Dual-spectrum Turret Network Camera
IRS-FD225-T

Product Feature

1.With the latest InfiRay® 12μm IR thermal imaging detector and advanced IR 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.The professional thermographic analysis tools and smart fire detecting algorithm are supported.

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

6.One-piece body design with encapsulation level IP66.

7.DC12 or PoE power supply is available.

7.The compatible NVR and VMS software are provided, ONVIF&GB28181 standard interface protocol and SDK for secondary development are available.

Product Specifications

Technical Index		IRS-FD225-T	
Thermal	Detector Type	VOx, uncooled FPA detectors	
	Spectral Range	8~14μm	
	NETD	≤40mK(@25°C,F#1.0,25Hz)	
	Resolution	256×192	
	Pixel Pitch	12μm	
	Focal Length	3.2mm	7mm
	Focus Mode	Athermal fixed focus	
	FOV	56.0°×42.2°	24.8°×18.7°
	F#	1.1	1.0
	IFOV	3.75mrad	1.71mrad
	Palette	20 palettes available such as Whitehot/Blackhot/Rainbow.	
Visible	Sensor	5MP 1/2.7" Progressive Scan CMOS	
	Max Resolution	2592×1944	
	Focal Length	4mm	8mm
	Focus Mode	fixed focus	
	FOV	84°× 60.7°	38°× 28°
	Min. Illumination	0.0018Lux @(F1.6,AGC ON) ,0 Lux with IR	
	WDR	120dB	
	Day/Night Conversion	ICR auto conversion/ Electronic color to B/W	
	DNR	3D NR	
	Filling Light	Infrared filling light, maximum filling distance 30m	
Dual-spectrum	Dual-spectrum Fusion	Support the thermal image to fuse visible image to improve the image details	
	Temperature Information Overlay	The camera displays a digital camera image with superimposed thermal imaging thermographic information	

Network	Network Protocols	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 with Chrome kernel such as Google, Firefox, Edge, Chinese and English are supported
Video	Max. Resolution	2592×1944（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： 50Hz:25fps(2592×1944, 2560×1440, 1920×1080) 60Hz:30fps(2592×1944, 2560×1440, 1920×1080) Thermal： 50Hz:25fps(1280×960, 1024×768) 60Hz:30fps(1280×960, 1024×768)
	Sub Stream	Visible： 50Hz:25fps(704×576, 640×480, 352×288) 60Hz:30fps(704×576, 640×480, 352×288) Thermal： 50Hz:25fps(640×480, 256×192) 60Hz:30fps(640×480, 256×192)
Temperature Measurement	Measuring Range	-20℃~+550℃
	Measuring Accuracy	±2℃ or ±2%（The larger value shall prevail）

	Temperature Analysis	Whole frame, spot, line, region, support 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 warning.
	Smart Detecting	Support tripwire intrusion, area intrusion
	Voice Intercom	Two-way voice intercom
	Alarm Linkage	Video/ Snapshot/Email/Alarm output/sound and light alarm
System Interface	Power Interface	DC 12V±25% / POE(802.3af)
	Communication Interface	1 RJ45 10M / 100M self-adaptive Ethernet port
	Audio Input	1 channel audio input
	Audio Output	1 channel audio output
	Alarm Input	1 channel DC 0~5V alarm input
	Alarm Output	1 channel open relay output
	Storage Interface	Micro SD memory（maximum 256G）
	Reset Button	Support
	RS-485	1 channel RS485, extended Pelco protocols are supported
General Specification	Operating Temperature & Humidity	-40℃~+70℃；<95%RH
	Protection Level	IP66
	Power Consumption	≤10W
	Dimension(mm)	Φ129×96
	Weight	≤0.8kg

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:

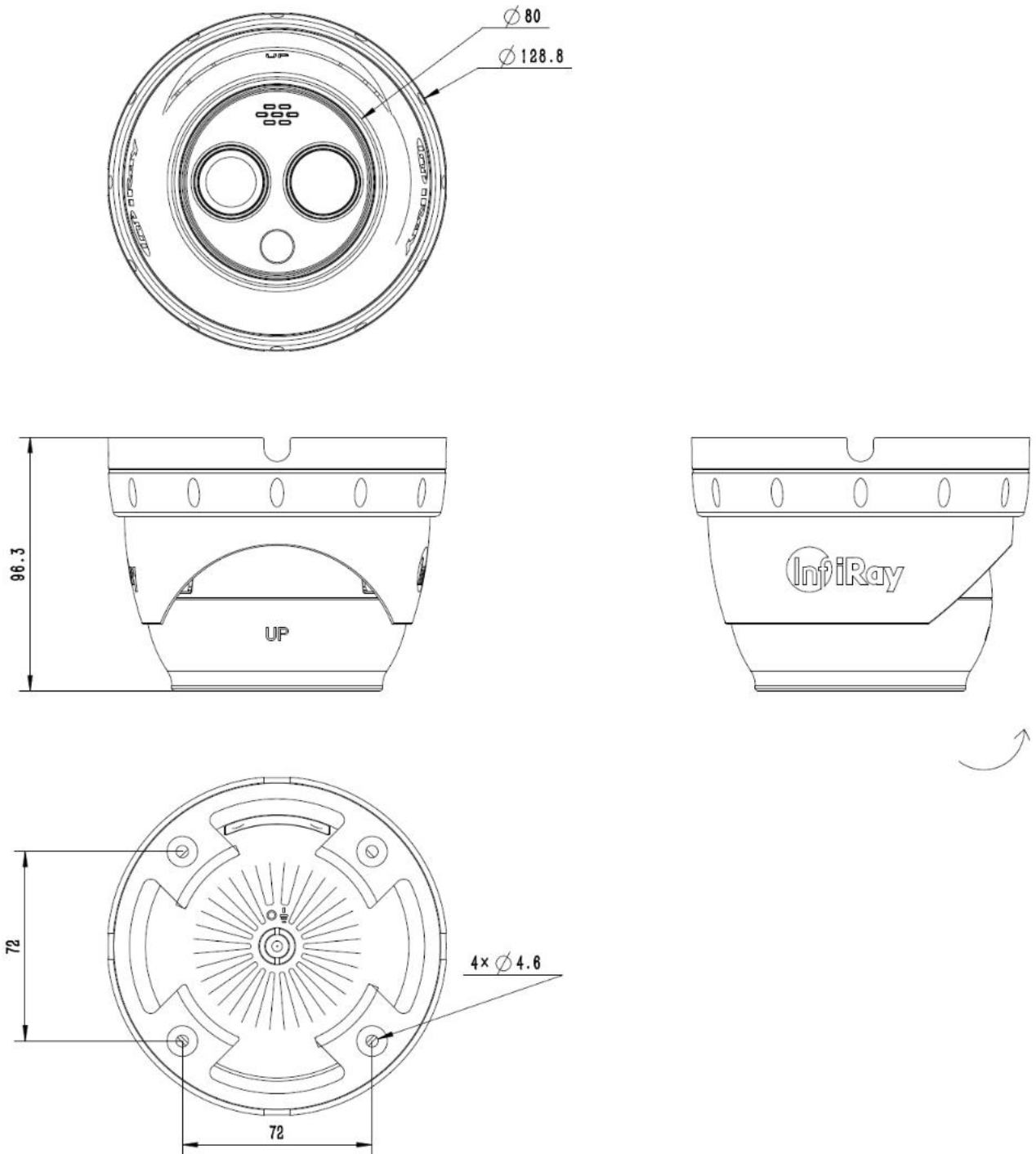DD stands for Detecting Distance;

RD stands for Recognizing Distance;

ID stands for Identifying Distance;

Equipped Lens	DD （vehicle）	DD （human）	RD （vehicle）	RD （human）	ID （vehicle）	ID （human）
3.2mm	409m	133m	102m	33m	51m	17m
7mm	894m	292m	224m	73m	112m	36m

Operating Distance of Intelligent Analysis

Equipped Lens	RD (Human)	RD (Vehicle)	Temperature Measurement Range (Target size: 2mx2m)	Temperature Measurement Range (Target size :1mx1m)	Fire Detection Range (Target size: 2mx2m)	Fire Detection Range (Target size: 1mx1m)
3.2mm	25m	77m	89m	44m	356m	178m
7mm	55m	168m	194m	97m	778m	389m

Structure Drawings

Ø80
Ø128.8

96.3

UP

InfiRay

72

72

4× Ø4.6

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