

# HQ50L

## Multi-Spectrum Binocular



HIKMICRO HABROK Pro HQ50L multi-spectrum binocular is equipped with a 15 mK NETD, 640 × 512 thermal detector @50 mm thermal lens and an advanced 4K digital detector with 60 mm lens, ensuring perfect image quality and detail recognition in various weather and light conditions. Combined with a 1000 m Laser rangefinder and replaceable IR emitter @850 nm wavelength, this all-in-one binocular can be applied mainly in forest & field hunting, birding, animal searching, rescuing and marine scenario.

### Key Feature

- 640 × 512 resolution @12  $\mu$ m thermal detector
- High sensitivity thermal module NETD < 15 mK (@25°C, F# = 1.0)
- 50 mm, F1.0 lens with thermal detection range up to 2600 m
- 3840 × 2160 4K ultra high-resolution CMOS detector
- 1920 × 1080 resolution 0.49-inch OLED display
- Built-in 850 nm IR illuminator and Laser Rangefinder of 1000 m measuring distance
- 10.5 h+ continuous operation time with replaceable battery pack
- 975 g lightweight, with a compact and ergonomic design

# Specification

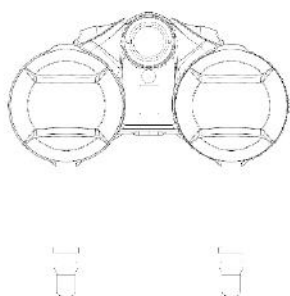
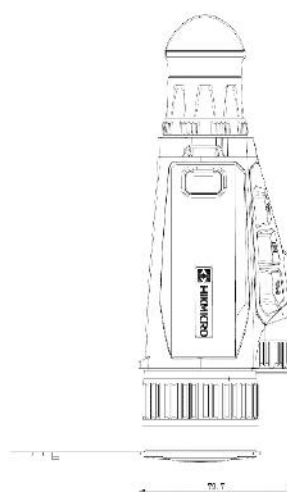
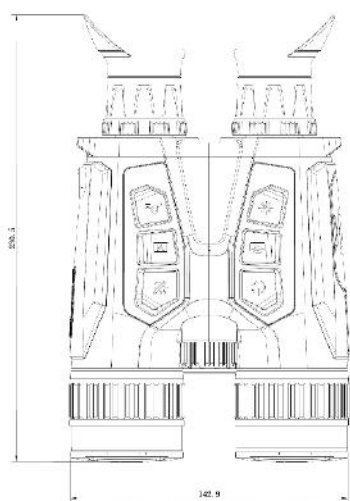
| Thermal Module                             |                                                                           |
|--------------------------------------------|---------------------------------------------------------------------------|
| Image Sensor                               | VOx Uncooled Focal Plane Arrays                                           |
| Max. Resolution                            | 640 × 512                                                                 |
| Frame Rate                                 | 50 Hz                                                                     |
| Pixel Interval                             | 12 μm                                                                     |
| Response Waveband                          | 8 μm to 14 μm                                                             |
| NETD                                       | Less than 15 mK (@25°C), F#=1.0                                           |
| Lens (Focal Length)                        | 50 mm, F1.0                                                               |
| Focus Mode                                 | Focus Ring                                                                |
| Detection Range                            | 2600 m                                                                    |
| Min. Focusing Distance                     | 5 m                                                                       |
| Magnification                              | 4.3× to 20.0× (4.6×)                                                      |
| Field of View(H × V),<br>Degrees/m @100 m  | 8.8° × 5.3°/15.4 m × 9.3 m                                                |
| Optical Module                             |                                                                           |
| Image Sensor                               | 1/1.8" Progressive Scan CMOS                                              |
| Max. Resolution                            | 3840 × 2160                                                               |
| Focal Length                               | 60 mm, F2.2                                                               |
| Min. Working Distance                      | 3 m                                                                       |
| Focus Mode                                 | Focus Ring                                                                |
| Magnification                              | 5.5× to 22.0× (4×)                                                        |
| Field of View (H × V),<br>Degrees/m @100 m | 7.3°× 4.1°/12.6 m × 7.2 m                                                 |
| Smart IR                                   | Yes                                                                       |
| IR Illuminator Wavelength                  | 850 nm                                                                    |
| Viewing Range at Night                     | 400 m                                                                     |
| Replaceable IR Illuminator                 | Yes                                                                       |
| 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)<br>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                                                                       |
| Image Pro 2.0                              | 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                                                                       |
| <b>Power Supply</b>             |                                                                           |
| Battery Type                    | Replaceable and Rechargeable Li-ion Battery Pack                          |
| Battery Operating Time          | 10.5 h (25°C, with hotspot off, LRF and Zoom Pro on)                      |
| Type-C Power Supply             | 5 V/9 V DC, 3 A<br>Support External Power Supply, Support Direct Charging |
| <b>General</b>                  |                                                                           |
| Protection Level                | IP67                                                                      |
| Dimension                       | 142.9 mm × 79.7 mm × 230.5 mm (5.6" × 3.1" × 9.1")                        |
| Weight                          | 975 g with battery pack                                                   |
| Working Temperature             | -30°C to +55°C                                                            |
| Interpupillary Adjustment Range | 60 mm to 74 mm                                                            |
| Mounting Adapter                | 1/4"-20-UNC                                                               |
| <b>Laser Rangefinder</b>        |                                                                           |
| Safety Class for Laser          | Class 1                                                                   |
| Wavelength                      | 905 nm                                                                    |
| Max. Measuring Range            | 1000 m                                                                    |
| Measurement Accuracy            | ±1 m                                                                      |
| Min. Measuring Range            | 10 m                                                                      |

## • Available Model

HM-TSA6-50S2G/W1LVE-HQ50L

## • Dimension



Unit: mm

## • Accessories



Neck Strap (× 1)



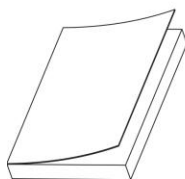
Type-C Cable (× 1)



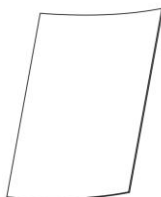
Tripod Adapter (× 1)



Battery (× 2)



QSG (× 1)



Lint-Free Cloth (× 1)



Battery Charger (× 1)



Binocular Harness (× 1)

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Room 313, Unit B, Building 2, 399 Danfeng Road, Xixing Subdistrict, Binjiang District, Hangzhou, Zhejiang  
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