

Dual-spectrum Bullet Camera IRS-FB225-T



Product Feature

- 1.With the latest InfiRay® 12 µm IR thermal imaging detector and advanced IR vision algorithm, IRS-FB2252-T series 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 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 level IP67.
- 7.DC12 or PoE power supply is available.
- 8.ONVIF&GB28181 standard interface protocol, SDK, NVR and VMS client software are available.



Camera Specifications

Technical Specifications		IRS-FB225-T			
	Detector Type	VOx, uncooled FPA detectors			
	Spectral Range	8 ~ 14μm			
	NETD	≤40mK @25°C,F#1.0			
	Max. Resolution	256×192			
	Pixel Pitch	12µm			
Thermal	Focal Length	3.2mm 7mm 10mr		10mm	
Parameters	Focus Type	Athermal fixed focus			
	FOV	56.0°×42.2°	24.8°×18.7°	17.5°×11.3°	
	F#	1.1	1	1	
	IFOV	3.75mrad	1.7mrad	1.2mrad	
	Palette	20 palettes available such	as		
	1 alctic	Whitehot/Blackhot/Rainbo	ow.	V.	
	Sensor	5MP 1/2.8" Progressive Scan CMOS			
	Max. Resolution	2560×1920			
	Focal Length	4mm 8mm 12mm			
	Focus Type	Fixed focus			
	FOV	82°×59°	39°×29°	25°×18°	
Visible Parameters	Min. Illumination	Color:0.005Lux ,Black&white:0.0005Lux , IR light on:0Lux			
raiailleteis	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			
Dual-spectrum	Dual-Spectrum	Support the thermal image to fuse visible image to			
	Fusion	improve the image details			
Parameters	Temperature	The camera displays a digital camera image with			
	Information	superimposed thermal imaging temperature			
	Overlay	measurement information			



	Network	IPv4,HTTP,HTTPS ,FTP,SMTP,UPnP,DNS,DDNS,N		
Network Functions	Protocol	TP,RTSP,RTCP,RTP,TCP,UDP,IGMP,ICMP,DHCP		
	Interoperability	ONVIF, GB28181, SDK		
	Number of Videos Previewed Simultaneously	Support up to 8 channels		
	User	Up to 32 users, divided into 3 levels: administrators,		
	Management	operators and users		
	Prower	Support browsers such as Google, Firefox, Edge		
	Browser	(chrome kernel), Chinese and English are supported.		
	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:		
		50Hz:25fps(2560×1920, 2560×1440,1920×1080)		
		60Hz:30fps(2560×1920, 2560×1440, 1920×1080)		
Video		Thermal:		
Parameters		50Hz:25fps(1280×960, 1024×768)		
r aramoters		60Hz:30fps(1280×960, 1024×768)		
		Visible		
		50Hz:25fps(1920×1080, 1280×720, 704×576,		
		352×288)		
	Sub stream	60Hz:30fps(1920×1080, 1280×720, 704×480,		
	Jub sucalli	352×240)		
		Thermal:		
		50Hz:25fps(640×480, 320×288)		
		60Hz:30fps(640×480, 320×240)		
Temperature Measurement	Measuring Range	-20℃~150℃,0℃~+550℃		



Accuracy Temperature Analysis Fire Warning Support full frame, spot, line, region temperature Analysis Fire Warning Support fire detection Alarm trigger recording, disconnection trigger recording Smart Video Smart Alarming Support triggering alarm and linkage alarm of network disconnection, IP address conflict, memory error, illegal access and burn alarm Support event analysis functions such as area intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Linkage Alarm Linkage Alarm Support two-way voice intercom Video/image/mail/ alarm output / sound and light alarm OC 12V±25% / PoE(802.3af) Communication Interface Audio Input Audio Output 1 channel audio input Audio Output 1 channel audio output Alarm noutput Storage Interface Reset Button Support RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level Power Consumption Max.< 6W Max.< 6W Micro SD Max.< 6W Max.< 6W		Measuring		
Analysis measurement rules and linkage alarms Fire Warning Support fire detection Alarm trigger recording, disconnection trigger recording Smart Video Support triggering alarm and linkage alarm of network disconnection, IP address conflict, memory error, illegal access and burn alarm Support event analysis functions such as area intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Support two-way voice intercom Linkage Alarm Video/image/mail/ alarm output / sound and light alarm Power Interface DC 12V±25% / PoE(802.3af) Communication Interface Audio Input 1 channel audio input Audio Output 1 channel audio output Alarm Input 2 channel Alarm output 1 channel Storage Interface Micro SD memory (maximum 256G) Reset Button Support RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level IP66 Power Consumption Max.< 6W			±2℃ or ±2% (The larger value shall prevail)	
Fire Warning Support fire detection Alarm trigger recording, disconnection trigger recording Smart Video Smart Alarming Support triggering alarm and linkage alarm of network disconnection, IP address conflict, memory error, illegal access and burn alarm Support event analysis functions such as area intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Support two-way voice intercom Linkage Alarm Video/image/mail/ alarm output / sound and light alarm Power Interface DC 12V±25% / PoE(802.3af) Communication Interface Audio Input 1 channel audio input Audio Output 1 channel audio output Alarm Input 2 channel Alarm output 3 channel Storage Interface Reset Button Support RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level Power Consumption Max.< 6W Max.< 6W		Temperature	Support full frame, spot, line, region temperature	
Smart Video Smart Video Smart Alarming Smart Alarming Smart Functions Smart Alarming Smart Alarming Smart Alarming Smart Alarming Support triggering alarm and linkage alarm of network disconnection, IP address conflict, memory error, illegal access and burn alarm Support event analysis functions such as area intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Linkage Alarm Power Interface DC 12V±25% / PoE(802.3af) Communication Interface Audio Input Alarm Input Alarm Input Alarm output 1 channel audio input Alarm output Alarm output Alarm output 1 channel Storage Interface Reset Button RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level Power Consumption Max.< 6W Max.< 6W		Analysis	measurement rules and linkage alarms	
Smart Video recording Support triggering alarm and linkage alarm of network disconnection, IP address conflict, memory error, illegal access and burn alarm Support event analysis functions such as area intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Support two-way voice intercom Linkage Alarm Power Interface DC 12V±25% / PoE(802.3af) Communication Interface Audio Input Audio Output 1 channel audio input Alarm output Alarm output 1 channel audio output Alarm output 1 channel audio output Alarm output 1 channel audio output Storage Interface Reset Button RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level Power Consumption Max.< 6W Support Max.< 6W		Fire Warning	Support fire detection	
Smart Functions Smart Alarming disconnection, IP address conflict, memory error, illegal access and burn alarm Support event analysis functions such as area intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Support two-way voice intercom Linkage Alarm Video/image/mail/ alarm output / sound and light alarm Power Interface Communication Interface Audio Input 1 channel audio input Alarm output 1 channel audio output Alarm Input 2 channel Alarm output 1 channel Storage Interface Reset Button Support RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level Power Consumption Max.< 6W Max.< 6W		Smart Video		
Smart Detecting intrusion, tripwire intrusion, dynamic detection analysis, etc. Voice Intercom Support two-way voice intercom Linkage Alarm Video/image/mail/ alarm output / sound and light alarm Power Interface DC 12V±25% / PoE(802.3af) Communication Interface Audio Input 1 channel audio input 4 Audio Output 1 channel audio output 4 Alarm Input 2 channel 4 Alarm output 1 channel 5torage Interface Reset Button Support 8 Reset Button Support 8 RS485 1 channel RS485 and support Pelco protocol 7 Operating Temperature& Humidity Protection Level Power Consumption Max.< 6W Max.< 6W		Smart Alarming	disconnection, IP address conflict, memory error,	
Linkage Alarm Video/image/mail/ alarm output / sound and light alarm Power Interface Communication Interface Audio Input Audio Output Alarm Input Alarm output Alarm output Storage Interface Reset Button RS485 Operating Temperature& Humidity Protection Level Power Consumption Video/image/mail/ alarm output / sound and light alarm output / sound and light alarm output / PoE(802.3af) 1 RJ45 10M/100M adaptive Ethernet port 1 channel audio input 4 channel audio output Alarm Input 2 channel 1 channel Channel Alarm output 3 channel Channel Alarm Output 4 channel Channel Channel Channel Sepecification Video/image/mail/ alarm output / sound and light alarm Input 4 channel Channel Audio Output 4 channel audio output Alarm Input 4 channel 4 ch	Functions	Smart Detecting	intrusion, tripwire intrusion, dynamic detection	
Communication 1 RJ45 10M/100M adaptive Ethernet port		Voice Intercom	Support two-way voice intercom	
System Interface Audio Input Audio Output Alarm Input Storage Interface Reset Button RS485 Communication Interface I RJ45 10M/100M adaptive Ethernet port I channel audio input Alarm output I channel I ch		Linkage Alarm		
Interface 1 RJ45 10M/100M adaptive Ethernet port		Power Interface	DC 12V±25% / PoE(802.3af)	
Audio Output 1 channel audio output Alarm Input 2 channel Alarm output 1 channel Storage Interface Reset Button Support RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level IP66 Power Consumption Alarm Input 2 channel Storage Micro SD memory (maximum 256G) Interface Alarm output 1 channel Storage Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Interface Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Interface Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm output 1 channel Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Micro SD memory (maximum 256G) Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Micro SD memory (maximum 256G) For example of the support Pelco protocol Alarm Input 2 channel Micro SD memory (maximum 256G)			1 RJ45 10M/100M adaptive Ethernet port	
Alarm Input 2 channel Alarm output 1 channel Storage Interface Reset Button RS485 1 channel RS485 and support Pelco protocol Operating Temperature& Humidity Protection Level IP66 Power Consumption Alarm Input 2 channel 2 channel Alarm output 1 channel Storage Micro SD memory (maximum 256G) Alarm Input 2 channel 1 channel Support -40°C ~ +70°C; <95%RH Max.< 6W		Audio Input	1 channel audio input	
Interface Alarm Input Alarm output Alarm output Storage Interface Reset Button RS485 Operating Temperature& Humidity Protection Level Power Consumption Alarm Input Conannel Conannel Conannel Consumption Alarm output Conannel		Audio Output	1 channel audio output	
Alarm output Storage Interface Reset Button RS485 Operating Temperature& Humidity Protection Level Power Consumption Alarm output 1 channel		Alarm Input	2 channel	
Micro SD memory (maximum 256G)	Interface	Alarm output	1 channel	
RS485 1 channel RS485 and support Pelco protocol Operating Temperature& -40°C ~ +70°C; <95%RH Humidity Protection Level IP66 Power Consumption Max.< 6W			Micro SD memory (maximum 256G)	
Operating Temperature& -40°C ~ +70°C; <95%RH Humidity Protection Level IP66 Power Consumption Max. < 6W		Reset Button	Support	
Temperature& -40°C ~ +70°C; <95%RH Humidity Protection Level IP66 Power Consumption Max.< 6W		RS485	1 channel RS485 and support Pelco protocol	
Specification Power Consumption Max. < 6W		Temperature&	-40°C ~ +70°C; <95%RH	
Specification Power Consumption Max. < 6W		Protection Level	IP66	
			Max.< 6W	
Dimension 265×99×87 (minimum length can be adjusted to (mm) 253mm)		Dimension (mm)	265×99×87 (minimum length can be adjusted to 253mm)	
Weight 950g		Weight	950g	



Operating Distance

The recommended distance of detecting, recognizing and identifying for human $(1.8 \times 0.5 \text{m})$ and vehicles $(1.4 \times 4.0 \text{m})$ are as follows:

DD stands for Detecting Distance;

RD stands for Recognizing Distance;

ID stands for Identifying Distance;

Equipped	DD	DD	RD	RD	ID	ID
Lens	(vehicle)	(human)	(vehicle)	(human)	(vehicle)	(human)
3.2mm	409m	133m	102m	33m	51m	17m
7mm	894m	292m	224m	73m	112m	36m
10mm	1278m	417m	319m	104m	160m	52m

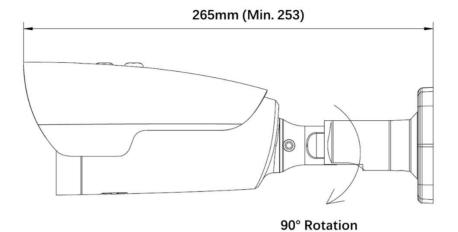


Operating Distance of Smart Analysis

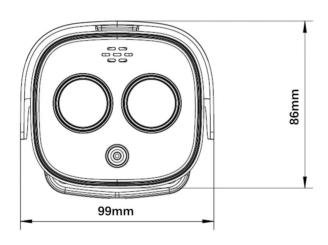
Equipped Lens	Target RD (human)	Target RD (vehicle)	Temperature Measuring Distance Target (2mx2m)	Temperature Measuring Distance Target (1mx1m)	Fire Detecting Distance Target (2mx2m)	Fire Detecting Distance Target (1mx1m)
3.2mm	25m	77m	89m	44m	356m	178m
7mm	55m	168m	194m	97m	750m	389m
10mm	78m	240m	278m	139m	1000m	550m



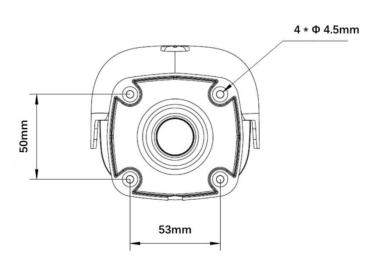
Camera Structure and Dimensions



Side View



Front View



Back View



Package List

No.	Items	Quantity
1	5-pin connector	1
2	2-pin connector	1
3	Waterproof connector	1
4	User Manual	1
5	Drill position template	1
6	Expansion screw with swivel nut	4

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