



**IRS-FB4-T Series**  
**Bi-spectrum Bullet Camera**  
**Product Datasheet V1.0.1**



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## **1. Overview**

### **1.1 Update Comments**

This datasheet may be updated several times per year. Please contact us to get the latest datasheet.

### **1.2 Authorized Release Notes**

The authorized release of this datasheet is the Chinese version. In case of disagreement due to translation errors, the Chinese version shall prevail. If there is any update in the future, the Chinese version will be revised first.

## 2.Product Description

### General Description

IRS-FB4-T Series Bi-spectrum Bullet Camera is a new-type thermal imaging net camera integrated with the functions of Internet remote monitoring, video server and high definition camera. The high-definition optical camera and advanced IR thermal imaging detectors are installed in this product, so it can realize the function of bi-spectrum shooting, and at the same time comprehensively collect the characteristic information of the monitoring scenes. It can also be widely used in the intelligent safety surveillance fields of indoor and outdoor environmental monitoring, perimeter prevention, industrial temp. measuring and fire alarm.

### Product Feature

- 1.The latest InfiRay® 12  $\mu$  m IR thermal imaging detector, advanced IR vision algorithm, more distant and clearer image.
- 2.Function of front-end independent temp. measuring; installed with professional temp. measuring analysis tools and multiple linkage alarm rules; function of fire point detecting alarm.
- 3.Function of intelligent behavior analysis, such as regional invasion detecting, boundary violation detecting , entering and leaving area detecting and left items detecting, etc.
- 4.One-piece shell, with outdoor protection class IP66
- 5.ONVIF standard interface protocol supported, available SDK, secondary development and third-party platform connection supported.

### 3.Product Performance Parameters

Product Model				
IRS-FB432		IRS-FB462		
Thermal Module				
Detector Type	Vanadium Oxide Uncooled Focal Plane Arrays			
Max. Resolution	384x288	640x512		
Pixel Pitch	17μm	12μm		
Spectral Range	8~14μm			
NETD	≤ 40mk (@25°C, F#=1.0)			
Focal Length	9.7mm	13mm	19mm	25mm
Field of View	37.9°x28.7°	28.2°x21.3°	22.9°x18.4°	17.5°x14.0°
IFOV	1.753mrad	1.308mrad	0.632mrad	0.480mrad
Color Palettes	18 color modes selectable such as Whitehot/Blackhot/Ironrow/Rainbow.			
Image Fusion	Bi-Spectrum Image Fusion Enhancement			
Optical Module				
Image Sensor	1/2.7"2MP CMOS			
Resolution	1920x1080			
Focal Length	6mm			
White Balance	Available			
Day/Night	Auto (IR-CUT)			
Noise Reduction	3D NR			
IR Distance	IR fill-in light, max. distance >30 m			
Network				
Network Protocols	TCP,UDP, ICMP,RTSP,RTSP,DHCP,PPPOE,UPNP,DDNS,ONVIF,802.1x, FTP			
Simultaneous Live View	6			
User Management	3 levels: Administrator, Operator, User			
Security	Authorized username and password;			
Video Compression	H.264/H.265			

Audio Compression	G.711u/ G.722	
<b>Video</b>		
Max.Resolution	1920×1080 (Visual) 384×288 (Thermal)	1920×1080 (Visual) 640×512 (Thermal)
Main Stream	Visual: 50Hz:25fps(1920×1080)、 25fps(1280×720) 60Hz:30fps(1920×1080)、 30fps(1280×720) Thermal: 50Hz: 25fps(384×288) 60Hz: 30fps(384×288)	Visual: 50Hz:25fps(1920×1080)、 25fps(1280×720) 60Hz:30fps(1920×1080)、 30fps(1280×720) Thermal: 50Hz: 25fps(640×512) 60Hz: 30fps(640×512)
Sub Stream	Visual: 50Hz:25fps(704×576)、 25fps(352×288) 60Hz:30fps(704×480)、 30fps(352×240) Thermal: 50Hz: 25fps(384×288) 60Hz: 30fps(384×288)	Visual: 50Hz:25fps(704×576)、 25fps(352×288) 60Hz:30fps(704×480)、 30fps(352×240) Thermal: 50Hz: 25fps(640×512) 60Hz: 30fps(640×512)
<b>Smart Function</b>		
Fire Detection	Support	
Temperature Measurement	Range: -20°C~+550°C, Accuracy: ±2°C/±2%	
Temperature Alarm	High temp. limits, low temp. limits and AVG temp. limit supported	
Malfunction Detection	Network disconnection; IP addresses conflict; SD card error (status or storage space)	
Smart Detection	Tripwire/intrusion/Abandon Detection	
<b>Integration</b>		
Communication	1-ch RJ45 10M/100M Self-adaptive Ethernet interface, 1-ch RS485	
Audio Input	1 channel	
Audio Output	1 channel	
Alarm Input	2-ch inputs	

Alarm Output	1-ch output
Video Output	1-ch analog video output, support CVBS
Memory	support Micro SD card (up to 64G)
<b>General</b>	
Work Temperature/Humidity	-40°C~+70°C, RH<95%
Protection Level	IP66 Standard
Power	12 VDC± 25%
Power Consumption	max. 8W
Dimensions	319.5*121.5*103.6mm
Weight	Approx. 1.8Kg

**Table 3.1 Product Performance Parameters**

## 4. Operating Distance

The recommended distances of detecting, recognizing and identifying are as follows:

Target: Human (1.8x0.5m) 、 Vehicle (1.4x4.0m)

DD stands for Detecting Distance;

RD stands for Recognizing Distance;

ID stands for Identifying Distance

Lens	DD (Vehicle)	DD (Human)	RD (Vehicle)	RD (Human)	ID (Vehicle)	ID (Human)
FB432 (9.7mm)	875m	285m	219m	71m	109m	36m
FB432 (13mm)	1173m	382m	293m	96m	147m	48m
FB462 (19mm)	2428m	792m	607m	198m	303m	99m
FB462 (25mm)	3194m	1042m	799m	260m	399m	130m



## 5. Dimensions

