alhua TECHNOLOGY

DH-TPC-BF5401

Thermal Network Bullet Camera

· 400x300 VOx uncooled thermal sensor technology
· Athermalized Lens (thermal), Focus-free
· Support Fire detection & alarm
· Various lens optional (7.5/13/25/35mm)
· 2/2 alarm in/out
· Micro SD memory, IP67, PoE, ePoE

| Pro Series | 40mK | Fire Detection | Analysis | PoE | IP67 |

System Overview

Featuring a fixed lens bullet camera, this series provides an all-in-one solution that is especially beneficial for long distance video surveillance in outdoor applications. Together with Thermal technology, the camera's long range capabilities are able to be utilized even at night.

Environmental

With a temperature range of-40 °C to +70 °C (-40 °F to +158 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for ±15% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

Functions

Uncooled Vox Technology

Dahua thermal cameras use uncooled Vox sensor technology. Their small size and better performance make them a cost-effective solution for thermal security.

High Sensitivity

High thermal sensitivity (<40mK) allows cameras to capture more image details and temperature difference information.

Fire Detection & Alarm

With built-in fire detection functionality, the camera has the ability to detect fires from long range. Because thermal cameras are sensitive to temperature, they provide higher fire detection accuracy than standard cameras, making them particularly fit for applications such as forest fire prevention.

Intelligent Video System (IVS)

IVS is a built-in video analytics algorithm that delivers intelligent functions to monitor a scene for tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area.

Onvif

Technical Specification

Thermal Camera

Image Sensor	Uncooled VOx Microbolometer
Effective Pixels	400(H)x300(V)
Pixel Size	17um
Thermal Sensitivity(NETD)	40mK
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/F1.0			
Focus Control	Athermalized, Focus-free			
Focal Length	7.5mm	13mm	25mm	35mm
Angle of View	H: 53.7° V: 39.7°	H: 30.2° V: 22.6°	H: 15.5° V: 11.6°	H: 11.1° V: 8.3°
Effective Distance① Man(1.8m*0.5m)	D②: 221m R③: 57m I④: 28m	D: 382m R: 98m I: 49m	D: 735m R: 189m I: 95m	D: 1030m R: 265m I: 132m
Effective Distance Vehicle(4m*1.4m)	D: 490m R: 126m I:63m	D: 850m R: 219m I: 109m	D: 1634m R: 420m I: 210m	D: 2288m R: 588m I: 294m

Video

Compression	H.265 / H.264 / MJPEG
Frame Rate	Main Stream: Thermal: 1280x1024 / 720P / 400x300 @25/30fps
	Sub Stream: Thermal: 640x512 / 400x300 @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 640 ~ 8192Kbps
Motion Detection	Off/On (4 zone, Rectangle)
Region of Interest	Off/On (4 zone)
Electronic Image Stabilization (EIS)	NA
Digital Zoom	4x(19 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	Fire 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)

Interface

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

Electrical

Power Supply	DC 12V/PoE/ePoE
Power Consumption	Max. 13W

Environmental

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

Construction

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

Note:
①Effective distance values shown are nominal values and should be used as estimates only. Exact value calculations depend on a wide variety of conditions.
②D: Detection Distance
③R: Recognition Distance
④I: Identification Distance

Ordering Information

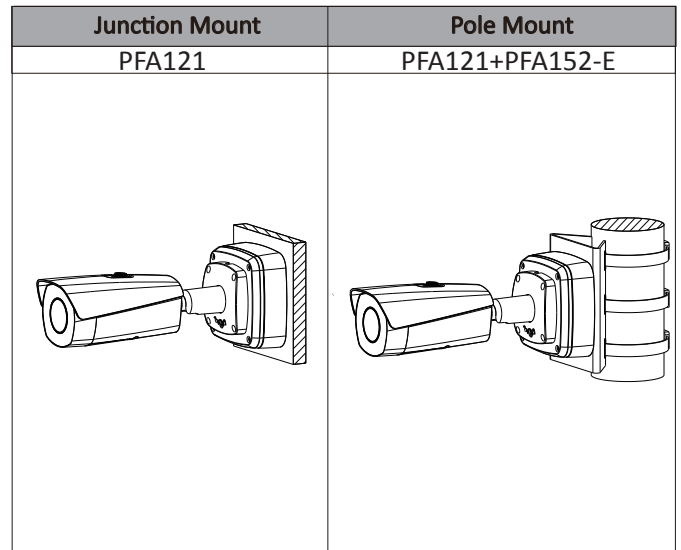| Type	Part Number	Description
DH-TPC-BF5401	DH-TPC-BF5401P-B7 DH-TPC-BF5401N-B7	Thermal:400x300 7.5mm lens
	DH-TPC-BF5401P-B13 DH-TPC-BF5401N-B13	Thermal:400x300 13mm lens
	DH-TPC-BF5401P-B25 DH-TPC-BF5401N-B25	Thermal:400x300 25mm lens
	DH-TPC-BF5401P-B35 DH-TPC-BF5401N-B35	Thermal:400x300 35mm lens

Accessories

Optional：

PFA121
Junction box

PFA152-E
Pole Mount

Mounting Type

Junction Mount	Pole Mount
PFA121	PFA121+PFA152-E

Dimensions(mm)

291.0[11.46"]

192.5[7.58"]

103.8[4.09"]

97.2[3.83"]