
Region of Interest	Off/On (4 zone)
Electronic Image Stabilization (EIS)	NA
Defog	Off/On
Flip	180°
Mirror	Off/On
Privacy Masking	Off/On (4 area, Rectangle)

#### Audio

Compression	G.711a/G.711Mu/AAC
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#### Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Interoperability	ONVIF Profile S & G, API
Streaming Method	Unicast/Multicast
Max. User Access	10 Users/20 Users
Edge Storage	Micro SD (128GB) Memory status display (Normal/Error/Active/Formatting/Lock), NAS (Network Attached Storage), Local PC for instant recording
Web Viewer	<IE11, <Chrome45, <Firefox52
Management Software	Smart PSS, DSS
Smart Phone	Android, IOS

Certifications

Certification	CE (EN 60950:2000) FCC (FCC Part 15 SubpartB )
Interface	
Video Interface	1.0Vp-p/75Ω, PAL/NTSC (HDCVI Optional)
Audio Interface	In/Out 1/1
RS485	Support
Alarm	2/2 In/Out

Electrical

Power Supply	DC 12V/PoE
Power Consumption	12W (Max)

Environmental

Operating Condition	10°C ~ +35°C
Storage Conditions	10°C ~ +35°C/Less than 95% RH
Ingress Protection	IP67

Construction

Casing	Metal
Dimensions	279.9mm × 103.8mm × 95.8mm(With bracket)
Weight	< 1.4Kg

Ordering Information

Type	Part Number	Description
DH-TPC-BF3221-T	DH-TPC-BF3221P-TB3F4 DH-TPC-BF3221N-TB3F4	Thermal: 256x192 3.5mm lens Visible: 2MP 4mm lens
DH-TPC-BF3221-T	DH-TPC-BF3221P-TB7F8 DH-TPC-BF3221N-TB7F8	Thermal: 256x192 7mm lens Visible: 2MP 8mm lens

Dimensions (mm)

