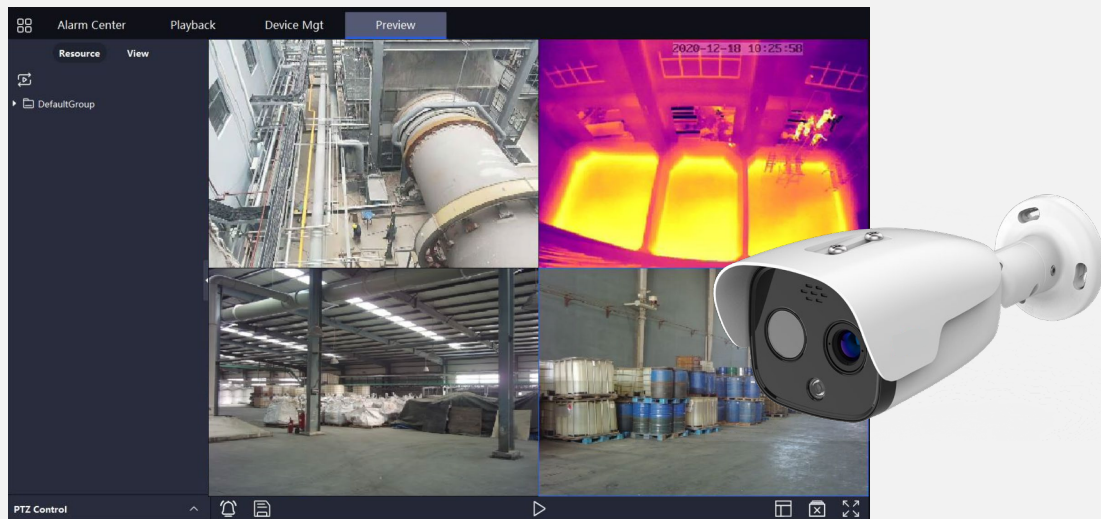# Dual-spectrum Camera

Dual 465-T

Product Feature

1. With the latest 12μm thermal imaging detector and advanced image algorithm, it can make farther and clearer images.

2. Visible imaging and thermal imaging can meet the requirement for 24/7 security monitoring.

3. Smart analysis for actions such as tripwire intrusion and area intrusion are available.

4. Support professional temperature measurement analysis tools and smart fire detecting algorithm.

5. Support multiple event linkage alarm and sound-light alarm.

6. One-piece body design with encapsulation rating IP67.

7. DC12 or PoE power supply is available.

8. ONVIF&GB28181 standard interface protocol, SDK, NVR and VMS client software is available.

Camera Specifications

Technical Specifications		Dual 465-T			
Thermal Parameters	Detector Type	VOx, uncooled FPA detectors			
	Spectral Range	8 ~ 14µm			
	NETD	≤40mK(@25°C,F#1.0,25Hz)			
	Max. Resolution	640×512			
	Pixel Pitch	12µm			
	Focal Length	9.1mm	13mm	19mm	25mm
	Focus Type	Athermal fixed focus			
	FOV	48°×38°	33°×26°	22°×18°	17°×14°
	F#	1.0	1.0	1.0	1.0
	IFOV	1.32mrad	0.92mrad	0.63mrad	0.48mrad
	Palette	20 palettes available such as Whitehot/Blackhot/Rainbow.			
Visible Parameters	Sensor	5MP 1/2.8" Progressive Scan CMOS			
	Max. Resolution	2560×1920			
	Focal Length	4mm	6mm	6mm	12mm
	FOV	65°×50°	46°×35°	46°×35°	24°×18°
	Day/Night Conversion	ICR auto conversion/ Electronic color to B/W			
	Filling Light	Infrared filling light, maximum filling distance 40m			
Dual-spectrum Parameters	Dual-Spectrum Fusion	Support the thermal image to fuse visible image to improve image details			
	PIP	Support thermal image overlaid on visual image in PIP mode			
Network Functions	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 20 channels			

	User Management	Up to 20 users, three levels: administrator, operator and user
	Browser	Support IE browser, Chinese and English are supported.
Video Parameters	Max. Resolution	2560×1920(visible),1280×1024(thermal)
	Image Format	JPEG
	Audio Compression Standard	G.711a/G.711u/AAC/PCM
	Video Compression Standard	H.264/H.265
	Main Stream	Visible: 50Hz:25fps(2560×1920,2560×1440,1920×1080,1280×720) 60Hz:30fps(2560×1920,2560×1440,1920×1080,1280×720) Thermal: 50Hz:25fps(1280×1024,1024×768) 60Hz:30fps(1280×1024,1024×768)
	Sub stream	Visible 50Hz:25fps(704×576,352×288) 60Hz:30fps(704×480,352×240) Thermal: 50Hz:25fps(640×512) 60Hz:30fps(640×512)
Temperature Measurement	Measuring Range	-20℃~+550℃
	Measuring Accuracy	±2℃ or ±2% (The larger value shall prevail)
	Temperature Analysis	Support full frame, spot, line, region temperature measurement rules and linkage alarms
Smart Functions	Fire Warning	Support fire detection
	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 burn alarm

V 1.0.0	Smart Detecting	Support event analysis functions such as area intrusion, tripwire intrusion, etc.
	Voice Intercom	Support two-way voice intercom
	Linkage Alarm	Video/image/mail/ alarm output / sound and light alarm
System Interface	Power Interface	DC 12V±25% / PoE(802.3af)
	Communication Interface	1 RJ45 10M/100M adaptive Ethernet port
	Audio Interface	1 channel audio input, 1 channel audio output
	Alarm Interface	2-channel alarm input, 2-channel alarm output
	Storage Interface	Micro SD memory (maximum 256G)
	RS485	1 channel RS485 and support Pelco protocol
General Specification	Operating Temperature& Humidity	-40℃～+70℃；<95%RH
	Encapsulation Rating	IP67
	Power Consumption	≤8W
	Dimension (mm)	319.5×121.5×103.6mm
	Weight	≤1.8kg

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;
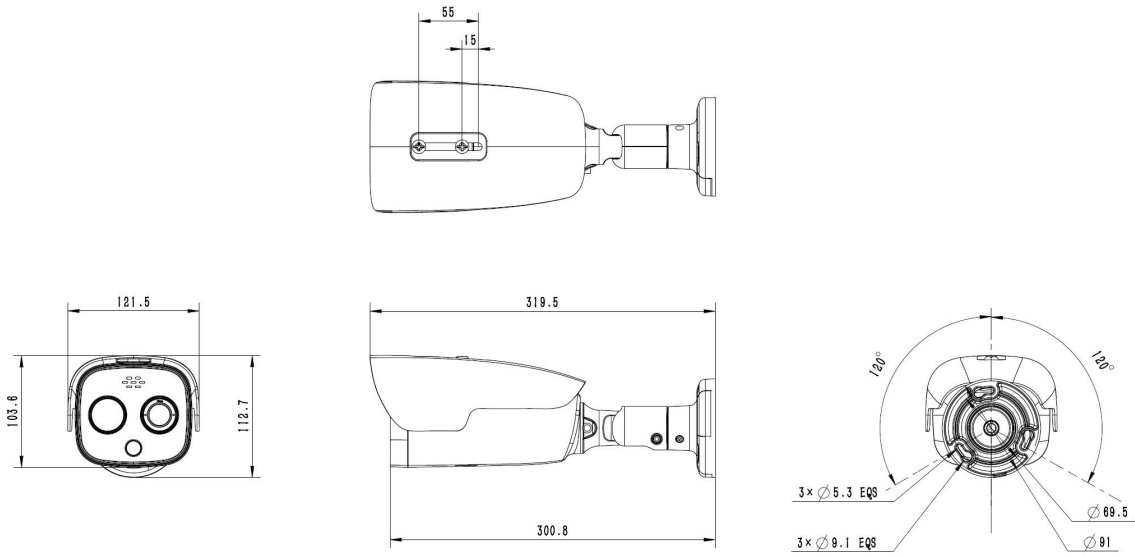
RD stands for Recognizing Distance;

ID stands for Identifying Distance;

Equipped Lens	DD (vehicle)	DD (human)	RD (vehicle)	RD (human)	ID (vehicle)	ID (human)
9.1mm	1163m	379m	291m	95m	145m	47m
13mm	1661m	542m	415m	135m	208m	68m
19mm	2428m	792m	607m	198m	303m	99m
25mm	3194m	1042m	799m	260m	399m	130m

Operating Distance of Smart Analysis

Equipped Lens	RD (human)	RD (vehicle)	Temperature Measurement (2m×2m)	Temperature Measurement (1m×1m)	Fire Detection (2m×2m)	Fire Detection (1m×1m)
9.1mm	95m	291m	253m	126m	1011m	506m
13mm	135m	415m	361m	181m	1444m	722m
19mm	198m	607m	528m	264m	2111m	1056m
25mm	260m	799m	694m	347m	2778m	1389m

Drawings

55

15

121.5

103.6

112.7

319.5

300.8

120°

120°

3×∅5.3 EQS

3×∅9.1 EQS

∅69.5

∅91

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