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VISION

# FUZION LRF TM50-640

## FUSION THERMAL & OPTICAL BI-SPECTRUM MONOCULAR WITH LASER RANGEFINDER

The AGM Fuzion LRF Handheld Thermal & Optical Bi-spectrum Monocular is equipped with 640x512 12 $\mu$ m high-sensitivity thermal detector, ultra-low light optical detector, 1024x768 OLED display and eyepiece with a large field of view. The device can quickly detect hiding objects even under extreme environments such as smoke, fog, rain, snow, etc. It can be widely applied to scenarios including patrol, search and rescue, drug interdiction, and suspect apprehension. Due to its waterproof capability the device performs well even in severe weather conditions and challenging environments.

The Fuzion LRF's user-friendly interface, comfortable and ergonomic operating controls makes adoption and application incredibly simple. The monocular offers three different variants of image view: thermal, visible light, and fusion that can be easily adapted depending on different environmental conditions. This high-tech monocular is equipped with a laser rangefinder for measurement of target distance. The Fuzion LRF uses one 18650 rechargeable Lithium battery for up to 5-hours of operating time. In addition, an external power supply can be used to provide an increase in operating time.

- Bi-spectrum image fusion and object highlight
- Detail enhancement and target recognition
- Selection of thermal view channel, visible light channel, or both them combined
- 12 $\mu$ m, 640x512 high-sensitivity thermal detector
- Fast 50Hz imaging
- 1x, 2x, 4x, 8x digital zoom
- Digital image processing technology
- Ultra-low illumination optical channel
- 1920x1080 optical resolution
- Eye-safe laser rangefinder
- 1024x768 resolution, 0.39-inch OLED display
- Video recording and snapshot, built-in EMMC (16 GB)
- Wi-Fi hotspot
- Standby mode
- Up to 5 hours continuous running
- Waterproof
- Limited 3-Year Warranty



Equipment described herein is subject to US export regulations and may require a license prior to export. Diversion contrary to US law is prohibited.

[www.agmglobalvision.com](http://www.agmglobalvision.com)

## SPECIFICATIONS

	<b>FUZION LRF TM50-640</b>
Detector Type	12 $\mu$ m VOx Uncooled Focal Plane Arrays
Resolution	640 x 512
Refresh Rate	50 Hz
Response Waveband	8 $\mu$ m to 14 $\mu$ m
Thermal Lens Focal Length	50 mm
Aperture	F1.2
Field of View (HxV)	8.8° x 7°
Magnification	3x - 24x
Digital Zoom	1x, 2x, 4x, 8x
Detection Range (6' object)	2,600 m/yd
Monitor	1024x768, 0.39 inch, OLED, 50Hz
FFC (Flat Field Correction)	Auto, Manual, External Correction
Palettes	Black Hot, White Hot, Red Hot, Fusion, Visible, Image Fusion
Highest Temperature Spot Tracking	Yes
Scene Mode	Jungle, Recognition
Optical Image Sensor	1/2" Progressive Scan CMOS, 1920x1080@25fps
Optical Sensor Wavelength	400-1000 nm
Optical Module Lens Focal Length	22 mm
Distance Measurement	Yes (Laser Rangefinder: up to 600 m, $\pm$ 1 m accuracy)
Laser Wavelength	905 nm
Laser Safety Class	Class 1
Hotspot	Yes
Sleep Mode	Yes
Built-in Storage	16 GB EMMC
Record Video	On-board video recording
Capture Snapshot	Yes
CVBS Output	Yes (via USB)
Battery Type	One 18650 rechargeable battery (removable)
Battery Operating Time	Up to 5 hours continuous running (@25°C, WiFi and CVBS off) Up to 3 hours continuous running (@25°C, WiFi and CVBS on)
Battery Capacity Display	Yes
Power	5 VDC/2 A, USB Type-C interface Supports external power supply
Working Temperature	-20°C to 55°C (-4°F to 131°F)
Protection Level	IP67 (Waterproof)
Dimension	184 x 87 x 74 mm (7.2 x 3.4 x 2.9 in)
Weight (w/o batteries)	548g (1.15 lb)

Specifications are subject to change without notice.



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