

# EmPower IP Camera Series

## ◆TM-BMBL-F13080-EA◆

## Thermal Body Temperature Measurement Bullet Network Camera



### Features

- ◆ 400×300 uncooled VOx thermal sensor technology
- ◆ Athermalized lens (thermal), focus-free
- ◆ Support body temperature measurement
- ◆ Measurement Accuracy:  $\pm 0.3^{\circ}\text{C}$ , with blackbody
- ◆ Active deterrence with white light & siren
- ◆ 2/1 alarm in/out
- ◆ Micro SD memory, IP67, PoE, ePoE

### System Overview

Featuring a fixed lens bullet camera, this series provides an all-in-one solution that is especially beneficial for body temperature measurement.

### Functions

#### Uncooled Vox Technology

EmPower thermal cameras use uncooled Vox sensor technology. Because of small size and better performance, it's cost-effective solution for thermal security.

#### High Sensitivity

High thermal sensitivity(<40mK) makes cameras capture more image details and temperature difference information.

#### Protection

The camera allows for wide input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

#### Body Temperature Measurement

EmPower thermal cameras characterized by non-contact, multi-objective, rapid, and no risk to temperature testers, etc. It can be conveniently deployed in public places with dense personnel, and can be used for efficient and safe preliminary screening of temperature anomalies.

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### Technical Specification

#### Thermal

Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	400 × 300
Pixel Pitch	17 μm
Spectral Range	8 μm–14 μm
Thermal Sensitivity (NETD)	≤40 mK
Focal Length	13 mm
Field of View	13 mm: horizontal: 30°, vertical: 22.6°
Focus Mode	Fixed-focal
Aperture	F1.0
Digital Detail Enhancement (DDE)	Yes
Thermal Image Stabilization	Electronic Image Stabilization
AGC	Auto; manual
Noise Reduction	2D NR; 3D NR
Image Flip	90°/180°/mirror
Color Palettes	18 color modes selectable such as Whitehot/Blackhot/Ironrow/Icefire.
Temperature Measurement Range	30°C ~45°C
Temperature Accuracy	Max ±0.3°C with blackbody Max ±1°C without blackbody
Temperature Mode	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously

#### Visible

Image Sensor	1/2.8" 2M CMOS
Effective Pixels	1920(H)×1080(V)
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.002Lux; B/W: 0.0002Lux; 0Lux (IR on)
IR Distance	35m
IR On/Off Control	Auto/Manual
IR LEDs	1
Focal Length	8mm
Aperture	F1.9
Angle of View	H: 40° V: 22°

#### Audio and Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG
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Resolution	Thermal Main stream: (1280 × 1024/1024 × 768/640 × 480/256 × 192@), 1280 × 960 by default; Sub stream: (640 × 512/256 × 192@), 256 × 192 by default Visible Main stream: (1920 × 1080/1280 × 720/704 × 576@), 1920 × 1080 by default; Sub stream: (704 × 576/352 × 288@), 355 × 288 by default
Frame Rate	Thermal: 50Hz: Main stream (1fps-25fps), 25fps by default; sub stream (1fps-25fps), 15fps by default; 60Hz: Main stream (1fps-30fps), 30fps by default; sub stream (1fps-30fps), 15fps by default; Visual: 50Hz: Main stream (1fps-25fps), 25fps by default; sub stream (1fps-25fps), 15fps by default; 60Hz: Main stream (1fps-30fps), 30fps by default; sub stream (1fps-30fps), 15fps by default;
Audio Compression	G.711a; G.711mu; AAC; PCM
Image Encoding Format	JPEG
General Function	
Two-way Talk	Yes
Network Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP
Region of Interest (ROI)	Yes
Edge Storage	FTP; Micro SD card (256G, hot plug)
Interoperability	CGI; SDK
Browser	IE: IE8 and the later, and explorer with IE core Google: 42 and the earlier Firefox: 42 and the earlier Safari: 10 and the earlier
User/Host	20 channels at most (the total bandwidth 64M)
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
User Management	Support 20 users at most and users are classified as two groups-administrator group and user group.
Malfunction Detection	Network disconnection; IP addresses conflict; SD card error (status or storage space)
Port	
Network	1 10M/100M Ethernet port (RJ-45)
Alarm Input	2 channels
Alarm Output	1channel
Audio Input	1 channel
Audio Output	1 channel
Alarm Linkage	SD card recording/on-off output/siren and light/email/PTZ/snapshot

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Alarm Event	SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio abnormal; security exception; Temperature Measurement; blackbody exception
RS-485	1 channel
Power	
Power Supply	12V±20% DC, 1.2A, PoE (802.3af), ePoE
Power Consumption	Basic: 5.0W Maximum: 12W (power adapter excluded)
Environment	
Operating Temperature	10°C to +30°C
Storage Temperature	-40°C to +70°C
Operating Humidity	≤95%
Self-Adaptive	Auto heating to protect the chip under the cold environment
Physical Characteristics	
Protection Grade	IP67, anti-surge 6KV, anti-electrostatic 8KV (touched by objects), anti-electrostatic 15KV (air)
Packaging Dimensions	365 mm × 175 mm × 176 mm (14.37" × 6.89" × 6.93")
Net Weight	≤1.4 kg (3.09 lb)
Gross Weight	≤1.9 kg (4.19 lb)
Power Adaptor	Selectable
Certification	
Certifications	CE; FCC

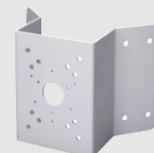
## Accessories(Optional)



**PFA121**  
Junction Box  
(Wall Mount)

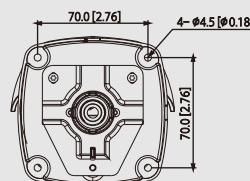
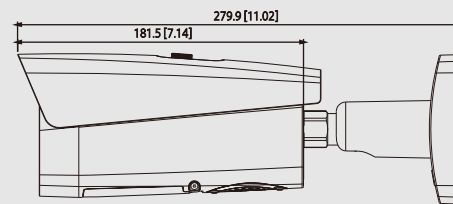
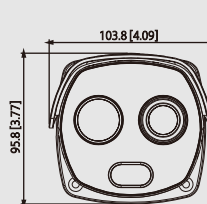


**PFA152-E**  
Pole Mount

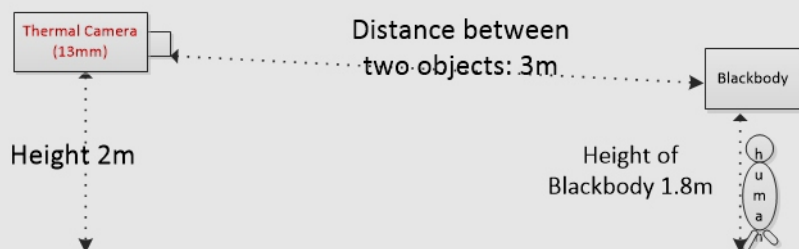


**PFA151**  
Corner Mount

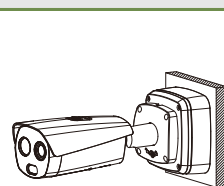
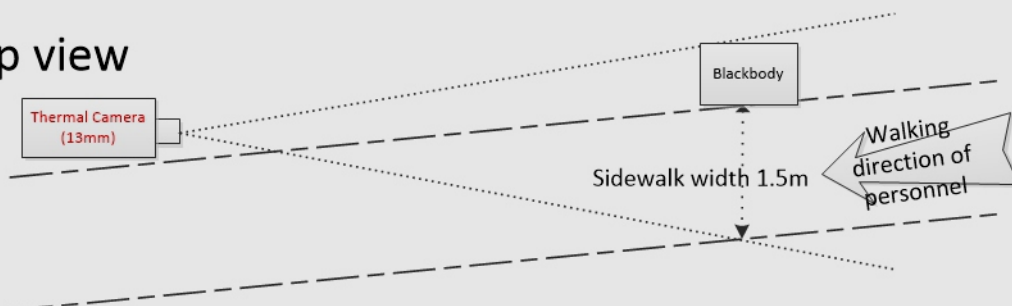
## Dimensions(mm/inch)



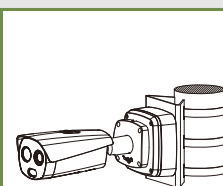
## Side view



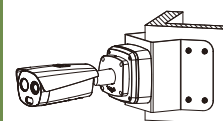
## Top view



**PFA121**  
Junction Mount



**PFA121+PFA152-E**  
Pole Mount



**PFA121+PFA151**  
Corner Mount