

PFI-S650LRF Thermal Monocular Camera



Key Features

- Vanadium oxide uncooled focal plane detector.
- Ultra-low power consumption.
- Detection distance is up to 2,600 m.
- Laser ranging distance is up to 1,000 m.
- Connects to the mobile app through Wi-Fi.
- Six color palettes.
- Built-in EMMC (64 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)	≤18 mK@f/1.0, 25 °C
Focal Length	50 mm
Aperture	F0.9
Field of View	H: 8.8°; V: 7.1°/H: 15.4 m; V: 12.3 m (@100 m)
Focus Control	Manual
Close Focus Distance	3 m (9.84 ft)
Detection Distance	2,600 m (8,530.18 ft)
Recognition Distance	662 m (2,171.92 ft)
Identification Distance	331 m (1,085.96 ft)
Magnification	3.45×
Frame Rate	50 Hz
Display	
Screen	1920 × 1080, 0.49 inch, OLED
Color Palettes	6 (white hot/black hot/iron red/alarm/emerald/amber)
Video Compression	H.264
Diopter	–5D to +3D
Eye Relief	15 mm (0.59 inch)
Exit Pupil	8 mm (0.31 inch)
Function	
Digital Zoom	1×, 2×, 4×, 8×
Video Recorder	Yes
Snapshot	Yes
Wi-Fi Hotspot	Yes
Hot Spot Track	Yes
FFC Calibration	Auto, semi-auto; manual
Standby Mode	Yes
DPC (Defective Pixel Correction)	Yes
MIC	Yes
Compass	Yes

Storage	Built-in 64 GB
Laser Range Finder	
Max.Distance	1,000 m (3,280.84 ft)
Min.Distance	10 m (32.81 ft)
Accuracy	±1 m (3.28 ft)
Safety	Class 1
Wavelength	905 nm
Power	
Battery Type	Replaceable 18650 battery
Battery Life	6 h@25 °C (Wi-Fi off)
Power Supply	5 VDC/2 A
Port	USB Type-C
Overvoltage Protection	Yes
General	
Operating Temperature	−30 °C to +55 °C (−22 °F to +131 °F)
Operating Humidity	≤95%
Protection Grade	IP67
Packaging Dimensions	291 mm × 140 mm × 127 mm (11.46" × 5.51" × 5") (L × W × H)
Product Dimensions	217.8 mm × 78.5 mm × 90.4 mm (8.58" × 3.09" × 3.56") (L × W × H)
Gross Weight	1.82 kg (4.01 lb)
Net Weight	635 g (1.4 lb)

Dimensions (mm[inch])

