MAWKEYE

BT0-49 Multi-Spectrum Binocular



HAWKEYE BT0-49 multi-spectrum binocular is equipped with a 640 \times 512 thermal detector and a 2560 \times 1440 optical detector. With less than 20 mK NETD, which represents high thermal sensitivity, it ensures perfect image quality and detail recognition even in the hardest weather conditions. Its 1000 m Laser rangefinder can accurately measure the distance when you are stalking or observing under low-light conditions.

Key Feature

- 640 × 512 resolution @12 μm thermal detector
- High sensitivity thermal module NETD < 20 mK (@25° C, F# = 1.0)
- 35 mm lens with thermal detection range up to 1400 m
- 2560 × 1440 high-resolution optical detector
- 1920 × 1080 resolution 0.49-inch OLED display
- Built-in 850 nm IR illuminator and Laser Rangefinder of 1000 m measuring distance
- Up to 5h continuous operation
- 780 g lightweight, compact and ergonomic design

Specification

Thermal Module		
Image Sensor	Uncooled	
Max. Resolution	640 × 512	
Frame Rate	50 Hz	
Pixel Interval	12 μm	
Response Waveband	8 µm to 14 µm	
NETD	Less than 20 mK (@25°C), F# = 1.0	
Lens (Focal Length)	35 mm, F1.0	
Focus Mode	Focus Ring	
Detection Range	1400 m	
Min. Focusing Distance	3.5 m	
Magnification	3x, 6x, 9x, 12x, 15x, 18x, 21x, and 24x	
Field of View ($H \times V$),	12.5° × 10.1°/ 22.0 m × 17.6 m	
Degrees/m @100 m		
Optical Module		
Image Sensor	Optical	
Max. Resolution	2560 × 1440	
Focal Length	31 mm, F1.2	
Min. Working Distance	3 m	
Min. Illumination	0.001 lux @ (F1.0 , AGC On)	
Focus Mode	Focus Ring	
Magnification	3x, 6x, 9x, 12x, 15x, 18x, 21x, and 24x	
Field of View (H × V), Degrees/m @100 m	13.9° × 7.8°/24.4 m × 13.6 m	
Smart IR	Yes	
Viewing Range at Night	300 m (optimum condition)	
Image Display		
Display	0.49 inch, OLED, 1920 ×1080	
Palettes	Thermal: Black Hot, White Hot, Red Hot, Fusion; Optical: Day, Night, Auto	
FFC (Flat Field Correction) Mode	Auto, Manual, External Correction	
Exit Pupil	8 mm	
Eye Relief	15 mm	
Diopter (Range)	-5 D to +3 D	
Brightness Adjustment	Yes	
Tone Adjustment	Cold, warm	
Contrast Adjustment	Yes	
Zoom Pro	Yes	

System	
Record Video	Yes
Capture Snapshot	Yes
Audio Recording	Yes
Standby Mode	Yes
Storage	Built-in EMMC (64 GB)
PIP	Yes
Hot Track	Yes
Digital Magnetic Compass	Yes
GPS	Yes
Local Album	Yes
Power Supply	
Battery Type	Replaceable and Rechargeable Li-ion Battery
Battery Operating Time	Up to 5h (25°C)
Type-C Power Supply	5 V DC, 2 A
	Supports External Power Supply
General	
Protection Level	IP67
Dimension	138.2 mm × 68.4 mm × 212.4 mm (5.4" × 2.7" × 8.4")
Weight	+/- 780 g
Working Temperature	-30°C to +55°C
Interpupillary Adjustment	60 mm to 70 mm
Range	
Mounting Adapter	1/4"-20-UNC
Laser Rangefinder	
Safety Class for Laser	Class 1
Wavelength	905 nm
Max. Measuring Range	1000 m
Measurement Accuracy	±1 m
Min. Measuring Range	10 m
Infrared Illuminator	
Emitter	LED
IR Wavelength	850 nm
Beam Angle	Adjustable 7.6 to 11.5°