

# ObservIR LRF 50-640

## THERMAL AND DIGITAL BINOCULARS



The AGM ObservIR LRF Thermal & Digital Day/Night Vision binoculars are some of the most technologically advanced and feature-packed digital devices in the world. The primary engine behind these binoculars lies within the main thermal viewing channel, with its high-sensitivity 12 micron detector. Unlike other thermal binoculars on the market, the ObservIR LRF also come outfitted with a digital day/night channel as well, which is great for aiding in recognition of targets detected by the thermal channel. The built-in 1,000 m laser rangefinder simply takes the ObservIR LRF to another level, and this is without even mentioning its 64 GB of internal memory and Wi-Fi compatibility.

The ObservIR LRF binoculars also come packed with numerous software improvements, and many features that have become commonplace within the AGM thermal product assortment: high-sensitivity thermal detector, 50 mm objective lens with a 1.0 aperture, 3840x2160 ultra-low light CMOS sensor, various viewing modes, multiple color palettes, picture-in-picture mode, built-in laser rangefinder, GPS module, long-range IR illuminator, up to 8.5 hours of battery life on removable, rechargeable battery pack, USB Type-C port for external power capabilities, IP67 waterproof rating. The package includes two battery packs, wrist strap, tripod adapter and charger.

- Dual-spectrum thermal and digital day/night system
- 12 $\mu$ m high-sensitivity thermal sensor
- Superior sub-15 milikelvin thermal sensitivity
- 640x512 thermal resolution
- 4.5x – 20x thermal magnification
- Digital image processing technology
- Ultra-low illumination digital channel
- 3840x2160 digital resolution
- Built-in IR illuminator
- Eye-safe 1,000 m laser rangefinder
- 1920x1080 resolution, 0.49-inch OLED display
- Digital Magnetic Compass
- Built-in GPS module
- Video/audio recording and snapshot capture
- Built-in 64 GB EMMC storage
- Wi-Fi hotspot
- Standby mode
- 8.5 hours of continuous operation on a single charge
- Auto screen-off function to saving energy
- External power supply capability
- Waterproof and dustproof
- 5-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.

## SPECIFICATIONS

Thermal Channel Image Sensor	12µm VOx Uncooled Focal Plane Array
Thermal Channel Resolution	640 x 512
Thermal Channel Refresh Rate	50 Hz
NETD	Less than 15 mK (25°C, F#=1.0)
Thermal Channel Lens System	50 mm; F/1.0
Thermal Channel Field of View	8.8° x 5.3°
Thermal Channel Magnification	4.5x, 9x, 13.5x, 20x
Thermal Channel Detection Range (6' object)	2,600 m
FFC (Flat Field Correction)	Auto, Manual, External Correction
Thermal Channel Palettes	Black Hot, White Hot, Red Hot, Fusion, Red Monochrome, Green Monochrome
Thermal Scene Modes	General, Compressed
Hot Tracking (Thermal Channel)	Yes
Digital Digital Sensor	3840x2160, 1/1.8" Progressive Scan CMOS
Digital Channel Magnification	5.5x, 11x, 16.5x, 22x
Digital Channel Field of View	7.3° x 4.1°
Digital Channel Lens System	60 mm, F/2.2
Digital Channel Modes	Day, Night, Green, Yellow, Auto
Digital Channel Viewing Range at Night	400 m
Diopter Adjustment	-5D to +3D
Interpupillary Adjustment Range	60 mm to 74 mm
Display	1920x1080, 0.49 inch, OLED, 50 FPS
Distance Measurement	Laser Rangefinder: up to 1,000 m, ±1 m accuracy
Laser Wavelength	905 nm
Laser Safety Class	Class 1
Infrared Light	Built-in 850nm Smart IR. Power and beam angle adjustment
Wi-Fi Hotspot	Yes
PIP	Yes
Digital Magnetic Compass	Yes
GPS	Yes
Zoom Pro	Yes
Image Boost 3.0	Yes
Standby Mode	Yes
Storage	Built-in EMMC (64 GB)
Video/Audio Recording	Yes / Yes
Image Capture	Yes
Local Album	Yes
Battery Type	One replaceable rechargeable NE-7255 Li-Ion battery (two NE-7255 batteries included)
Battery Life (operating)	Up to 8.5 hours continuous running (@25°C, Wi-Fi, IR and LRF off)
Power	5 VDC/9 VDC, 3 A; USB Type-C interface; Supports external power supply; Support direct charging; Supports fast charging
Operating Temperature	-30°C to 55°C (-22°F to 131°F)
Protection Level	IP67 (Waterproof)
Dimensions	229 x 148 x 80 mm (9.0 x 5.8 x 3.1 in)
Weight (w/o batteries)	0.83 kg (1.83 lb)

**Package Includes:** Thermal and Digital Binoculars, Two NE-7255 Batteries, NE-7255 Charger, USB-C to UCB-C Cable, USB-A to USB -C Cable, Power Adapter, Tripod Adapter, Quick Start Guide, User Manual, Lens Cloth, Neck Strap.

*\* Specifications are subject to change without notice. Images are for illustration purposes only.*



MAIN OFFICE | 2407 E Interstate 30, Suite 100, Grand Prairie | TX 75050, USA  
Tel. +1.928.333.4300 | [info@agmglobalvision.com](mailto:info@agmglobalvision.com) | [www.agmglobalvision.com](http://www.agmglobalvision.com)

EUROPEAN OFFICE | #6 Andrey Lyapchev Blvd | Sofia, P.C. 1756 | Bulgaria  
Tel. +35.988.560.0326 | [info@agmglobalvision.eu](mailto:info@agmglobalvision.eu) | [www.agmglobalvision.eu](http://www.agmglobalvision.eu)

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