

# PTD2617/V1-3 Thermal & Optical Network Bullet Camera





PTD2617/V1-3 Thermal Bi-spectrum Network Bullet Camera equipped with built-in GPU which support intelligent behavior analysis algorithm, can realize high precision VCA detection and real-time alarm. It is applied to perimeter defense and fire-prevention purposes in critical infrastructures such as: community, villa, construction site, factory, 4S stores, and so on. The pre-alarm system helps you discover unexpected events immediately and protects you from property loss.

#### **Smart Function (Thermal Imaging)**

- Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD less than 40 mk (@25°C,F#=1.1)
- Powerful behavior analysis function, based on deep learning algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- Advanced fire detection algorithm
- Bi-spectrum image fusion, picture in picture preview

### **Thermal Imaging Module Function**

- $160 \times 120$  (the resolution of output image is  $320 \times 240$ ) resolution sensor, high sensitivity sensor, support contrast adjustment
- Shutter adjustment in various modes
- 3D DNR, 15 palettes of color adjustable, image detail enhancement
- Mirror image, digital zoom ×2, ×4, ×8, and local output

# Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Max. Resolution	160 × 120 (the resolution of output image is 320 × 240)
Pixel Interval	17μm
Response Waveband	8μm to 14μm
NETD	less than 40 mk (@25°C,F#=1.1)
Lens (Focal Length)	3.1 mm
MRAD	5.48 mrad
Field of View	50° × 37.2° (H × V)
Min. Focusing Distance	0.2 m
Aperture	F1.1
Optical Module	
Max. Image Resolution	1920 × 1080
Image Sensor	1/2.8" Progressive Scan CMOS
Min. Illumination	Color: 0.002 Lux @(F1.5,AGC ON), B/W: 0.0002 Lux @(F1.5, AGC ON)
Shutter Speed	1s to 1/100,000s
Lens (Focal Length)	4 mm
Field of View	87° × 46.2°(H × V)
WDR	Digital WDR
Day & Night	IR cut filter with auto switch
Image Function	
Bi-spectrum Image Fusion	Fusion view of thermal view and overlaid details of the optical channel
Picture in Picture	Combins details of thermal and optical image PIP, overlay thermal image on optical image
Smart Function	
VCA (Video Content Analysis)	4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 8 VCA rules.
Temperature Measurement	3 temperature measurement rule types, 21 rules (10 points, 10 areas, and 1 line).
Temperature Range	-20 °C to +150 °C (-4 °F to +302°F)
Temperature Accuracy	± 8 °C (± 14.4 °F)
Fire detection	Dynamic fire point detection, up to 10 fire points detectable.
Infrared	
IR Distance	Up to 40 m
IR Intensity and Angle	Automatically adjusted

Network			
Main Stream	Visible Light: 50Hz: 25fps (1920 $\times$ 1080), 25fps (1280 $\times$ 960), 25fps (1280 $\times$ 720) Visible Light: 60Hz: 30fps (1920 $\times$ 1080), 30fps (1280 $\times$ 960), 30fps (1280 $\times$ 720) Thermal: 25fps (160 $\times$ 120 (the resolution of output image is 320 $\times$ 240))		
Sub Stream	Visible Light: 50Hz: 25fps (704 $\times$ 576), 25fps (352 $\times$ 288), 25fps (176 $\times$ 144) Visible Light: 60Hz: 30fps (704 $\times$ 480), 30fps (352 $\times$ 240), 30fps (176 $\times$ 120) Thermal: 25fps (160 $\times$ 120 (the resolution of output image is 320 $\times$ 240))		
Video Compression	H.265/H.264/MJPEG, H.265+/H.264+ encoding with Baseline/Main/High Profile		
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/PCM		
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS,NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPOE		
Simultaneous Live View	Up to 20		
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User		
Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.13 access control, IP address filtering		
Integration			
Alarm Input	2-ch inputs (0-5vDC)		
Alarm Output	2-ch relay outputs, alarm response actions configurable		
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage		
Audio Input	1 3.5mm Mic in/Line in interface. Line input: 2-2.4V[p-p], output impedance:1KΩ±10%		
Audio Output	Linear Level; Impedance: $600\Omega$		
Reset	1 Reset Button		
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface, 1 RS-485 interface		
SD Memory Card	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 128G), support manual/alarm recording		
Analog Video Output	1.0V [p-p]/75Ω, PAL/NTSC/BNC		
Application Programming	Open-ended API, support ISAPI, HIKVISION SDK and third-party management platform		
Client	iVMS-4200		
Web Browser	IE9+, chrome31-chrome44, Firefox 30-Firefox51, Safari 5.02+(mac)		
General			
Menu language	English		
Power	12 VDC± 20% PoE (802.3af, class 4)		
Power Consumption	12 VDC ± 20%: max. 12W PoE (802.3af, class 4)		
Working Temperature/Humidity	-40 °C to 60 °C (-40 °F to 140 °F), 90% or less		
Protection Level	IP66 Standard TVS 6000V Lightning protection, surge protection, voltage transient protection		
Dimensions	352.4 mm × 113.5 mm × 114.7 mm (13.9" × 4.5" × 4.5 ")		
Weight	Approx. 1.5Kg (3.3lb)		

# **Detection Range Table**

\* The table is only for reference, the performance may vary from camera to camera.

# **Smart functions Range**

Different targets trigger the VCA events within different range limits.

VCA Range (Vehicles: 1.4×4.0m)	VCA Range (Humans: 1.8×0.5m)	Temperature Measurement (Object:2×2 m)	Temperature measurement (Object:1×1 m)	Fire Detection (Object:2×2 m)	Fire Detection (Object:1×1 m)
63 m	21 m	66 m	33 m	180 m	90 m

# **Wide Range Coverage**

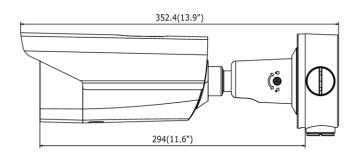
There is range limit for detecting, recognizing, and identifying human/vehicle targets.

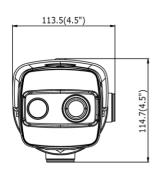
Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles:	(Humans:	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)
280 m	91 m	70 m	23 m	35 m	11 m

# **Available Model**

PTD2617/V1-3

# **Dimension**





Unit:mm(inch)