

# Dual-spectrum Bullet Camera

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## Product Feature

1. With the latest  $12\ \mu\text{m}$  IR thermal imaging detector and advanced IR vision algorithm, the camera can make farther and clearer images.
2. Visible imaging and thermal imaging can meet the requirement for 24-hour security monitoring.
3. Smart analysis for actions such as area intrusion and cross-border intrusion are available.
4. Fire detecting alarm is available.
5. The camera can measure temperature independently. Equipped with professional temperature measuring analysis tools and multiple linkage alarm rules.
6. One-piece body design with encapsulation level IP66.
7. DC12 or PoE power supply is available.
8. ONVIF&GB28181 standard interface protocol, SDK, second development and third-party platform integration are available.

## Camera Specifications

Technical Specifications		Dual-spectrum bullet camera		
<b>Thermal Parameters</b>	Detector Type	VOx, uncooled FPA detectors		
	Spectral Range	8 ~ 14 $\mu$ m		
	NETD	$\leq$ 40mK@25°C,F#1.0		
	Resolution	256 $\times$ 192		
	Pixel Pitch	12 $\mu$ m		
	Focal Length	3.2mm	7mm	10mm
	Focus Type	Athermal fixed focus		
	FOV	56.0° $\times$ 42.2°	24.8° $\times$ 18.7°	17.5° $\times$ 11.3°
	F#	1.1	1	1
	IFOV	3.75mrad	1.7mrad	1.2mrad
	Palette	18 palettes available such as Whitehot/Blackhot/Rainbow.		
<b>Visible Parameters</b>	Sensor	5MP 1/2.8" Progressive Scan CMOS		
	Max. Resolution	2560 $\times$ 1920(visible)		
	Focal Length	4mm	8mm	12mm
	Focus Type	Fixed focus		
	FOV	82° $\times$ 59°	39° $\times$ 29°	25° $\times$ 18°
	Min. Illumination	Color:0.005Lux ,Black&white:0.0005Lux , IR light on:0Lux		
	Wide Dynamic	120dB		
	Day/Night Conversion	ICR auto conversion/ Electronic color to B/W		
	Digital Noise Reduction	3D NR		
	Filling Light	Infrared filling light, maximum filling distance 30m		
<b>Dual-spectrum Parameters</b>	Dual-Spectrum Fusion	Support the thermal image to fuse visible image to improve the image details		
	PIP	The camera displays a digital camera image with a superimposed infrared image frame		

	Temperature Information Overlay	The camera displays a digital camera image with superimposed thermal imaging information (only support thermographic rules and thermographic values)	
<b>Network Functions</b>	Network Protocol	IPv4,HTTP,HTTPS,QoS,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,RTP,TCP,UDP,IGMP,ICMP,DHCP	
	Interoperability	ONVIF、GB28181、SDK	
	Number of Videos Previewed Simultaneously	Support up to 8 channels	
	User Management	Up to 32 users, divided into 3 levels: administrators, operators and users	
	Browser	Support browsers such as Google, Firefox, Edge, 360 (chrome kernel), and multiple languages (at least Chinese and English are supported)	
<b>Video Parameters</b>	Max. Resolution	2560×1920(visible),1280×960(thermal)	
	Image Format	JPEG	
	Audio Compression Standard	G.711a/G.711u/AAC/PCM	
	Video Compression Standard	H.264/H.265	
	Main Stream	Visible:	
		PAL:25fps(2560×1920),25fps(2560×1440),25fps(1920×1080)	
		NTSC:30fps(2560×1920),30fps(2560×1440),30fps(1920×1080)	
		Thermal:	
		PAL:25fps(1280×960),25fps(1024×768)	
	NTSC:30fps(1280×960),30fps(1024×768)		
Substream	Visible		
	PAL:25fps(1920×1080),25fps(1280×720),25fps(704×576),25fps(352×288)		

		NTSC:30fps(1920×1080),30fps(1280×720),30fps(704×480),30fps(352×240)
		Thermal:
		PAL:25fps(640×480),25fps(320×288)
		NTSC:30fps(640×480),30fps(320×240)
<b>Temperature Measurement</b>	Measuring Range	-20°C ~ +550°C
	Measuring Accuracy	±2°C or ±2% (The larger value shall prevail)
	Temperature Analysis	Whole frame, spot (12), line (12) region (12), support temperature measurement rules and linkage alarms
<b>Smart Functions</b>	Fire Warning	Support fire detection and at least 10 fire alarms.
	Smart Video	Alarm trigger recording, disconnection trigger recording
	Smart Alarming	Support triggering alarm and linkage alarm of network disconnection, IP address conflict, memory error, illegal access and abnormal detection, strong light protection detection
	Smart Detecting	Support area intrusion, cross-border intrusion (distinguishing human/vehicles), dynamic detection analysis, heat source tracking analysis, etc.
	Voice Intercom	Support two-way voice intercom
	Linkage Alarm	Video/image/mail/ alarm output / sound and light alarm (built-in)
<b>System Interface</b>	Power Interface	DC 12V±25% / PoE(802.3af)
	Communication Interface	1 RJ45 10M/100M adaptive Ethernet port
	Audio Input	1 channel audio input
	Audio Output	1 channel audio output,1 channel built-in speaker
	Alarm Input	2 channel DC 0 ~ 5V alarm input
	Alarm output	1 channel open relay output
	Storage Interface	Micro SD memory (maximum 256G)
	Reset Button	Support
RS485	1 channel RS485 and support Pelco protocol	

<b>General Specification</b>	Operating Temperature & Humidity	-40°C ~ +70°C; <95%RH
	Protection Level	IP67,TVS 6000V, lightning protection, anti-surge, in line with level four standard of GB/T17626.5
	Power Consumption	Max.< 3W
	Dimension (mm)	265×99×87 (minimum length can be adjusted to 253mm)
	Weight	950g

## Operating Distance

The recommended distance of detecting, recognizing and identifying for human (1.8×0.5m) and vehicles (1.4×4.0m) are as follows:

DD stands for Detecting Distance;

RD stands for Recognizing Distance;

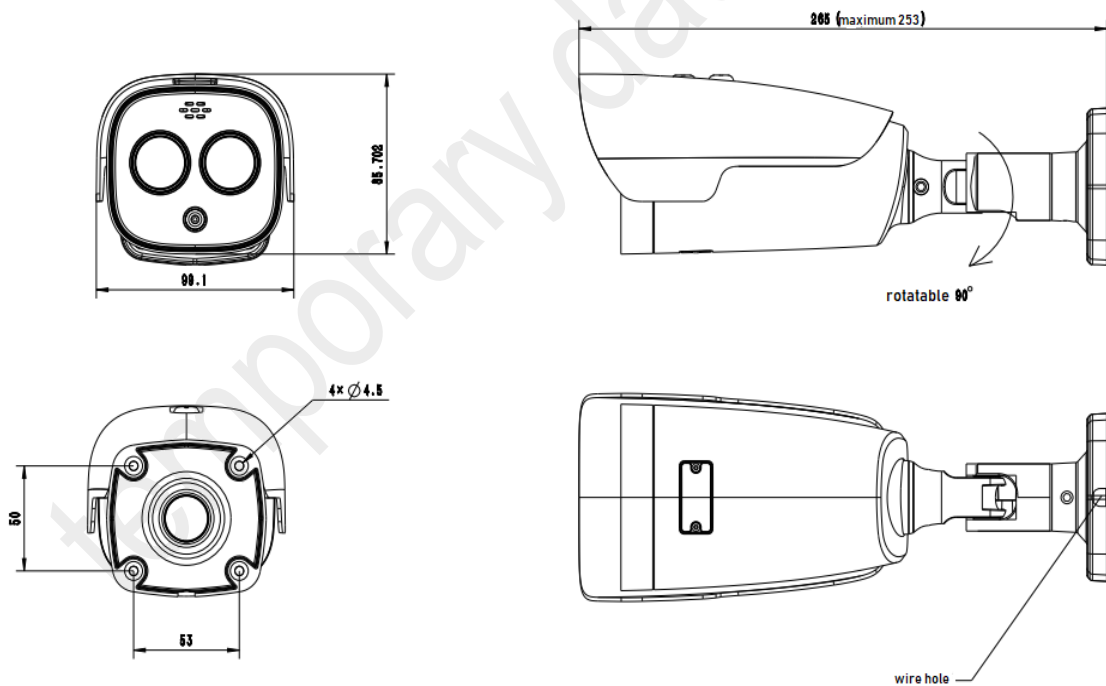
ID stands for Identifying Distance;

Equipped Lens	DD (vehicle)	DD (human)	RD (vehicle)	RD (human)	ID (vehicle)	ID (human)
3.2mm	409m	133m	102m	33m	51m	17m
7mm	894m	292m	224m	73m	112m	36m
10mm	1661m	542m	415m	135m	208m	68m

## Operating Distance

Equipped Lens	DD (vehicle)	DD (human)	Temperature Measuring Distance Target (2mx2m)	Temperature Measuring Distance Target (1mx1m)	Fire Detecting Distance Target (2mx2m)	Fire Detecting Distance Target (1mx1m)
3.2mm	33m	102m	89m	44m	356m	178m
7mm	73m	224m	194m	97m	750m	389m
10mm	104m	319m	278m	139m	1000m	550m

## Camera Structure and Dimensions



## Accessories

temporary datasheet

This datasheet is subject to change without prior notice. Please contact us to get the latest datasheet.