

# TQ50C 3.0 Thermal Monocular



HIKMICRO THUNDER TQ50C 3.0 Thermal Monocular is equipped with an unparalleled powerful thermal detector, with higher sensitivity and the latest image processing algorithm, ensuring users catch the finest details no matter the weather or light conditions. With a  $1920 \times 1080$  OLED larger display, THUNDER 3.0 provides a better visual experience.

#### **Key Feature**

- 640 × 512 resolution @12 µm thermal detector
- High sensitivity thermal module NETD < 15 mK (@25°C, F# = 1.0)
- 50 mm, F1.0 lens with detection range up to 2600 m
- 1920 × 1080 resolution 0.49-inch OLED display
- HIKMICRO Shutterless Image System (HSIS)
- Rechargeable and Replaceable Li-on Battery, 6h continuous operation
- High shock resistance up to 1000 g/0.4 ms

## **Specification**

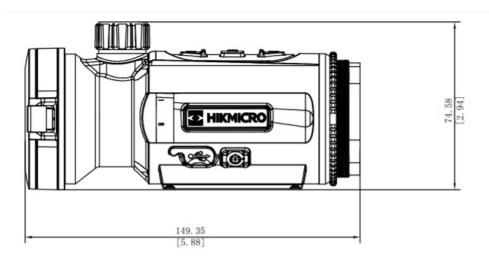
Image Sensor         Uncooled Focal Plane Arrays           Max. Resolution         640 × 512           Frame Rate         50 Hz           Pixel Interval         12 μm           Response Waveband         8 μm to 14 μm           Lens (Focal Length)         50 mm, F1.0           NETD         Less than 15 mK (@25 °C, F# = 1.0)           Detection Range         2600 m           Focus Mode         Focus Knob           Min. Focusing Distance         10 m           Magnification         1 x           Field of View(H x V),         8.8° x 7.0°/15.4 m x 12.3 m           Degrees / m @100m         8.8° x 7.0°/15.4 m x 12.3 m           Recommended Magnification of the Day Scope         1-15x           Image Display         1920 x 1080, 0.49 inch, OLED           Palettes         Black Hot, White Hot, Red Hot, Fusion, Red monochrome, Green monochrome           Exit Pupil         25 mm           Eye Relief         20 mm           Brightness Adjustment         Yes           HSIS (HIKMICRO Shutterless image System)         Yes           Image Pro 2.0         Yes           System         Yes           Record Video         On-board Video Recording           Capture Snapshot         Yes	Thermal Module	
Frame Rate         50 Hz           Pixel Interval         12 µm           Response Waveband         8 µm to 14 µm           Lens (Focal Length)         50 mm, F1.0           NETD         Less than 15 mK (@25 °C, F# = 1.0)           Detection Range         2600 m           Focus Mode         Focus Knob           Min. Focusing Distance         10 m           Magnification         1x           Field of View(H x V),         8.8° x 7.0°/15.4 m x 12.3 m           Degrees / m@100m         1-15x           Recommended Magnification of the Day Scope         1-15x           Inage Display         1-15x           Jack Hot, White Hot, Red Hot, Fusion, Red monochrome, Green monochrome exit Pupil         25 mm           Exit Pupil         25 mm           Eye Relief         20 mm           Brightness Adjustment         Yes           Tone Adjustment         Yes           Pusik HMI/LORO Shutterless Image System)         Yes           Image Pro 2.0         Yes           System         Yes           Record Video         On-board Video Recording           Capture Snapshot         Yes           Storage         Built-in EMMC (64GB)           Hotspot         Yes	Image Sensor	Uncooled Focal Plane Arrays
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of the Day Scope         1-15x           Image Display         1920 × 1080, 0.49 inch, OLED           Palettes         Black Hot, White Hot, Red Hot, Fusion, Red monochrome, Green monochrome           Exit Pupil         25 mm           Eye Relief         20 mm           Brightness Adjustment         Yes           Tone Adjustment         Cold, Warm           HSIS (HIKMICRO Shutterless Image System)         Yes           Image Pro 2.0         Yes           System         Yes           Record Video         On-board Video Recording           Capture Snapshot         Yes           Virtual Reticle         Yes           Standby Mode         Yes           Storage         Built-in EMMC (64GB)           Hot Spot         Yes           Hot Track         Yes           Reticle         No           Audio Recording         Yes           Recoil-activation Recording         Yes           Max. Recoil         1000 g/0.4 ms           Local Album         Yes           Image Calibration         Yes		8.8° × 7.0°/15.4 m × 12.3 m
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Tone Adjustment Cold, Warm  HSIS (HIKMICRO Shutterless Image System)  Image Pro 2.0 Yes  System  Record Video On-board Video Recording  Capture Snapshot Yes  Virtual Reticle Yes  Standby Mode Yes  Storage Built-in EMMC (64GB)  Hotspot Yes  Hot Track Yes  Reticle No  Audio Recording Yes  Recoil-activation Recording Yes  Max. Recoil  Local Album Yes  Image Calibration Yes	Eye Relief	20 mm
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Image System)YesImage Pro 2.0YesSystemRecord VideoOn-board Video RecordingCapture SnapshotYesVirtual ReticleYesStandby ModeYesStorageBuilt-in EMMC (64GB)HotspotYesHot TrackYesReticleNoAudio RecordingYesRecoil-activation RecordingYesMax. Recoil1000 g/0.4 msLocal AlbumYesImage CalibrationYes	Tone Adjustment	Cold, Warm
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Capture Snapshot Virtual Reticle Ves Standby Mode Yes Storage Built-in EMMC (64GB) Hotspot Yes Hot Track Yes Reticle No Audio Recording Yes Recoil-activation Recording Max. Recoil Local Album Image Calibration Yes	System	
Virtual ReticleYesStandby ModeYesStorageBuilt-in EMMC (64GB)HotspotYesHot TrackYesReticleNoAudio RecordingYesRecoil-activation RecordingYesMax. Recoil1000 g/0.4 msLocal AlbumYesImage CalibrationYes	Record Video	On-board Video Recording
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Recoil-activation Recording  Max. Recoil  Local Album  Yes  Image Calibration  Yes	Reticle	No
Max. Recoil 1000 g/0.4 ms Local Album Yes Image Calibration Yes	Audio Recording	Yes
Local Album Yes Image Calibration Yes	Recoil-activation Recording	Yes
Image Calibration Yes	Max. Recoil	1000 g/0.4 ms
•	Local Album	Yes
	Image Calibration	Yes
Zeroing Profiles 5	Zeroing Profiles	5
Power Supply	Power Supply	
Battery Type Replacable and Rechargeable Li-ion Battery Pack	Battery Type	Replacable and Rechargeable Li-ion Battery Pack

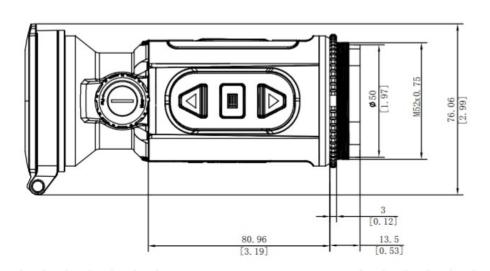
Battery Operating Time	≥6h (25 °C, with hotspot off)	
Type-C Power Supply	5 VDC, 2 A Supports External Power Supply	
General		
Protection Level	IP67	
Dimension	149.4 mm × 76 mm × 74.6 mm	
Weight	500 g with Battery	
Working Temperature	-30°C to + 55°C (-22°F to 131°F)	
Body Material	Body & Lens Cover: Magnesium Alloy	
Center Height	32.5 mm	

#### - Available Model

TQ50C 3.0

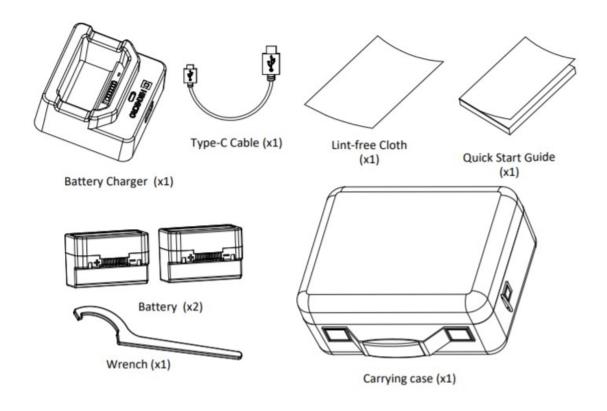
### Dimension





Unit: mm[inch]

#### **.** Accessories



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