

# PFI-R650 Thermal Monocular Camera



### Key Features

- Vanadium oxide uncooled focal plane detector.
- Ultra-low power consumption.
- Detection distance is up to 2,600 m.
- Connects to the mobile app through Wi-Fi.
- Six color palettes.
- Built-in EMMC (32 GB).
- Connects to the external display.
- Lightweight and portable.
- IP67 rated.

### Technical Specification

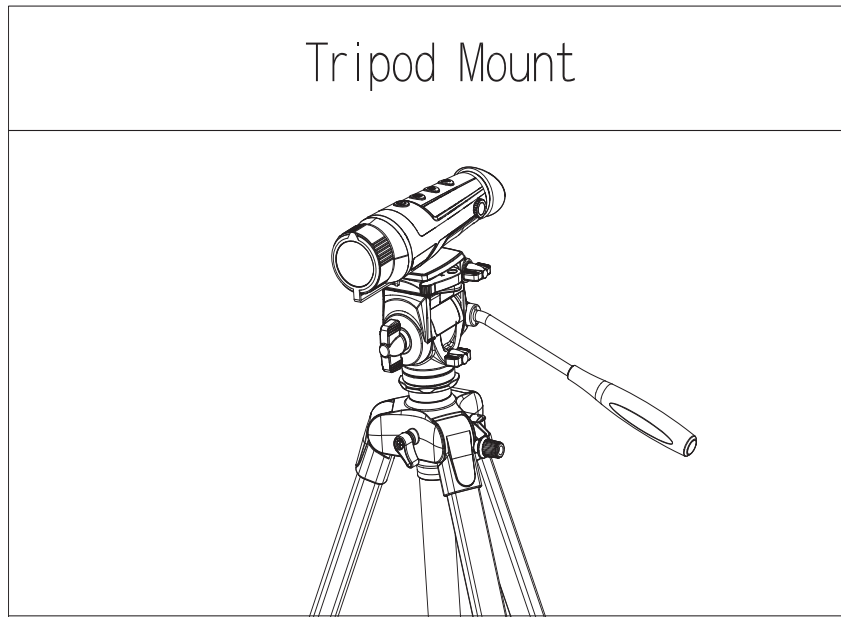
Thermal	
Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	640 (H) × 512 (V)
Pixel Pitch	12 μm
Spectral Range	8 μm–14 μm
Sensitivity (NETD)	≤30 mK@f/1.0
Frame Rate	50 Hz
Focal Length	50 mm
Field of View	H: 8.7°; V: 7.0°
Focus Control	Manual
Close Focus Distance	1.5 m (4.92 ft)
Aperture	F1.0
Detection Distance	2,600 m (8,530.18 ft)

Digital Zoom	1 ×; 2 ×; 4 ×; 8 ×
Color Palettes	6 (white hot/black hot/iron red/alarm/emerald/amber)
<b>Display</b>	
Display Screen Dimensions	0.41 inch, OLED
Screen Resolution	1440 (H) × 1080 (V)
Magnification	2.92 ×
Diopter Adjust	−4 D to +5 D
Eye Relief	25 mm (0.98")
<b>Function</b>	
Storage	Built-in EMMC (32 GB)
Uniformity Correction	Auto; manual
Cold/Hot Spot Trace	Yes
Wi-Fi	Yes
Analog Output	Yes. Type-C.
<b>Power</b>	
Power Supply	5 VDC/2 A, USB Type-C
Battery Type	1 rechargeable Lithium batteries (internal)
Battery Capacity	3,200 mAh
Overvoltage Protection	Yes
Standby Time	≥6.5 h
<b>Environment</b>	
Operating Temperature	−30 °C to +50 °C (−22 °F to +122 °F)
Operating Humidity	≤95%
Storage Temperature	−30 °C to +65 °C (−22 °F to +149 °F)
<b>Physical Characteristics</b>	
Protection	IP67
<b>Structure</b>	
Product Dimensions	217 mm × 64.7 mm × 69.6 mm (8.54" × 2.55" × 2.74") (L × W × H)
Packaging Dimensions	265 mm × 152 mm × 114 mm (10.43" × 5.98" × 4.49") (L × W × H)
Net Weight	≤495 g (1.09 lb)
Gross Weight	≤1 kg (2.20 lb)

### Ordering Information

Type	Model	Description
Thermal Monocular Camera	PFI-R650	Thermal Monocular Camera

Installation



Dimensions (mm[inch])

