



- 384 × 288 resolution @12 μm thermal detector
- High sensitivity thermal module NETD < 20 mK (@25°C), F#=1.0
- 50 mm, F0.9 lens with thermal detection range up to 2600 m
- 3840 × 2160 4K ultra high-resolution CMOS detector
- 31 mm, F1.2 digital lens with 1.0x to 24x digital zoom
- 1024 × 768 resolution 0.39-inch OLED display
- Built-in 850 nm IR illuminator and Laser Rangefinder of 1100 m measuring distance
- <980 g lightweight, with a compact and ergonomic design

BIN-R3850-EOIR-4K is a powerful and innovative digital and thermal binocular designed especially for daytime use. Combined with a 384 thermal detector, an advanced 4K digital detector for a 1x-24x @31 mm lens, and a 1100 m laser rangefinder, this all-in-one binocular can be mainly applied in forest & field hunting, birding, human and animal searching, adventuring, and rescuing in various weather conditions.

SPECIFICATIONS

| Thermal Module | |
|--|-----------------------------------|
| Image Sensor | VOx Uncooled Focal Plane Arrays |
| Max. Resolution | 384 × 288 |
| Frame Rate | 25Hz |
| Pixel Interval | 12 μm |
| Response Waveband | 8 μm to 14 μm |
| NETD | Less than 20 mK (@25°C), F# = 1.0 |
| Lens (Focal Length) | 50mm, F0.9 |
| Focus Mode | Focus Ring |
| Detection Range | 2600 m |
| Min. Focusing Distance | 5 m |
| Magnification | 5.7× - 91.2× (16×) |
| Field of View(H × V), Degrees/ m @100m | 5.3 ° × 4.0 ° / 9.3 m × 7.0 m |

| Optical Module | |
|--|---|
| Image Sensor | 1/1.8" Progressive Scan CMOS |
| Max. Resolution | 3840 × 2160 |
| Focal Length | 31mm, F1.2 |
| Min. Working Distance | 5 m |
| Focus Mode | Focus Ring |
| Magnification | 1x to 24.0x (24x) |
| Field of View (H × V), Degrees/m @100 m | 13.9°× 7.8° / 24.4m × 13.6m |
| Smart IR | Yes |
| IR Illuminator Wavelength | 850 nm |
| Viewing Range at Night | 450 m |
| Image Display | |
| Display | 0.39 inch, OLED, 1024 × 768 |
| 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 |
| Hotspot | 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 | ≥ 8 h (25°C, with hotspot off) |
| Type-C Power Supply | 5 VDC, 2 A Supports External Power Supply |
| General | |
| Protection Level | IP67 |
| Dimension | 218 mm × 155.0 mm × 88 mm |
| Working Temperature | -30°C to +55°C |
| Weight | < 980g without batteries |
| Interpupillary Adjustment Range | 60 mm to 74 mm |
| Mounting Adapter | 1/4"-20-UNC |
| Laser Rangefinder | |
| Safety Class for Laser | Class 1 |
| Wavelength | 905 nm |
| Max. Measuring Range | 1100 m |
| Measurement Accuracy | ±1 m |
| Min. Measuring Range | 10 m |

. Dimension

