



TB 2.0 Series

Clip-on | Thermal Imaging Attachment

Silky Imaging, Far-Range Command



Introduction

The TB 2.0 Series is a front-mounted thermal attachment designed for seamless integration with standard optics, offering a quick upgrade to thermal capability. Balancing lightweight design with professional-grade performance, it delivers sharp, stable imaging in a compact form. App connectivity enables OTA firmware upgrades and ballistic calculations, adapting to diverse use cases. The TB650P model further enhances functionality with built-in laser rangefinding for accurate long-range targeting.

Features

- o True zero-shutter calibration for seamless, uninterrupted visuals.
- o Powered by Hyper-light algorithm and high-sensitivity detectors.
- o Replaceable, rechargeable battery with low-power design for extended runtime.
- o 1.2cm@100m per-click adjustment, compatible with 15x daylight optics.
- o Integrated laser rangefinder in the lens elevates ranging accuracy. (Exclusive to TB650P 2.0)

Applications

- o Night Hunting
- o Law Enforcement
- o Search & Rescue



Specifications



| Product model | TB650 2.0 | TB650P 2.0 |
|--------------------|--|----------------------------|
| Sensor | | |
| Type | Uncooled VOx Infrared Detector, 8 to 14μm | |
| Resolution | 640×512@12μm | |
| NETD | 18mK | |
| Frame rate | 50Hz | |
| Lens | | |
| Objective lens | 50mm, F1.0 | 50mm, F0.9 |
| Field of view | 8.8°×6.6° | |
| FOV m@100m | 15×11 | |
| Magnification | 1x | |
| Detection range | 2600m/2800yd | |
| Focus | Manual | |
| Display | | |
| Display type | 0.39" AMOLED 1920×1080 | |
| Color palettes | White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia | |
| Eyepiece | Eye relief: 20mm | |
| Hardware | | |
| Laser rangefinder | / | 1500m/1630yd |
| WIFI | 2.4G, 5G | |
| Interface | USB-C (Power supply/USB2.0) | |
| Others | Microphone, Bluetooth | |
| System | | |
| Recording function | Photo/Video (Audio recording included) | |
| Memory capacity | 64GB | |
| Power | | |
| Battery type | Single, Replaceable 18650 Battery | |
| Operating time | 5 hours | |
| Environmental | | |
| Operating temp. | -20℃ to 50℃ / -4°F to +122°F | |
| Shock | 6000J | |
| Encapsulation | IP68 | |
| Physical | | |
| Weight (g/oz) | 470/16.58 | 485/17.11 |
| Size (mm/in) | 138.5x92x79.5/5.45×3.62×3.13 | 145x92x79.5/5.71×3.62×3.13 |
| Standard | Device, 18650 Battery ×2, Battery Charger, 5V 2A Adapter (US, UK, Australia, and Europe), USB-A to USB-C Cable, Quick Start Guide, Warranty Card | |
| Optional | Bluetooth Remote Control, Adapter Ring, 18650 Battery | |

| Cover ring adapter | |
|--------------------|--|
| A | Weighs 70g, compatible with 38/40/42/44/46mm |
| B | Weighs 80g, compatible with 48/50/52/54mm |
| C | Weighs 90g, compatible with 56/58/60/62/64mm |

* Product performance is based on testing in a controlled laboratory environment. Your test results may vary due to several external and environmental factors.
All specifications are subject to the actual product. The manufacturer reserves the right to modify technical specifications without notice or liability to you.