DHI-TPC-BF5601

Thermal Network Bullet Camera



- Vanadium oxide uncooled focal plane detector.
- AI functions: heat detection, tripwire, intrusion, and human/vehicle classification.
- Wide input voltage 12 VDC ± 20%, and PoE.
- IP67 rated.

Featuring thermal channel, Thermal Network Bullet Camera offers various AI functions such as heat detection, tripwire, intrusion, and human/vehicle classification. The camera is widely applied in outdoor scenes of the medium-distance perimeter protection and heat detection.

Technical Specification

Thermal Camera

Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	640 (H) × 512 (V)
Pixel Size	17 μm
Thermal Sensitivity (NETD)	40 mK
Spectral Range	8 μm–14 μm
Image Setting	Brightness/Sharpness/ROI/AGC/FFC/3D DNR
Color Palettes	18 (white hot/black hot/fusion/rainbow/golden autumn/midday/iron red/amber/jade/sunset/icefire/ painting/pomegranate/emerald /spring/summer/ autumn/winter)

Thermal Lens

Lens Type	Fixed/F1.0
Focus Control	Athermalized, Focus-free
Focal Length	7.5 mm; 13 mm; 25 mm; 35 mm
Angle of View	7.5 mm: H: 91.2°; V: 70.3° 13 mm: H: 48.9°; V: 38.8° 25 mm:H: 24.6°; V: 19.8° 35 mm:H: 17.6°; V: 14.1°

Video

Compression	H.265; H.264; MJPEG
Frame Rate	Main Stream: Thermal: 1280 × 1024; 720p; 640 × 512@25/30 fps Sub Stream: Thermal: 640 × 512; 320 × 256@25/30 fps
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 640–8192 Kbps
Motion Detection	Off/On (4 zone, Rectangle)
Region of Interest	Off/On (4 zone)
Digital Zoom	4 × (24 levels)
Flip	180°
Mirror	Off/On
Privacy Masking	Off/On (4 area, Rectangle)

Audio

Compression	G.711A; G.711Mu; AAC; PCM

Intelligence

IVS	Tripwire, Intrusion
Advanced Intelligent Functions	Heat detection & alarm, Cold/Hot spot trace, Human/Vehicle classification

Network

Ethernet	RJ-45
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 (256GB) Memory status display (Normal / Error / Active / Formatting / Lock), NAS (Network Attached Storage), Local PC for instant recording
Web Viewer	>IE8; <Chrome42; <Firefox42
Management Software	SmartPSS; DSS
Smart Phone	Android; iOS

Certifications

Certification	CE (EN 60950: 2000); FCC (FCC Part 15 SubpartB)

Port

Video Interface	1 Port (CVBS/BNC)
Audio Interface	1/1 In/Out
RS485	Yes
Alarm	2/2 In/Out

Electrical

Power Supply	12 VDC/PoE/ePoE
Power Consumption	Max. 13 W

Environmental

Operating Condition	–40°C to +70°C (–40°F to +158°F)/Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	–40°C to +70°C (–40°F to +158°F)/Less than 95% RH
Ingress Protection	IP67

Construction

Casing	Metal
Dimensions	291 mm × 103 mm × 97 mm (11.46" × 4.06" × 3.82") (L × W × H)
Net Weight	1.5 Kg (3.31 lb)
Gross Weight	1.9 Kg (4.19 lb)

DRI Distance

Focal Length	Detection Distance①	Recognition Distance②	Identification Distance③
7.5 mm	Vehicle: 676 m (2,217.85 ft); Human: 221 m (725.07 ft)	Vehicle: 169 m (554.46 ft); Human: 55 m (180.45 ft)	Vehicle: 85 m (278.87 ft); Human: 28 m (91.86 ft)
13 mm	Vehicle: 1,173 m (3,848.43 ft); Human: 382 m (1,253.28 ft)	Vehicle: 293 m (961.29 ft); Human: 96 m (314.96 ft)	Vehicle: 147 m (482.28 ft); Human: 48 m (157.48 ft)
25 mm	Vehicle: 2,255 m (7,398.29 ft); Human: 735 m (2,411.42 ft)1	Vehicle: 564 m (1,850.39 ft); Human: 184 m (603.67 ft)	Vehicle: 282 m (925.20 ft); Human: 92 m (301.84 ft)
35 mm	Vehicle: 3,157 m (10,357.61 ft); Human: 1,029 m (3,375.98 ft)	Vehicle: 789 m (2,588.58 ft); Human: 257 m (843.18 ft)	Vehicle: 395 m (1,295.93 ft); Human: 129 m (423.23 ft)

①Detection Distance: Detects objects, but cannot recognize their characteristics (objects must cover more than 1.5 pixels of the image).
②Recognition Distance: Classifies objects into general categories, such as human, vehicle (the object must cover more than 6 pixels of the image).
③Identification Distance: Classifies objects into specific categories based on their characteristics, such as engineering truck, car (the object must cover more than 12 pixels of the image).

Note:
The table is the standard theoretical calculation and is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more. For the intelligent detection distance, refer to the table of Perimeter Protection Distance (IVS Distance) above.

Ordering Information

Type	Part Number	Description
DHI-TPC-BF5601	DHI-TPC-BF5601-B7	Thermal: 640 × 512; 7.5 mm lens
	DHI-TPC-BF5601-B13	Thermal: 640 × 512; 13 mm lens
	DHI-TPC-BF5601-B25	Thermal: 640 × 512; 25 mm lens
	DHI-TPC-BF5601-B35	Thermal: 640 × 512; 35 mm lens
Accessories (Optianal)	PFA121	Junction box
	PFA152-E	Pole Mount
	PFM320D	Power Adapter

Accessories

Optional:



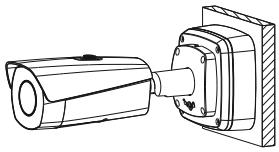
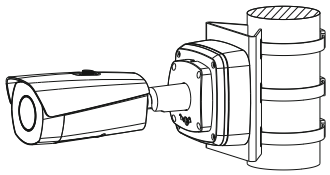
PFA121
Junction box



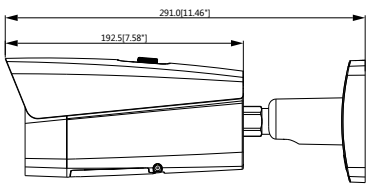
PFA152-E
Pole Mount

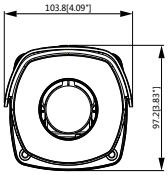


PFM320D
Power Adapter

Junction Mount	Pole Mount
PFA121	PFA121+PFA152-E
	

Dimensions(mm)





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