



Thermal Security System Products and Solutions

<https://www.thermeytec.com> · Thermal Security System · info@thermeytec.com



Contents

Applications **P3-9**

Products and Solutions **P10-38**

Short Range Thermal Cameras **P11-18**

Middle & Long Range Thermal Cameras **P19-28**

Long Range Thermal Cameras **P29-32**

Thermal Marine Cameras **P33-38**

Indexes **P39-45**

Applications

A photograph of a security perimeter featuring multiple layers of chain-link fencing topped with razor wire. A gate is visible in the background under a cloudy sky.

**Perimeter
Defense**

A photograph of a large green and white maritime vessel, possibly a patrol boat or fishing vessel, on the water. The name 'ALFA 18' is visible on the side.

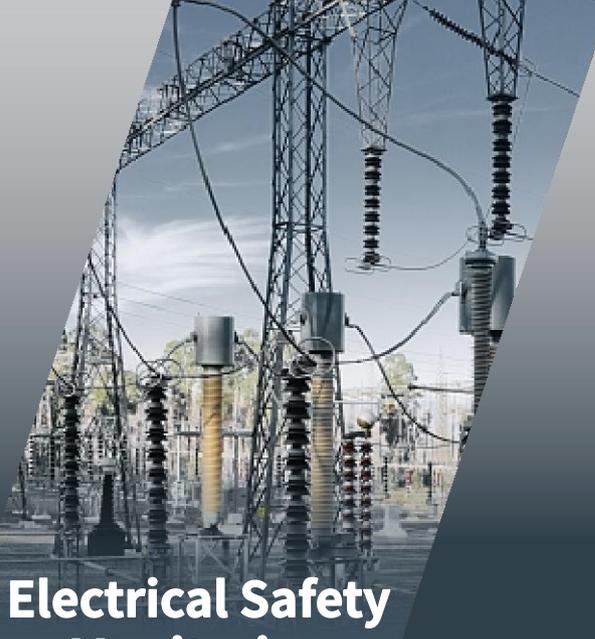
**Maritime
Security**

A photograph of a modern, sleek high-speed train in motion, with its headlights on.

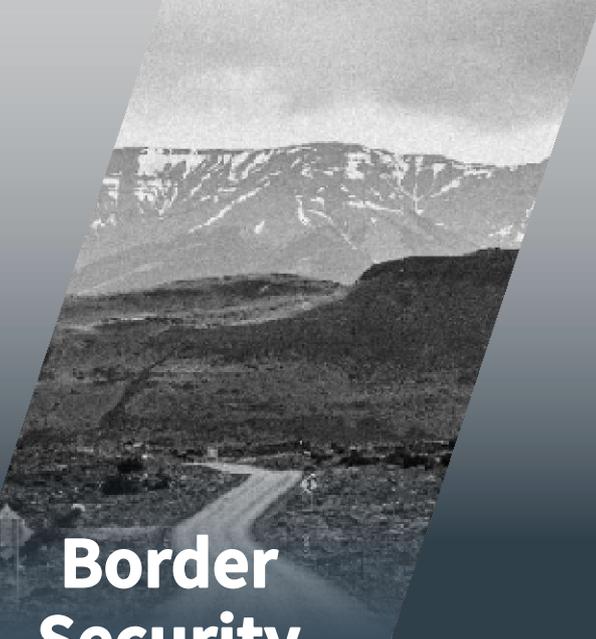
**Public
Transportation
Monitoring**

A photograph of a landscape with dry, brown grass and a few evergreen trees under a cloudy sky, suggesting a fire-prone area.

**Fire
Prevention**

A photograph of a high-voltage electrical substation with several tall metal towers and power lines.

**Electrical Safety
Monitoring**

A photograph of a dirt road winding through a rugged, mountainous landscape with snow-capped peaks in the background.

**Border
Security**

Perimeter Defense

Perimeter defense plays a crucial role in protecting high-risk sites, commercial real estate, and factory spaces in both urban and remote locations. ThermTec provides a reliable, high-efficiency and visual system that greatly reduce the potential threats.

Solution Strengths



Dual Spectrum



Image Fusion



Motorized Focus



Multi-Target Recognition



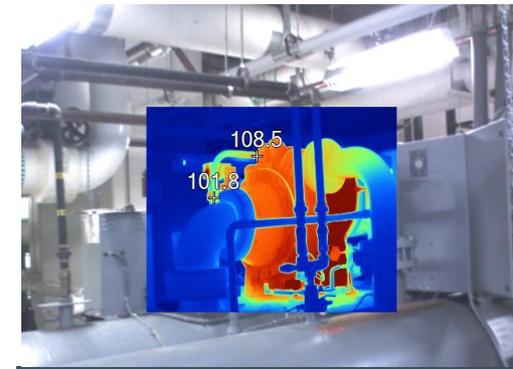
Thermal image



Visible image



Image fusion



Picture-in-picture

Public Transportation Monitoring

ThermTec delivers intelligent public transportation solutions that monitor traffic flow and detect initial signs of failure for railway and subway system in time for protecting public safety.

Solution Strengths



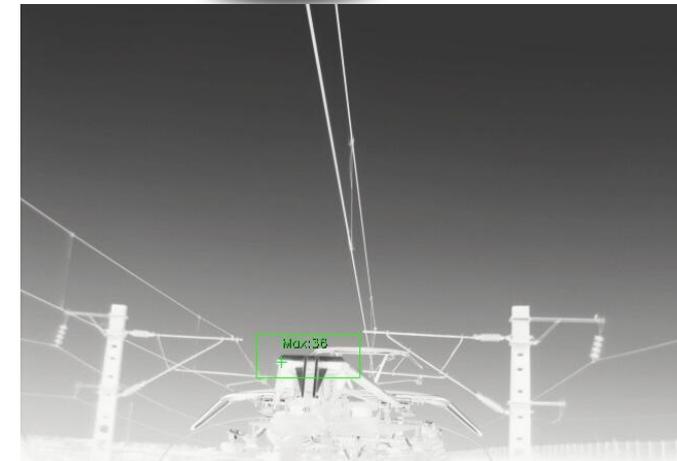
High Frame Rate



High Anti-Electromagnetic Interference Performance



Great Image Effect



Electrical Safety Monitoring

ThermTec provides the electrical safety monitoring to survey and troubleshoot the electrical systems.

Solution Strengths



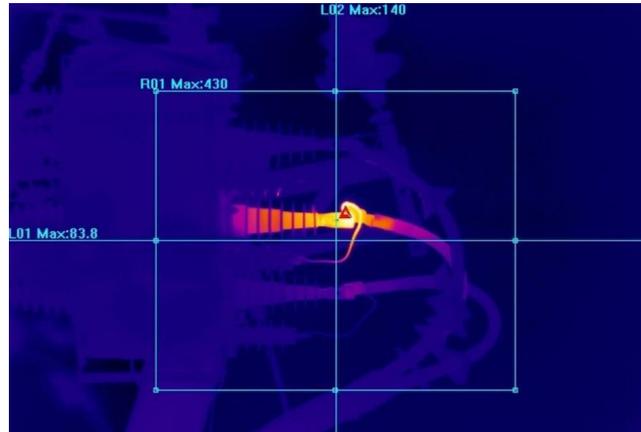
Outstanding Image Quality



High Precision



High Sensitivity



Fire Prevention

ThermTec provides intelligent fire prevention solution with smart thermal and visible imaging system that operates 24/7, all weather for detecting any potential fire hazard. ThermTec's accurate alarm can help prevent the fire occurrence and allow timely response before fire spread.



Solution Strengths

Intelligent Fire Prevention

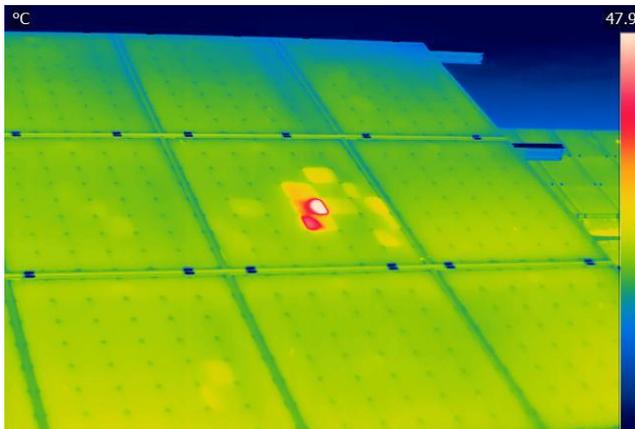


Dual spectrum monitoring allows thermal cameras to detect the early source of the fire and visibly track it in the system.

Accurate and Smart Alarming



Embedded with high temperature alarm module and intelligent algorithm, it supports flexible temperature measurement rule setting and can accurately pre-alarm the fire source in different scenes in real time.



Early fire detection of solar panel



Fire detection before spread at the early stage

Maritime Security

ThermTec Maritime thermal imaging systems works 24/7, in total darkness and brightness, through light fog and smoke. Our thermal technology is used for commercial marine, first responder, law enforcement, collision avoidance, coastal surveillance, and search and rescue missions.



Solution Strengths



Powerful Gyro Stabilization



Effective Video Analysis



Light Designed with Unique Material



Excellent Performance to Anti-Wind and Anti-Corrosion



Border Security

Border security and surveillance is a 24/7 operation that guarding against terrorism, smuggling and illegal immigration. ThermTec provides reliable long-range threat detection and positive identification of potential threats all day, all night, and in all conditions.

Solution Strengths



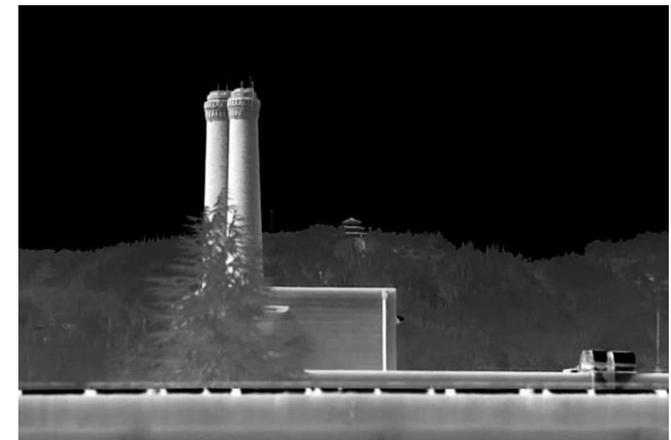
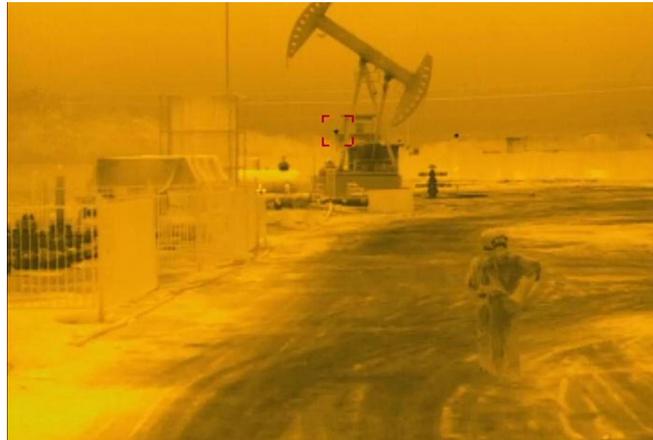
360-degree PTZ control



Long & wide range detection coverage



Complete Customizability





HS Series

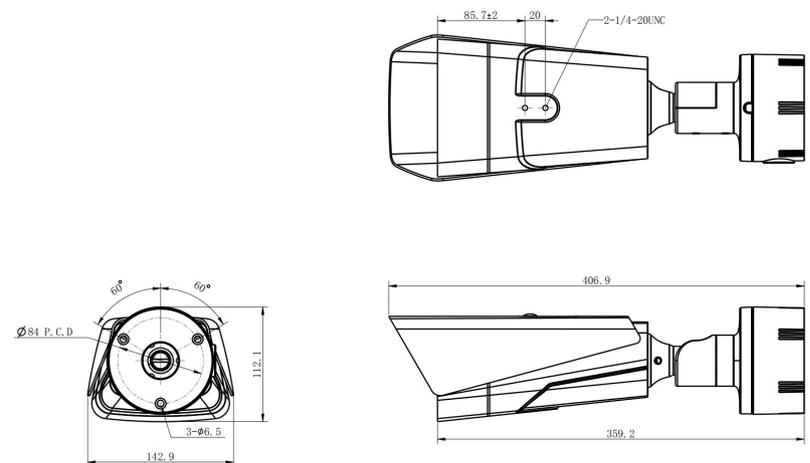
Outdoor IP Thermal Image Bullet Camera



Product Features

- High image quality: 12 μ m thermal sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Thermal image smart function: Multiple targets types detection;
- Advanced fire/smoke detection algorithm;
- Excellent image enhancement: AGC, IDE;
- User-friendly platform: Standard ONVIF protocol, fast compatible with the third-party platform;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete customizability.

Dimensions



Thermal Module		HS3		HS6			
Detector		VOx Uncooled FPA					
Resolution/Pixel pitch		384x288/12μm		640x512/12μm			
NETD		<35mK@ 25°C					
Spectral range		8-14μm					
Focus Method		Motorized					
Focal Length		7mm(HS3 only)	10mm	17mm	25mm	35mm	50mm
FOV	HS3	36.4x27.7	25.9x19.6	15.4x11.6	10.5x7.9	7.5x5.6	5.2x3.9
	HS6	/	42x34	25.4x20.4	17.4x14	12.5x10	8.7x7
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance					
Uniformity correction		Auto/Manual shutter					
Image Effect							
Thermal image process		AGC, IDE					
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance					
Color Palette		Optional 9 color palettes (rust, rainbow, white/black, etc.)					
Smart Function							
VCA		4 VCA types excluding HS6 (motion detection, cross line, intrusion, area entry and exit)					
Fire Detection		Support					
Temperature Measurement		3 temperature measurement rule types (points, areas, lines)					
Temperature Range		-20 °C ~+ 135 °C					
Temperature Accuracy		± 8 °C(± 14.4 °F)					
Video and Audio							
Video compression		H.264/H.265					
Main-Stream		768*576, 384*288		640*512, 384*288			
Audio		External sound pick-ip only					

Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm Interface	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Power Supply	DC 12V/POE
Power Consumption	<2W (w/o IR) <3W (w/o IR)
Work Temperature/Humidity	-20°C~60°C, <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP67
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	407mmx143mmx113mm
Weight	<2.3Kg

HM2 Series

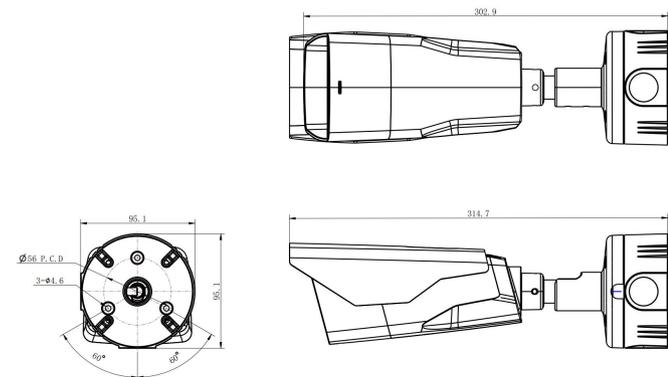
Outdoor IP Dual Spectrum Bullet Camera



Product Features

- High image quality: 12 μ m thermal sensor, 4MP 1/2.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Thermal image smart function: Multiple targets types detection;
- Advanced fire/smoke detection algorithm;
- Excellent image enhancement: AGC, IDE
- User-friendly platform: Standard ONVIF protocol, fast compatible with the third-party platform;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete customizability.

Dimensions



Thermal Module	HM2		
Detector	VOx Uncooled FPA		
Resolution/Pixel pitch	256x192/12μm		
NETD	<35mK@ 25°C		
Spectral range	8-14μm		
Focus Method	Fixed lens		
Focal Length	3.6mm	7mm	10mm
FOV	50x37	24.8x18.6	17x13
Image adjustment	Auto/Manual adjustment for contrast ratio & brightness & acutance		
Uniformity correction	Auto/Manual shutter, background correction		
Optical Module			
Image Sensor	1/2.8" Progressive Scan CMOS		
Resolution	2560(H) × 1440(V)		
Focal Length	4mm	6mm	8mm
FOV	80°56.7	54°29	41.4°23.9
IR Range	30m		
Image Effect			
Thermal image process	AGC, IDE		
Image fusion	Support		
Color Palette	Optional 9 color palettes(rust, rainbow, white/black, etc.)		
Smart Function			
VCA	4 VCA types (motion detection, cross line, intrusion, area entry and exit)		
Fire Detection	Support		
Sound and light alarm	Add speakers and embedded flashing lights alarm		
Temperature Measurement	3 temperature measurement rule types (points, areas, lines).		
Temperature Range	-20°C~+ 135°C		
Temperature Accuracy	± 8 °C (± 14.4 °F)		

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	2560*1440,1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	384*288, 256*192
Audio	Sound pick-up
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Power Supply	DC 12V/POE
Power Consumption	3W(w/o IR)
Work Temperature/Humidity	-20°C~+60°C (customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP67
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	315mmx96mmx96mm
Weight	<1.6Kg

HM3&6 Series

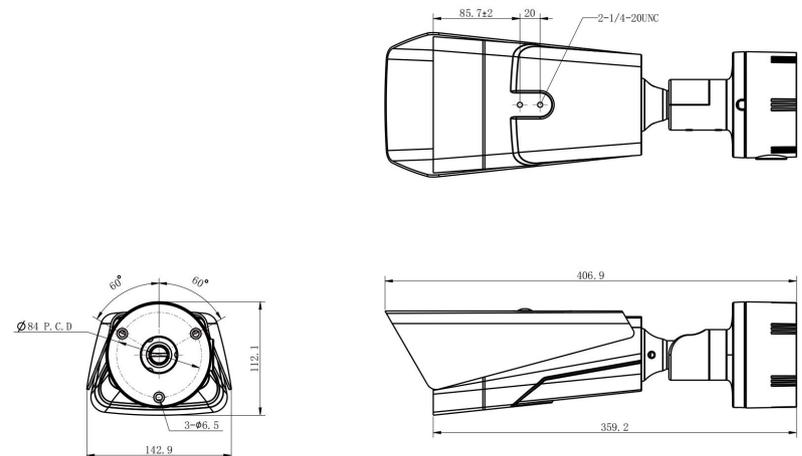
Outdoor IP Dual Spectrum Bullet Camera



Product Features

- High image quality: 12 μ m thermal sensor, 4MP 1/2.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Support temperature measurement with multiple rules;
- Advanced fire/smoke detection algorithm;
- Excellent image enhancement: AGC, IDE
- Image effect: Image fusion, PIP;
- User-friendly platform: Standard ONVIF protocol, fast compatible with the third-party platform;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete customizability.

Dimensions



Thermal Module		HM3			HM6	
Detector		VOx Uncooled FPA				
Resolution/Pixel pitch		384x288/12μm			640x512/12μm	
NETD		<35mK@ 25°C				
Spectral range		8-14μm				
Focus Method		Motorized				
Focal Length		7mm(HM3 only)	10mm	17mm	25mm	35mm
FOV	HM3	36.4x27.7	25.9x19.6	15.4x11.6	10.5x7.9	7.5x5.6
	HM6	/	42x34	25.4x20.4	17.5x14	12.5x10
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance				
Uniformity correction		Auto/Manual shutter, background correction				
Optical Module						
Image Sensor		1/2.8" Progressive Scan CMOS				
Resolution		2560(H)×1440(V)				
FOV		4mm: 80°56.7; 6mm54°29; 8mm: 41.4°23.9 ; 12mm: 28°23.9				
Focal Length	HM3	4mm	6mm	12mm	12mm	12mm
	HM6	/	6mm	8mm	12mm	12mm
IR Range		50m				
Image Effect						
Thermal image process		AGC, IDE				
Image fusion		Support				
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)				
Smart Function						
VCA		4 VCA types for HM3 only (motion detection, cross line, intrusion, area entry and exit)				
Fire Detection		Support				
Temperature Measurement		3 temperature measurement rule types (points, areas, lines).				
Temperature Range		-20°C~+ 135°C				
Temperature Accuracy		± 8 °C (± 14.4 °F)				

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	2560*1440,1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	768*576,384*288
Audio	Sound pick-up
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Power Supply	DC 12V/POE
Power Consumption	<2W(w/o IR & heater)
Work Temperature/Humidity	-20°C~+60°C (customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP67
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	407mmx143mmx113mm
Weight	<2.2Kg

QG Series

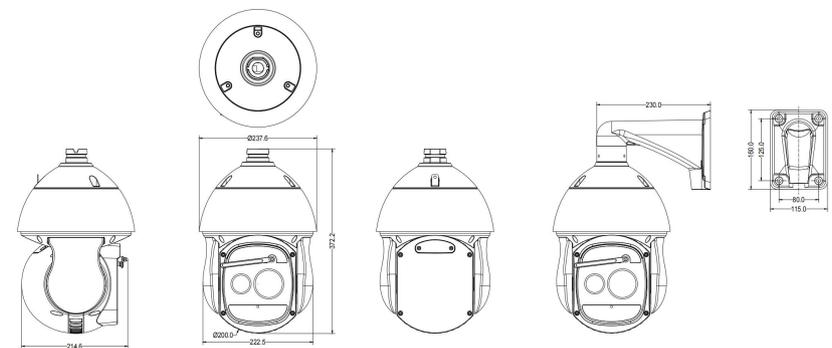
Dual Spectrum High Speed PTZ Camera



Product Features

- High image quality: 12 μ m thermal sensor, 2MP 1/2.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Advanced AI algorithm: Multiple targets types detection and tracking;
- Excellent image enhancement: AGC, IDE;
- Rugged PTZ: Aluminium alloy material, waterproof aviation interface, anti-salt spray, pan: 0.01 $^{\circ}$ ~180 $^{\circ}$ /s, tilt: 0.01 $^{\circ}$ ~130 $^{\circ}$ /s high speed rotation, preset: \pm 0.1 $^{\circ}$
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete customizability.

Dimensions



Thermal Module		QG3			QG6		
Detector		VOx Uncooled FPA					
Resolution/Pixel pitch		384x288/12μm			640x512/12μm		
NETD		<35mK@ 25°C					
Spectral range		8-14μm					
Focus Method		Manual/Motorized(auto focus)					
Focal Length		7mm(QG3)	10mm	17mm	25mm	35mm	50mm
FOV	QG3	36.4*27.7	25.9*19.6	15.4*11.6	10.5*7.9	7.5*5.6	5.2*3.9
	QG6	/	42*34	25.4*20.4	17.4*14	12.5*10	8.7*7
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance					
Uniformity correction		Auto/Manual shutter, background correction					
Optical Module							
Image Sensor		1/1.8" Progressive Scan CMOS					
Resolution		2560(H)×1440(V)					
Focal Length&Zoom		6.5-240mm, 37X					
FOV		70.0-2.51(wide to narrow)					
IR Range		50m					
Image Effect							
Thermal image process		AGC, IDE					
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)					
Smart Function							
VCA		4 VCA types for QG3 only (motion detection, cross line, intrusion, area entry and exit)					
Fire Detection		Support					
Temperature Measurement		3 temperature measurement rule types (points, areas, lines).					
Temperature Range		-20°C~+ 135°C					
Temperature Accuracy		± 8 °C (± 14.4 °F)					
PTZ							
Movement range		Pan:360° continuous; Tilt:-15°~+90°					
Presets		200					
Power Off Memory		Support					

Pan speed	0.01°~180°/s
Tilt speed	0.01°~130°/s
Auto Horizontal Scan	Preset patrol / Auto line scanning & etc
Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	2560*1440,1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Power Supply	AC 24V,3A
Power Consumption	<36W
Work Temperature/Humidity	-20°C~+60°C (customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	Ø237.6mm*373mm
Weight	<5.5Kg(with bracket)

CH Series

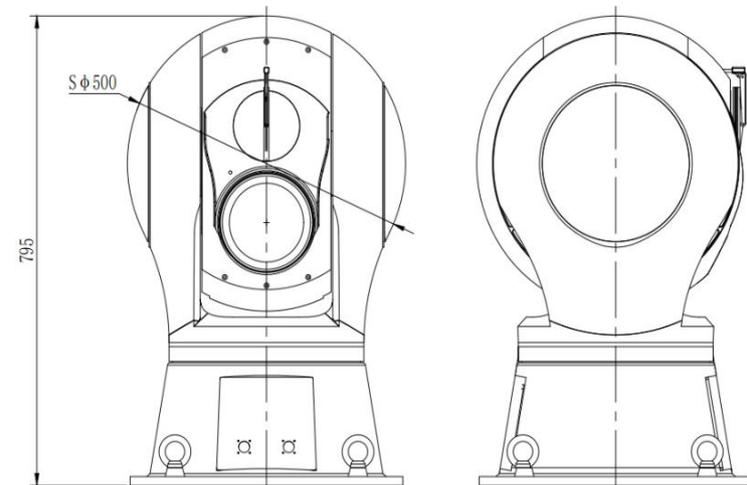
Dual Spectrum PTZ Camera

Product Features

- Built-in high sensitivity infrared thermal camera realizes clear infrared images without any light, perfect for dark night voyage;
- Design of the magnetic composite sucker, simple operation with the one-key deployment;
- Embedded gyroscopic image stabilization system;
- Leading thermal image processing technology: adaptive AGC, IDE;
- Optional laser ranging or laser illumination.



Dimensions



Thermal Module	CH3		CH6	
Detector	VOx Uncooled FPA			
Resolution/Pixel pitch	384x288/12μm		640x512/12μm	
NETD	<35mK@ 25°C			
Spectral range	8-14μm			
Focus Method	Manual/Motorized(auto focus)			
Focal Length	30-150mm	30-180mm	30-150mm	30-180mm
FOV	8.75*6.57~ 1.76*1.32	8.75*6.57~ 1.46*1.10	14.59*11.69~ 2.93*2.35	14.59*11.69~ 2.44*1.96
Image adjustment	Auto/Manual adjustment for contrast ratio & brightness & acutance			
Uniformity correction	Auto/Manual shutter, background correction			
Optical Module				
Image Sensor	1/1.8" Progressive Scan CMOS			
Resolution	1920(H)×1080(V)			
Focal Length&Zoom	15-775mm, 52X			
FOV	29.1-0.5(wide to narrow)			
Image Effect				
Thermal image process	AGC, IDE			
Color Palette	Optional 9 color palettes(rust, rainbow, white/black, etc.)			
Smart Function				
VCA	4 VCA types for CH3 only (motion detection, cross line, intrusion, area entry and exit)			
Fire Detection	Support			
PTZ				
Movement range	Pan:360° continuous; Tilt: -45°~+45°			
Presets	200			
Power Off Memory	Support			
Pan speed	0.01~80°/s			
Tilt speed	0.01~80°/s			
Auto Horizontal Scan	Preset patrol / Auto line scanning & etc			

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Laser ranging or illumination	Optional
Gyroscopes	Optional
Power Supply	DC48V,10A
Power Consumption	<270W(with heater)
Work Temperature/Humidity	-20°C~+60°C(customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	φ500mm×795mm
Weight	<90Kg(with bracket)

TG Series

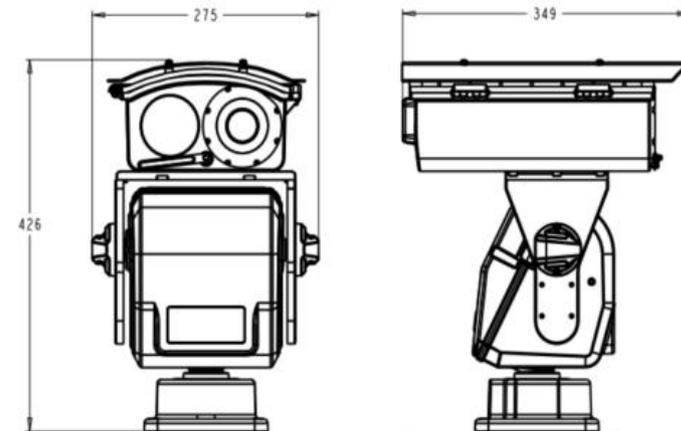
Middle and Long Distance Dual Spectrum PTZ Camera

Product Features

- High image quality: 12 μ m thermal sensor, 4MP 1/1.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Advanced AI algorithm: Multiple targets types detection and tracking;
- Excellent image enhancement: AGC, IDE;
- Rugged PTZ: Aluminium alloy material, waterproof aviation interface, anti-salt spray;
- Superior environmental adaptability: Applicable for extreme weather including darkness, rain, fog, smog and etc.;
- Easily integrated with the third party.



Dimensions



Thermal Module	TG3		TG6	
Detector	VOx Uncooled FPA			
Resolution/Pixel pitch	384x288/12μm		640x512/12μm	
NETD	<35mK@ 25°C			
Spectral range	8-14μm			
Focus Method	Manual/Motorized(auto focus)			
Focal Length	50mm	75mm	50mm	75mm
FOV	5.2*3.9	3.5*2.6	8.7*7	8.7*7
Image adjustment	Auto/Manual adjustment for contrast ratio & brightness & acutance			
Uniformity correction	Auto/Manual shutter, background correction			
Optical Module				
Image Sensor	1/1.8" Progressive Scan CMOS			
Resolution	2560(H)×1440(V)			
Focal Length&Zoom	6.5-240mm, 37X			
FOV	70.0-2.51(wide to narrow)			
Image Effect				
Thermal image process	AGC, IDE			
Color Palette	Optional 9 color palettes(rust, rainbow, white/black, etc.)			
Smart Function				
VCA	4 VCA types for TG3 only (motion detection, cross line, intrusion, area entry and exit)			
Fire Detection	Support			
PTZ				
Movement range	Pan:360° continuous; Tilt: -70°~+45°			
Presets	200			
Power Off Memory	Support			
Pan speed	0.4°~40°/s			
Tilt speed	0.2°~10°/s			
Auto Horizontal Scan	Preset patrol / Auto line scanning & etc			

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	2560*1440,1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288 640*512
Sub-stream (Thermal)	384*288 384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Wiper	Optional
Power Supply	DC24V,5A
Power Consumption	<30W(with heater)
Work Temperature/Humidity	-20°C~+60°C(customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	349mmx275mmx426mm
Weight	<20Kg

TH Series

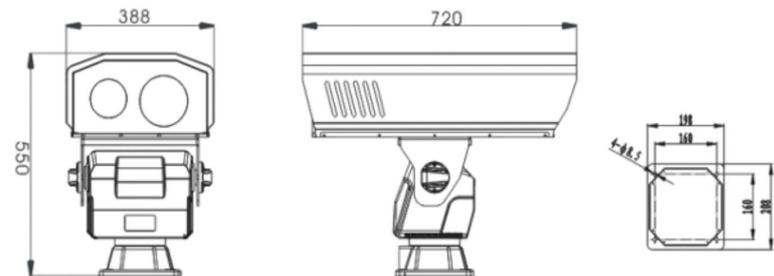
Middle and Long Distance Dual Spectrum PTZ Camera



Product Features

- High image quality: 12μm thermal sensor, 2MP 1/1.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Advanced AI algorithm: Multiple targets types detection and tracking;
- Excellent image enhancement: AGC, IDE;
- Rugged PTZ: Aluminium alloy material, waterproof aviation interface, anti-salt spray;
- Superior environmental adaptability: Applicable for extreme weather including darkness, rain, fog, smog and etc.;
- Easily integrated with the third party.

Dimensions



Thermal Module		TH3	TH6	
Detector		VOx Uncooled FPA		
Resolution/Pixel pitch		384x288/12μm	640x512/12μm	
NETD		<35mK@ 25°C		
Spectral range		8-14μm		
Focus Method		Manual/Motorized(auto focus)		
Focal Length		25-100mm	30-150mm	30-180mm
FOV	TH3	10.47*7.87~ 2.64*1.98	8.75*6.57~ 1.76*1.32	8.75*6.57~ 1.46*1.10
	TH6	17.46*14~ 4.4*3.52	14.59*11.69~ 2.93*2.35	14.59*11.69~ 2.44*1.96
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance		
Uniformity correction		Auto/Manual shutter, background correction		
Optical Module				
Image Sensor		1/1.8" Progressive Scan CMOS		
Resolution		1920(H)×1080(V)		
Focal Length&Zoom		15-775mm, 52X		
FOV		29.1-0.5(wide to narrow)		
Image Effect				
Thermal image process		AGC, IDE		
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)		
Smart Function				
VCA		4 VCA types for TH3 only (motion detection, cross line, intrusion, area entry and exit)		
Fire Detection		Support		
PTZ				
Movement range		Pan:360° continuous; Tilt: -55°~+60°		
Presets		200		
Power Off Memory		Support		
Pan speed		0.2°~30°/s		
Tilt speed		0.3°~13°/s		
Auto Horizontal Scan		Preset patrol / Auto line scanning & etc		

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Laser ranging&lighting	Optional
Auto wiper	Optional
Power Supply	DC48V,5A
Power Consumption	<80W
Work Temperature/Humidity	-20°C~+60°C(customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 8000V lightning protection, surge protection, voltage transient protection
Dimension	720mmx388mmx550mm
Weight	<50Kg

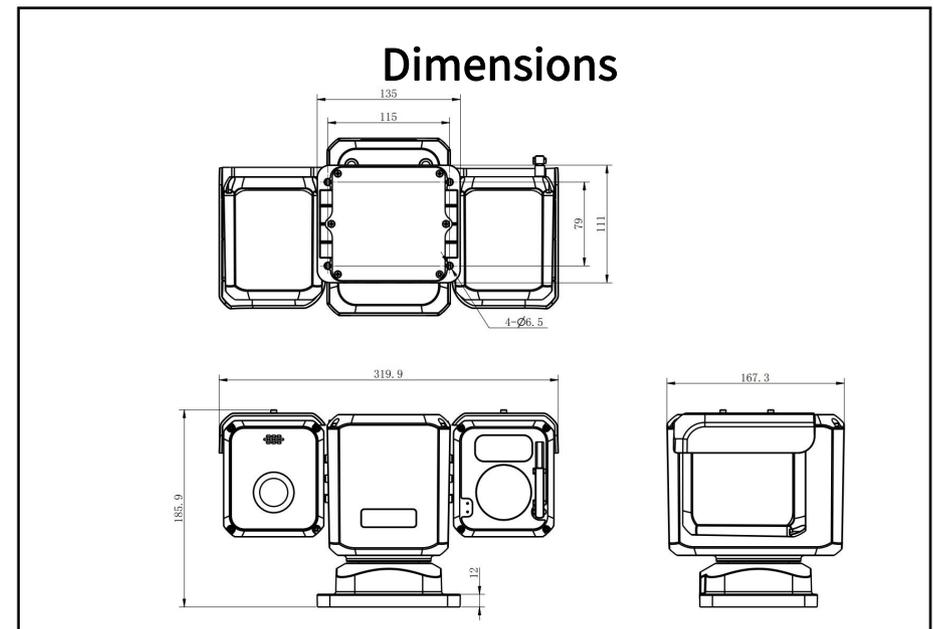
YS Series

Mobile Dual Spectrum PTZ Camera



Product Features

- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Advanced AI algorithm: Multiple targets types detection and tracking;
- Excellent image enhancement: AGC, IDE;
- Light weight design;high speed rotation,low power consumption, easier installation;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete customizability: Laser range finder, laser illuminator, radar in option.



Thermal Module		YS3			YS6	
Detector		VOx Uncooled FPA				
Resolution/Pixel pitch		384x288/12μm			640x512/12μm	
NETD		<35mK@ 25°C				
Spectral range		8-14μm				
Focus Method		Manual/Motorized(auto focus)				
Focal Length		7mm	10mm	17mm	25mm	35mm
FOV	YS3	36.4*27.7	25.9*19.6	15.4*11.6	10.5*7.9	7.5*5.6
	YS6	/	42*34	25.4*20.4	17.4*14	12.5*10
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance				
Uniformity correction		Auto/Manual shutter, background correction				
Optical Module						
Image Sensor		1/2.8" Progressive Scan CMOS				
Resolution		1920(H)×1080(V)				
Focal Length&Zoom		5.1-127.5mm, 25X				
FOV		51.69-3.66(wide to narrow)				
Image Effect						
Thermal image process		AGC, IDE				
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)				
Smart Function						
VCA		4 VCA types for YS3 only (motion detection, cross line, intrusion, area entry and exit)				
Fire Detection		Support				
Temperature Measurement		3 temperature measurement rule types (points, areas, lines).				
Temperature Range		-20~+135°C				
Temperature Accuracy		±8°C(± 14.4 °F)				
PTZ						
Movement range		Pan:360° continuous; Tilt: -90°~+90°				
Presets		200				
Power Off Memory		Support				

Pan speed	0.1°~100°/s	
Tilt speed	0.1°~80°/s	
Auto Horizontal Scan	Preset patrol / Auto line scanning & etc	
Video and Audio		
Video Compression	H.264 / H.265	
Main-Stream (Visible)	1920*1080,1280*720	
Sub-stream (Visible)	1280*720,768*576,640*480,384*288	
Main-Stream (Thermal)	768*576,384*288	640*512
Sub-stream (Thermal)	384*288	384*288
Audio compression	G.711	
Network		
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP	
API	ISAPI,SDK, third-party management platform, ONVIF	
Common function	Hearbet, password protection, multi-user access control	
Security	Support password protection, bonding MAC ID, IP filtration	
Simultaneous Live View	10 channels	
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General	
Web Browser	Google Kernel Browser, Edge	
Interface		
Alarm	1x ch input, 1x ch output	
Audio	1x ch input, 1x ch output	
Serial port	1x ch RS485	
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet	
Storage	Embedded EMMC 16GB	
General		
Web Client Language	English	
Power Supply	DC9--36V,5A	
Power Consumption	<20W	
Work Temperature/Humidity	-20°C~+60°C, <90%RH	
Storage temperature	-45°C ~ +75°C	
Protection	IP66	
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection	
Dimension	168mm*320mm*186mm	
Weight	<5.5Kg	

Y Series

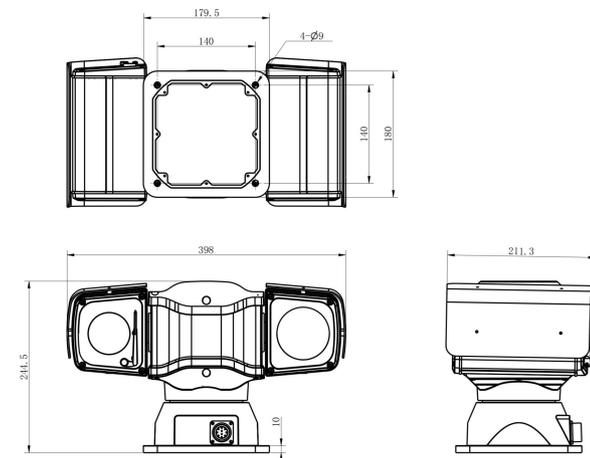
Mobile Dual Spectrum PTZ Camera

Product Features

- High image quality: 12 μ m thermal sensor, 2MP 1/2.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Advanced AI algorithm for fire detection;
- Excellent image enhancement: AGC, IDE;
- Rugged PTZ: Aluminium alloy material, waterproof aviation interface, anti-salt spray;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete customizability: Laser range finder, laser illuminator, radar in option.



Dimensions



Thermal Module		Y3	Y6	
Detector		VOx Uncooled FPA		
Resolution/Pixel pitch		384x288/12μm	640x512/12μm	
NETD		<35mK@ 25°C		
Spectral range		8-14μm		
Focus Method		Manual/Motorized(auto focus)		
Focal Length		25mm	35mm	50mm
FOV	Y3	10.5*7.9	7.5*5.6	5.2*3.9
	Y6	17.4*14	12.5*10	8.7*7
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance		
Uniformity correction		Auto/Manual shutter, background correction		
Optical Module				
Image Sensor		1/2.8" Progressive Scan CMOS		
Resolution		1920(H)×1080(V)		
Focal Length&Zoom		5.1-127.5mm, 25X		
FOV		51.69-3.66(wide to narrow)		
Image Effect				
Thermal image process		AGC, IDE		
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)		
Smart Function				
VCA		4 VCA types for Y3 only (motion detection, cross line, intrusion, area entry and exit)		
Fire Detection		Support		
Temperature Measurement		3 temperature measurement rule types (points, areas, lines).		
Temperature Range		-20~+135°C		
Temperature Accuracy		±8°C(± 14.4 °F)		
PTZ				
Movement range		Pan:360° continuous; Tilt: -90°~+90°		
Presets		200		
Power Off Memory		Support		

Pan speed	0.1°~20°/s		
Tilt speed	0.1°~10°/s		
Auto Horizontal Scan	Preset patrol / Auto line scanning & etc		
Video and Audio			
Video Compression	H.264 / H.265		
Main-Stream (Visible)	1920*1080,1280*720		
Sub-stream (Visible)	1280*720,768*576,640*480,384*288		
Main-Stream (Thermal)	768*576,384*288	640*512	
Sub-stream (Thermal)	384*288	384*288	
Audio compression	G.711		
Network			
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP		
API	ISAPI,SDK, third-party management platform, ONVIF		
Common function	Hearbet, password protection, multi-user access control		
Security	Support password protection, bonding MAC ID, IP filtration		
Simultaneous Live View	10 channels		
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General		
Web Browser	Google Kernel Browser, Edge		
Interface			
Alarm	1x ch input, 1x ch output		
Audio	1x ch input, 1x ch output		
Serial port	1x ch RS485		
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet		
Storage	Embedded EMMC 16GB		
General			
Web Client Language	English		
Power Supply	DC12V,3A		
Power Consumption	<30W		
Work Temperature/Humidity	-20°C~+60°C, <90%RH		
Storage temperature	-45°C ~ +75°C		
Protection	IP66		
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection		
Dimension	212mm*398mm*245mm		
Weight	<7Kg		

E Series

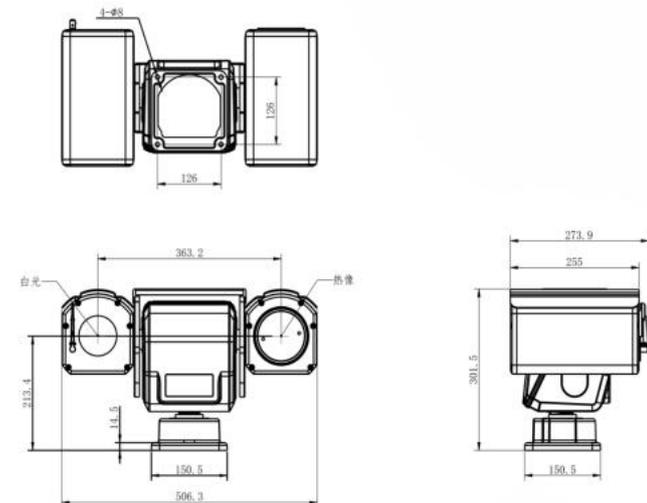
Middle and Long Distance Dual Spectrum PTZ Camera



Product Features

- High image quality: 12μm thermal sensor, 2MP 1/1.8" CMOS visible sensor;
- Powerful behavior analysis algorithm: Line crossing, intrusion, region entry & exit;
- Advanced AI algorithm: Multiple targets types detection and tracking;
- Excellent image enhancement: AGC, IDE;
- Rugged PTZ: Aluminium alloy material, waterproof aviation interface, anti-salt spray;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete Customizability: Laser range finder, laser illuminator, radar in option.

Dimensions



Thermal Module		E3	E6
Detector		VOx Uncooled FPA	
Resolution/Pixel pitch		384x288/12μm	640x512/12μm
NETD		<35mK@ 25°C	
Spectral range		8-14μm	
Focus Method		Manual/Motorized(auto focus)	
Focal Length		75mm	100mm
FOV	E3	3.5*2.6	2.64*1.98
	E6	5.8*4.7	4.4*3.5
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance	
Uniformity correction		Auto/Manual shutter, background correction	
Optical Module			
Image Sensor		1/1.8" Progressive Scan CMOS	
Resolution		1920(H)×1080(V)	
Focal Length&Zoom		6.1-317mm, 52X	
FOV		61.8-1.6(wide to narrow)	
Image Effect			
Thermal image process		AGC, IDE	
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)	
Smart Function			
VCA		4 VCA types for E3 only (motion detection, cross line, intrusion, area entry and exit)	
Fire Detection		Support	
PTZ			
Movement range		Pan:360° continuous; Tilt: -70°~+45°	
Presets		200	
Power Off Memory		Support	
Pan speed		0.4°~40°/s	
Tilt speed		0.2°~10°/s	
Auto Horizontal Scan		Preset patrol / Auto line scanning & etc	

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Manual wiper	Optional
Power Supply	DC24V,5A
Power Consumption	<20W
Work Temperature/Humidity	-20°C~+60°C(customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	407mmx143mmx113mm
Weight	<20Kg

EL Series

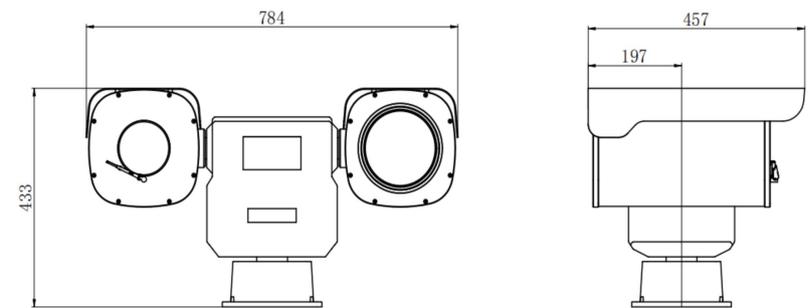
Ultra Distance Dual Spectrum PTZ Camera



Product Features

- High image quality: 12 μ m thermal sensor, 2MP 1/1.8" CMOS visible sensor;
- Thermal image focal lens up to 225mm;
- Advanced AI algorithm: Multiple targets types detection and tracking;
- Excellent image enhancement: AGC, IDE;
- Rugged PTZ: Aluminium alloy material, waterproof aviation interface, anti-salt spray;
- Superior environmental adaptability: Applicable for extreme weather, including darkness, rain, fog, smog and etc.;
- Complete Customizability: Laser range finder, laser illuminator, radar in option.

Dimensions



Thermal Module		EL3	EL6	
Detector		VOx Uncooled FPA		
Resolution/Pixel pitch		384x288/12μm	640x512/12μm	
NETD		<35mK@ 25°C		
Spectral range		8-14μm		
Focus Method		Manual/Motorized(auto focus)		
Focal Length		30-150mm	30-180mm	25-225mm
FOV	EL3	8.75*6.57~ 1.76*1.32	8.75*6.57~ 1.46*1.10	10.47*7.87~ 1.18*0.88
	EL6	14.59*11.69~ 2.93*2.35	14.59*11.69~ 2.44*1.96	17.46*14~ 1.96*1.5
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance		
Uniformity correction		Auto/Manual shutter, background correction		
Optical Module				
Image Sensor		1/1.8" Progressive Scan CMOS		
Resolution		1920(H)×1080(V)		
Focal Length&Zoom		15-775mmmm, 52X		
FOV		29.1-0.5(wide to narrow)		
Image Effect				
Thermal image process		AGC, IDE		
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)		
Smart Function				
VCA		4 VCA types for EL3 only (motion detection, cross line, intrusion, area entry and exit)		
Fire Detection		Support		
PTZ				
Movement range		Pan:360° continuous; Tilt: -90°~+90°		
Presets		200		
Power Off Memory		Support		
Pan speed		0.01°~60°/s		
Tilt speed		0.01°~30°/s		
Auto Horizontal Scan		Preset patrol / Auto line scanning & etc		

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Laser ranging or illumination	Optional
Power Supply	DC48V,6.7A
Power Consumption	<150W
Work Temperature/Humidity	-20°C~+60°C(customized -40°C), <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	457mm*784mm*433mm
Weight	<50Kg

CC Series

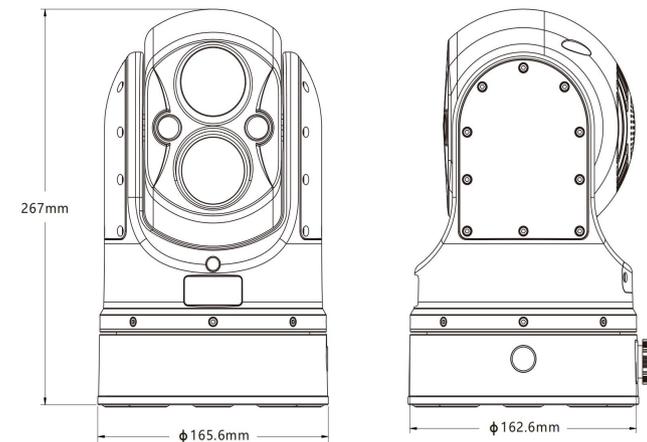
Dual Spectrum PTZ Camera



Product Features

- Built-in high sensitivity infrared thermal camera realizes clear infrared images without any light, perfect for dark night voyage;
- Design of the magnetic composite sucker, built-in large capacity battery, simple operation with the one-key deployment;
- Real time WiFi data transmission.

Dimensions



Thermal Module		CC3	CC6			
Detector		VOx Uncooled FPA				
Resolution/Pixel pitch		384x288/12μm	640x512/12μm			
NETD		<35mK@ 25°C				
Spectral range		8-14μm				
Focus Method		Manual/Motorized(auto focus)				
Focal Length		7mm(CC3 only)	10mm	17mm	25mm	35mm
FOV	CC3	36.4*27.7	25.9*19.6	15.4*11.6	10.5*7.9	7.5*5.6
	CC6	/	42*34	25.4*20.4	17.4*14	12.5*10
Image adjustment		Auto/Manual adjustment for contrast ratio & brightness & acutance				
Uniformity correction		Auto/Manual shutter, background correction				
Optical Module						
Image Sensor		1/2.8" Progressive Scan CMOS				
Resolution		1920(H)×1080(V)				
Focal Length&Zoom		5.1-127.5mm, 25X				
FOV		51.69-3.66(wide to narrow)				
IR Range		30m				
Image Effect						
Thermal image process		AGC, IDE				
Color Palette		Optional 9 color palettes(rust, rainbow, white/black, etc.)				
Smart Function						
VCA		4 VCA types for CC3 only (motion detection, cross line, intrusion, area entry and exit)				
Fire Detection		Support				
Temperature Measurement		3 temperature measurement rule types (points, areas, lines).				
Temperature Range		-20°C~+135°C				
Temperature Accuracy		± 8 °C (± 14.4 °F)				
PTZ						
Movement range		Pan:360° continuous; Tilt: -30°~+90°				
Presets		200				
Power Off Memory		Support				
Pan speed		0.01°~180°/s				
Tilt speed		0.01°~60°/s				

Auto Horizontal Scan	Preset patrol / Auto line scanning & etc	
Video and Audio		
Video Compression	H.264 / H.265	
Main-Stream (Visible)	1920*1080,1280*720	
Sub-stream (Visible)	1280*720,768*576,640*480,384*288	
Main-Stream (Thermal)	768*576,384*288	640*512
Sub-stream (Thermal)	384*288	384*288
Audio compression	G.711	
Network		
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP	
API	ISAPI,SDK, third-party management platform, ONVIF	
Common function	Hearbet, password protection, multi-user access control	
Security	Support password protection, bonding MAC ID, IP filtration	
Simultaneous Live View	10 channels	
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General	
Web Browser	Google Kernel Browser, Edge	
Interface		
Alarm	1x ch input, 1x ch output	
Audio	1x ch input, 1x ch output	
Serial port	1x ch RS485	
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet	
Storage	Embedded EMMC 16GB	
General		
Web Client Language	English	
WiFi	Optional	
Embedded battery	Optional (totally 9 pcs 18650,120Wh)	
Power Supply	DC12V,3A	
Power Consumption	<30W	
Work Temperature/Humidity	-20°C~+60°C, <90%RH	
Storage temperature	-45°C ~ +75°C	
Protection	IP66	
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection	
Dimension	φ165.6mmx267mm	
Weight	<5Kg(with bracket)	

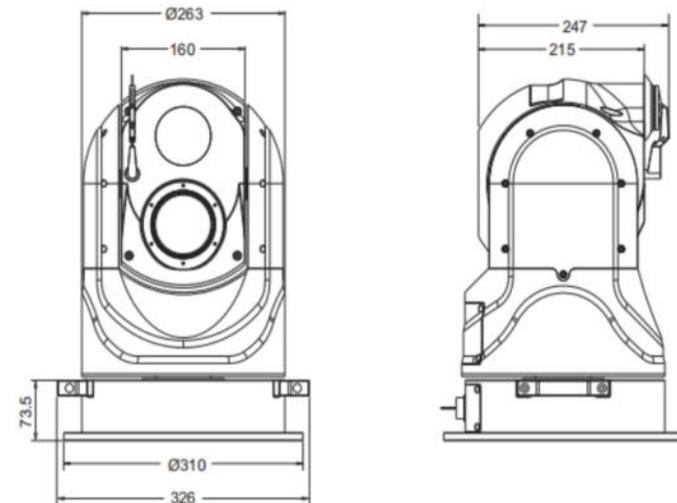
CL Series

Dual Spectrum PTZ Camera

Product Features

- Built-in high sensitivity infrared thermal camera realizes clear infrared images without any light, perfect for dark night voyage;
- Design of the magnetic composite sucker, simple operation with the one-key deployment;
- Embedded gyroscopic image stabilization system;
- Leading thermal image processing technology: adaptive AGC, IDE; pan: $0.05^{\circ}\sim 250^{\circ}/s$, tilt: $0.05^{\circ}\sim 180^{\circ}/s$ high speed rotation;
- Optional laser ranging or illumination.

Dimensions

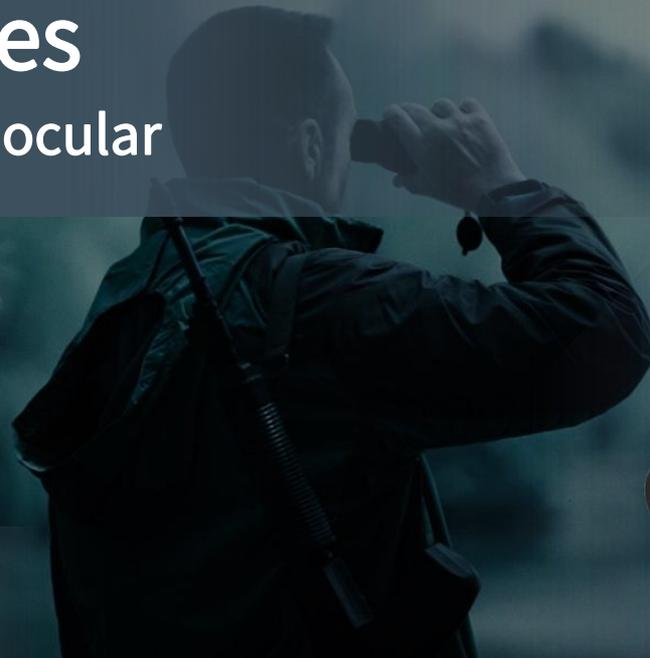


Thermal Module	CL3	CL6		
Detector	VOx Uncooled FPA			
Resolution/Pixel pitch	384x288/12μm	640x512/12μm		
NETD	<35mK@ 25°C			
Spectral range	8-14μm			
Focus Method	Manual/Motorized(auto focus)			
Focal Length	50mm	75mm	50mm	75mm
FOV	5.2*3.9	3.5*2.6	8.7*7	5.8*4.6
Image adjustment	Auto/Manual adjustment for contrast ratio & brightness & acutance			
Uniformity correction	Auto/Manual shutter, background correction			
Optical Module				
Image Sensor	1/1.8" Progressive Scan CMOS			
Resolution	1920(H)×1080(V)			
Focal Length&Zoom	6.1-317mm, 52X			
FOV	61.8-1.6(wide to narrow)			
Image Effect				
Thermal image process	AGC, IDE			
Color Palette	Optional 9 color palettes(rust, rainbow, white/black, etc.)			
Smart Function				
VCA	4 VCA types for CC3 only (motion detection, cross line, intrusion, area entry and exit)			
Fire Detection	Support			
PTZ				
Movement range	Pan:360° continuous; Tilt: -60°~+90°			
Presets	200			
Power Off Memory	Support			
Pan speed	0.05°~250°/s			
Tilt speed	0.05°~180°/s			
Auto Horizontal Scan	Preset patrol / Auto line scanning & etc			

Video and Audio	
Video Compression	H.264 / H.265
Main-Stream (Visible)	1920*1080,1280*720
Sub-stream (Visible)	1280*720,768*576,640*480,384*288
Main-Stream (Thermal)	768*576,384*288
Sub-stream (Thermal)	384*288
Audio compression	G.711
Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP
API	ISAPI,SDK, third-party management platform, ONVIF
Common function	Hearbet, password protection, multi-user access control
Security	Support password protection, bonding MAC ID, IP filtration
Simultaneous Live View	10 channels
User/Host level	Up to 9 users, 3 levels: Administrator, Operator, General
Web Browser	Google Kernel Browser, Edge
Interface	
Alarm	1x ch input, 1x ch output
Audio	1x ch input, 1x ch output
Serial port	1x ch RS485
Communication Interface	RJ45 10 M/100 M self-adaptive Ethernet
Storage	Embedded EMMC 16GB
General	
Web Client Language	English
Laser ranging or illumination	Optional
Wiper	Optional
Power Supply	DC24V,5A
Power Consumption	<60W
Work Temperature/Humidity	-20°C~+60°C, <90%RH
Storage temperature	-45°C ~ +75°C
Protection	IP66
Reliability	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	φ310mmx446mm
Weight	<17Kg(with bracket)

CYCLOPS Series

Thermal Imaging Monocular



Product Features



High Degree of Protection

- IP67 water-proof, dust-proof and fog-proof.



Electronic Image Stabilization

- Provide clear and precise images even in scenes with lots of motion.



Long Battery Life

- Built-in battery with up to 12H super long standby.



Perfect Detail Recognition

- 12 μ m VOx detector and 1024 OLED display ensure perfect detail recognition.



GPS Function

- Enable users to know their coordinates in real time, which makes field activities safer.



Two Way Wi-Fi Connection

- Support both Wi-Fi and hotspot connections.

Type	CP315	CP319	CP325	CP335	CP350	CP635	CP650
Sensor Parameters							
Detector Type	Vox Microbolometer						
Resolution/ Pixel Pitch	384 x 288/12μm				640 x 512/12μm		
NETD	≤40mk@300k				≤35mk@300k		
Frame Rate	8-14μm						
Spectral Range	50Hz						
Lens	15mm (F/0.9)	19mm (F/1.0)	25mm (F/1.0)	35mm (F/1.0)	50mm (F/1.0)	35mm (F/1.0,)	50mm (F/1.0)
FOV	17.5° x 13.1°	13.8° x 10.4°	10.5° x 7.9°	7.5° x 5.6°	5.3° x 4.0°	12.5° x 10°	8.8° x 7.0°
Magnification	1.4X	1.8X	2.4X	3.3X	4.8X	2.0X	2.8X
Imaging Processing							
Digital Zoom	1 - 6X continuous zoom						
Color Palette	5+						
Noise Reduction	3D noise reduction						
Image Enhancement	IDE; HDR						
Display							
OLED	0.39 inch; 1024x768 resolution						
Diopter Control	-5~+5						
Eye Distance	40mm						

Function	
OLED	3 modes
Language	English
Reticle	6+; adjustable coordinates
Memory Card	16G
AI Distance Measurement	Yes
Photo, Record, Playback	Yes
Heat Track	Yes
Lasor Indicator	Yes
GPS	Yes
Power	
Battery Type	Internal Cell (18650 x 2)
Battery Life	Continuous working time ≥12h
Interface	
Type-C	Power charge; data reading; output analog video
Wi-Fi	Two-way Wi-Fi connection; APP remote control
Environmental Parameters	
Working Temperature	-20°C~+55°C
Protection Level	IP67, 1 meter drop resistance
Physical Parameters	
Weight	470g (with battery)
Size	67mm x 63mm x 190mm
Accessories	
External Cable	Analog video cable; USB data cable
Other Accessory	Wrist strap; plush bag; user manual

Lens Indexes

LWIR 8~12μm			
Item	Focal Length (mm) & F number	Detector 12μm	Spectral Range
Athermalized			
1	3.8mm, F1.4	384x288,12μm	8~12μm
2	4.3mm, F1.2	384x288,12μm	8~12μm
3	5.1mm, F1.2	640x512,12μm	8~12μm
4	7.0mm, F1.0	384x288,12μm	8~12μm
5	8.0mm, F1.0	640x512,12μm	8~12μm
6	9.6mm, F1.0	640x512,12μm	8~12μm
7	9.8mm, F1.0	384x288,12μm	8~12μm
8	10mm, F1.0	384x288,12μm	8~12μm
9	12mm, F1.0	640x512,12μm	8~12μm
10	15mm, F1.2	384x288,12μm	8~12μm
11	19mm, F1.0	640x512,12μm	8~12μm
12	19mm, F1.0	640x512,12μm	8~12μm
13	21.7mm, F0.9	384x288,12μm	8~12μm
14	25mm, F1.0	640x480,12μm	8~12μm
15	25mm, F1.0	384x288,12μm	8~12μm
16	35mm, F1.0	640x512,12μm	8~12μm
12	40mm, F1.0	640x512,12μm	8~12μm
18	40mm, F1.0	640x512,12μm	8~12μm
19	40mm, F1.0	640x512,12μm	8~12μm
20	50mm, F1.0	640x512,12μm	8~12μm
21	60mm, F1.0	640x512,12μm	8~12μm
22	75mm, F1.1	640x512,12μm	8~12μm
23	100mm, F1.2	640x512,12μm	8~12μm
24	100mm, F1.0	640x512,12μm	8~12μm

LWIR8~12μm			
Item	Focal Length (mm) & F number	Detector 12μm	Spectral Range
Manual Focus			
25	3.5mm, F1.0	640x512,12μm	8~12μm
26	4.6mm, F1.0	640x512,12μm	8~12μm
27	5mm, F1.0	640x512,12μm	8~12μm
28	8.5mm, F1.2	640x512,12μm	8~12μm
29	11mm, F1.0	384x288,12μm	8~12μm
30	13mm, F1.2	640x512,12μm	8~12μm
31	15mm, F1.0	640x512,12μm	8~12μm
32	25mm, F1.2	640x512,12μm	8~12μm
33	25mm, F1.0	640x480,12μm	8~12μm
34	35mm, F1.0	640x480,12μm	8~12μm
35	38mm, F1.0	384x288,12μm	8~12μm
36	40mm, F1.0	640x512,12μm	8~12μm
37	40mm, F1.2	640x512,12μm	8~12μm
38	50mm, F1.0	640x512,12μm	8~12μm
39	50mm, F1.0	640x512,12μm	8~12μm
40	50mm, F1.2	640x512,12μm	8~12μm
41	75mm, F1.2	640x512,12μm	8~12μm
42	100mm, F1.2	640x512,12μm	8~12μm

Notes: The table is for reference only, and the performance may vary according to different environment.

Lens Indexes

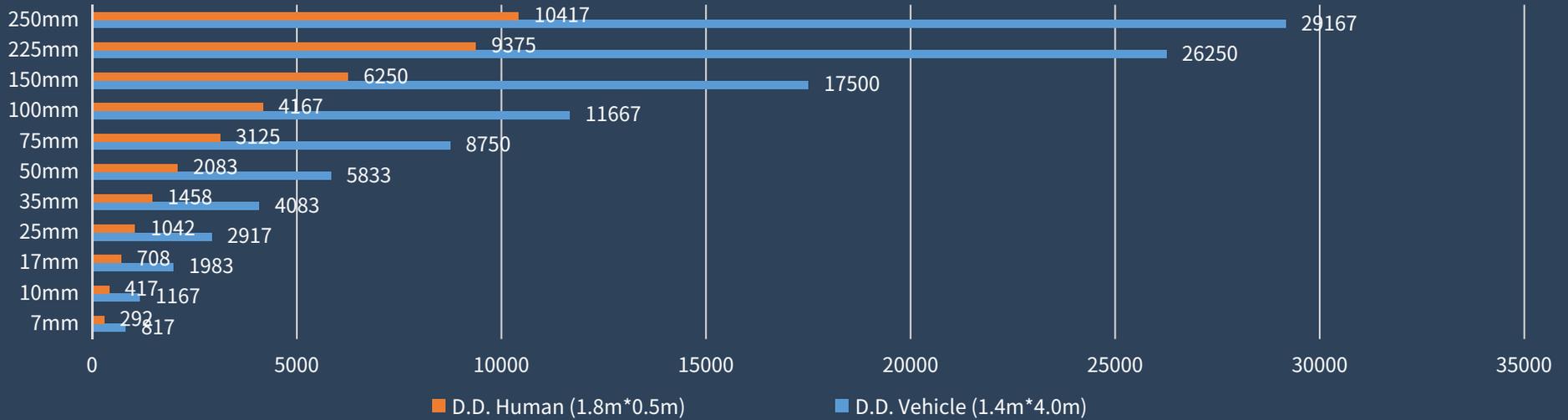
LWIR8~12μm			
Item	Focal Length (mm) & F number	Detector 12μm	Spectral Range
Motorized Focus			
43	25mm, F1.0	640x480,12μm	8~12μm
44	35mm, F1.0	640x480,12μm	8~12μm
45	40mm, F1.0	384x288,12μm	8~12μm
46	50mm, F1.0	384x288,12μm	8~12μm
47	50mm, F1.0	640x512,12μm	8~12μm
48	52mm, F1.0	384x288,12μm	8~12μm
49	70mm, F1.0	640x480,12μm	8~12μm
50	75mm, F1.0	384x288,12μm	8~12μm
51	75mm, F1.0	640x480,12μm	8~12μm
52	75mm, F1.0	640x512,12μm	8~12μm
53	75mm, F1.0	640x512,12μm	8~12μm
54	100mm, F1.0	640x480,12μm	8~12μm
55	100mm, F1.0	1024x768,12μm	8~12μm
56	100mm, F1.2	640x512,12μm	8~12μm
57	150mm, F1.0	640x480,12μm	8~12μm
58	150mm, F1.2	640x512,12μm	8~12μm

LWIR8~12μm			
Item	Focal Length (mm) & F number	Detector 12μm	Spectral Range
Motorized Zoom			
59	15-60mm, F1.0	640x512,12μm	8~12μm
60	25-75mm, F1.0	640x512,12μm	8~12μm
61	25-100mm, F1.0	640x512,12μm	8~12μm
62	25-225mm, F1.2	640x512,12μm	8~12μm
63	25-225mm, F1.0	1280x1024,12μm	8~12μm
64	28-300mm, F1.2	1280x1024,12μm	8~12μm
65	30-135mm, F1.0	640x512,12μm	8~12μm
66	30-150mm, F1.0	640x512,12μm	8~12μm
67	30-150mm, F1.0	800x600,12μm	8~12μm
68	30-150mm, F1.2	640x512,12μm	8~12μm
69	30-160mm, F1.2	640x512,12μm	8~12μm
70	40-200mm, F1.2	1024x768,12μm	8~12μm
Double FOV			
71	20~60mm, F1.0	640×512, 12μm	8~12μm
72	50-150mm, F1.0	640x512,12μm	8~12μm

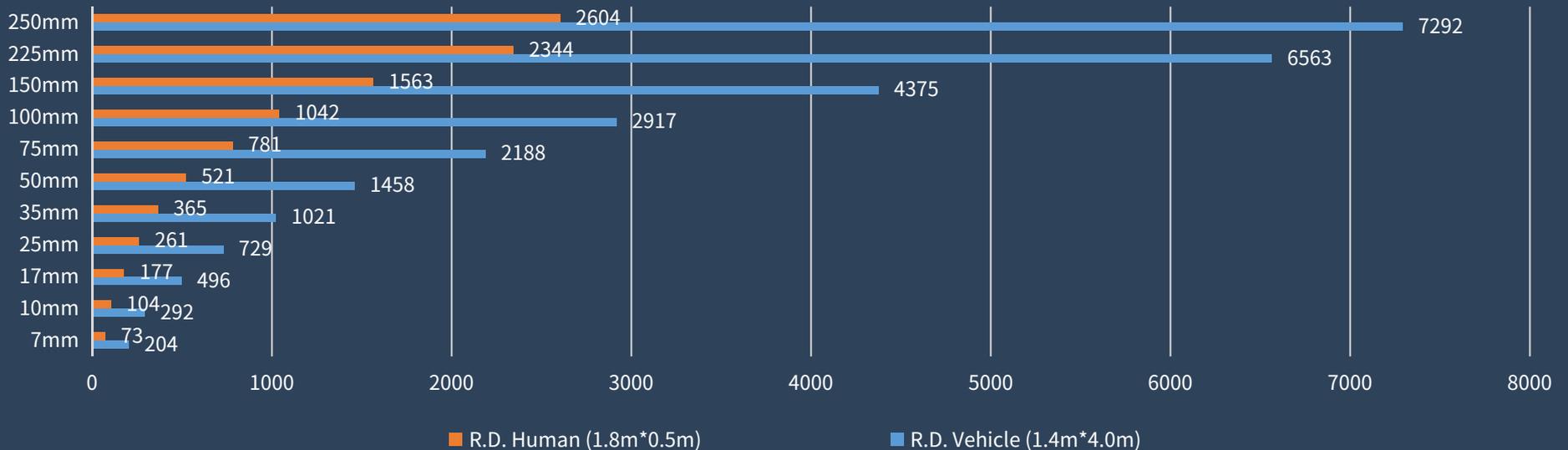
MWIR3~5μm			
Item	Focal Length (mm) & F number	Detector 12μm	Spectral Range
Motorized Zoom			
73	15-330mm, F4.0	640x512,12μm	3-5μm
74	30-660mm, F4.0	640x512,12μm	3~5μm
75	40-825mm, F4.0	640x512,12μm	3-5μm

Thermal Camera Range Performance

Detection Distance (unit: m)



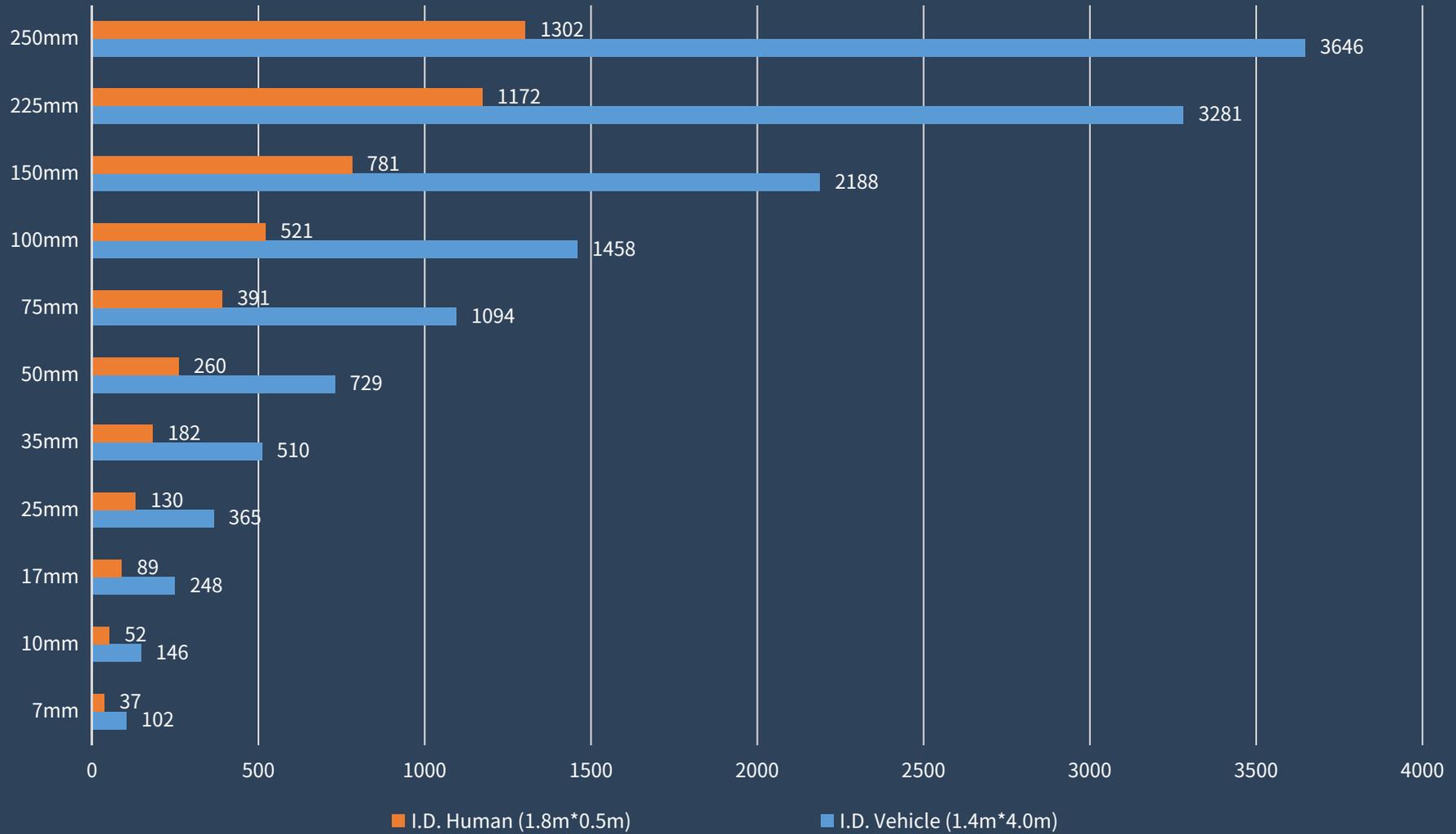
Recognition Distance (unit: m)



Notes: The table is for reference only, and the performance may vary according to different environment.

Thermal Camera Range Performance

Identification Distance (unit: m)

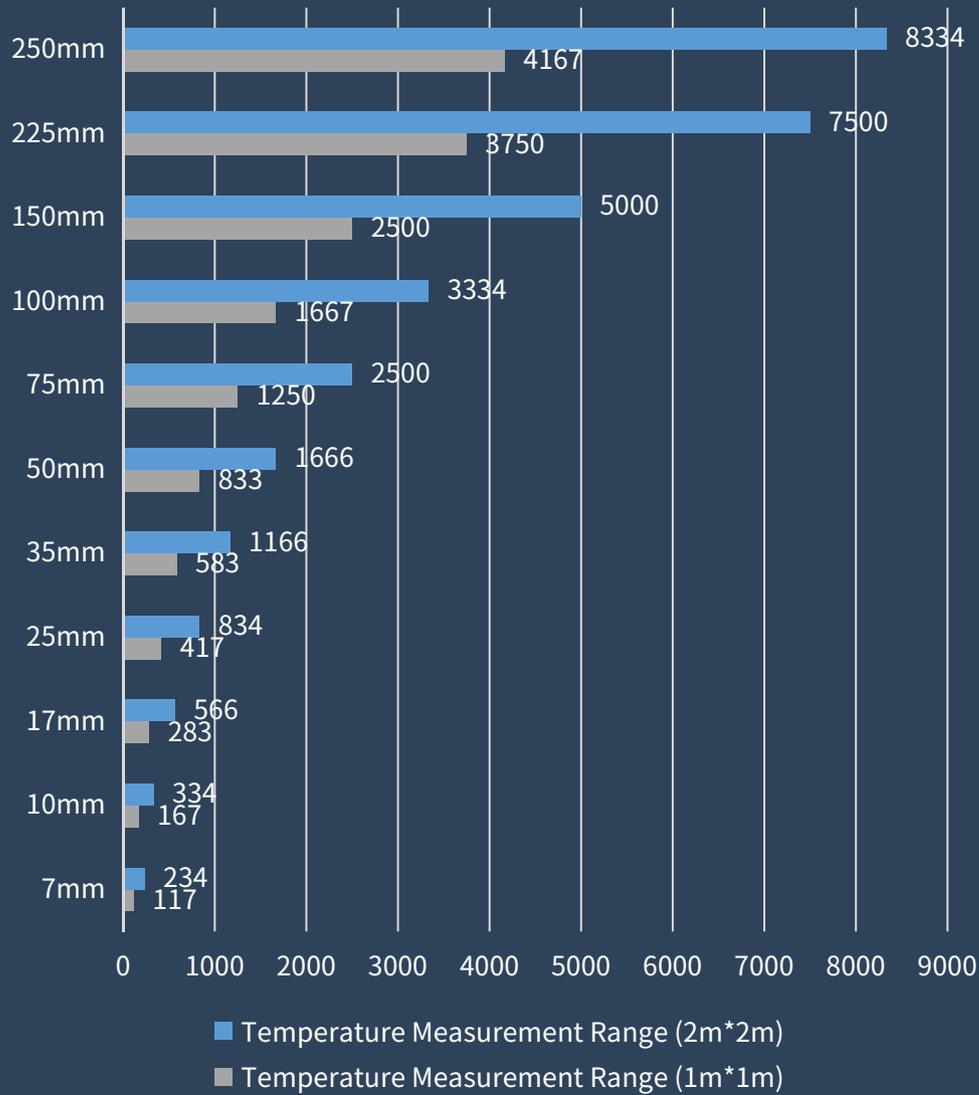


D.D. Detection Distance; R.D. Recognition Distance; I.D. Identification Distance

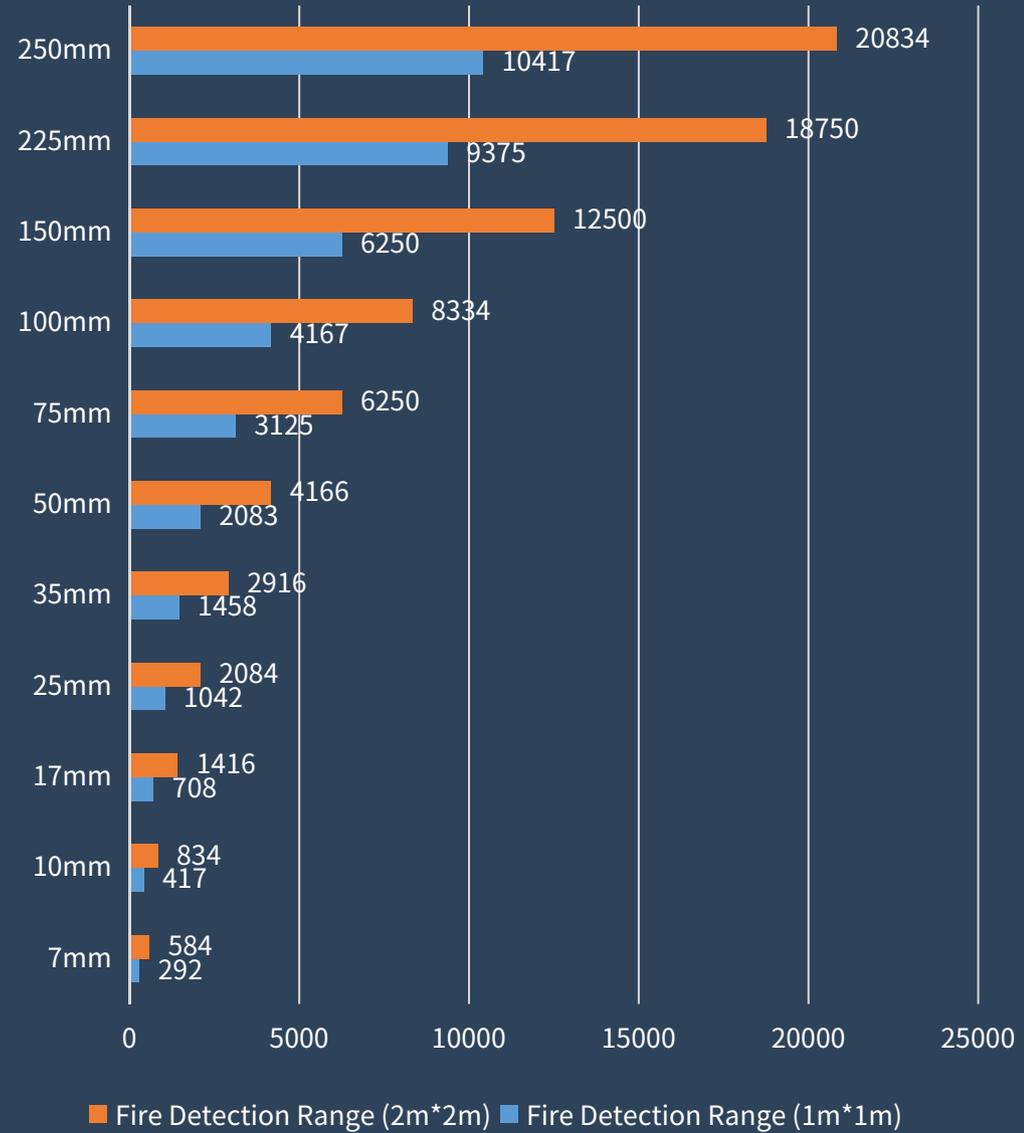
Notes: The table is for reference only, and the performance may vary according to different environment.

Smart Functions Range

Temperature Measurement Range (unit: m)



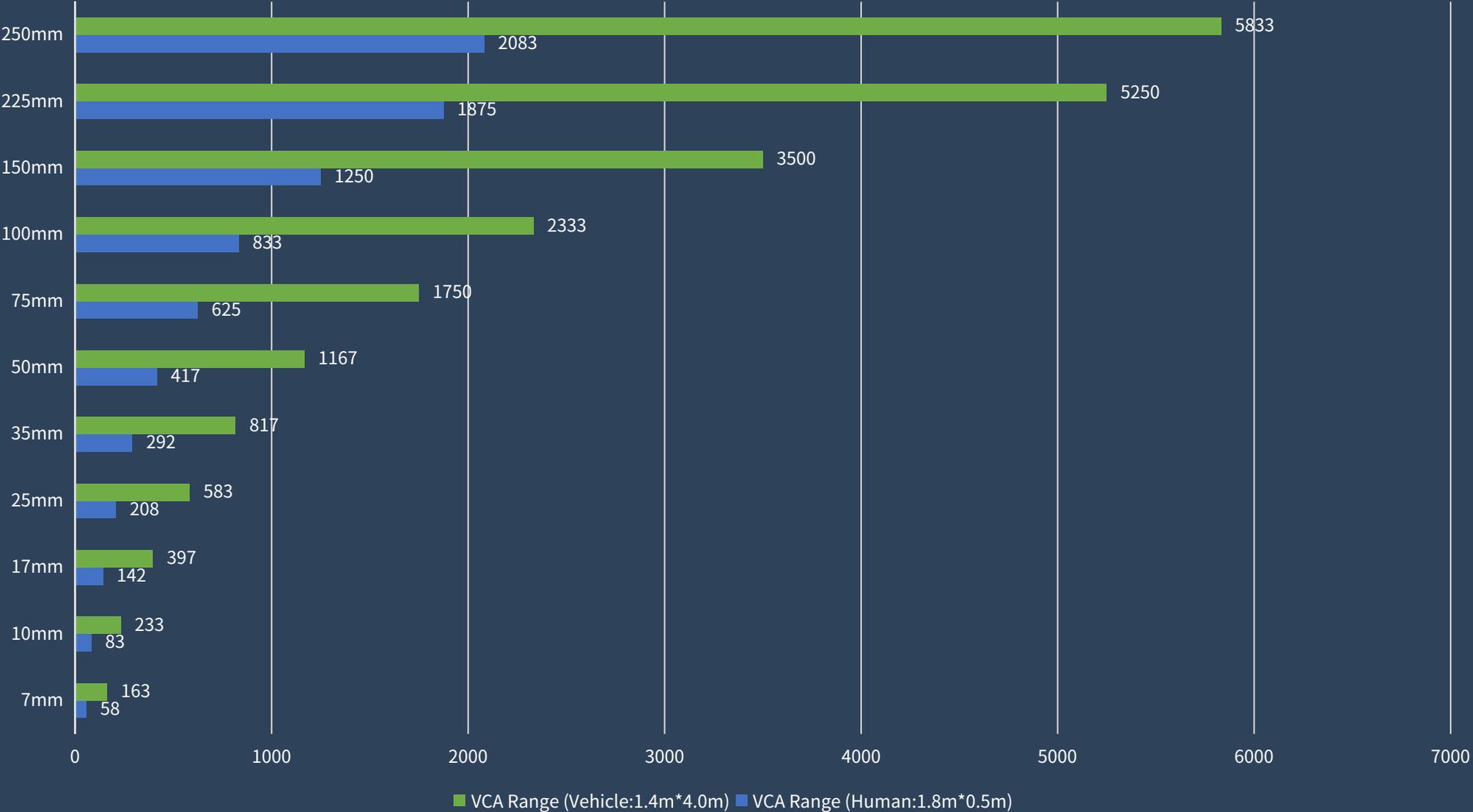
Fire Detection Range (unit: m)



Notes: The table is for reference only, and the performance may vary according to different environment.

Smart Functions Range

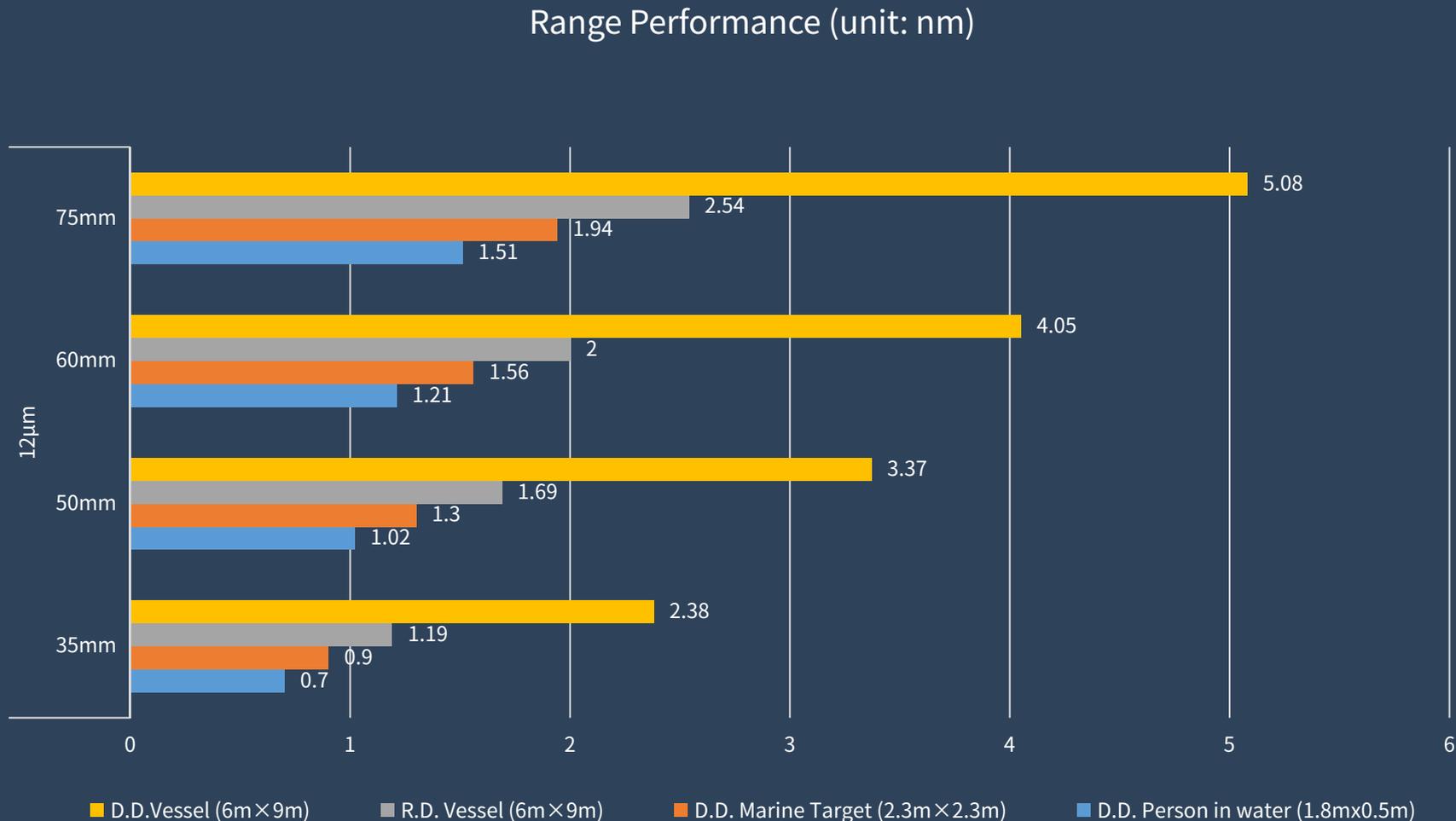
VCA Range (unit: m)



Notes: The table is for reference only, and the performance may vary according to different environment.

Thermal Marine Camera Range Performance

There is range limit for detecting and recognizing human/vessel target/marine target.



Notes: The table is for reference only, and the performance may vary according to different environment.



 **ThermTec**

ThermTec Technology Co., Ltd.

Email: info@thermeyertec.com

Website: <https://www.thermeyertec.com/>