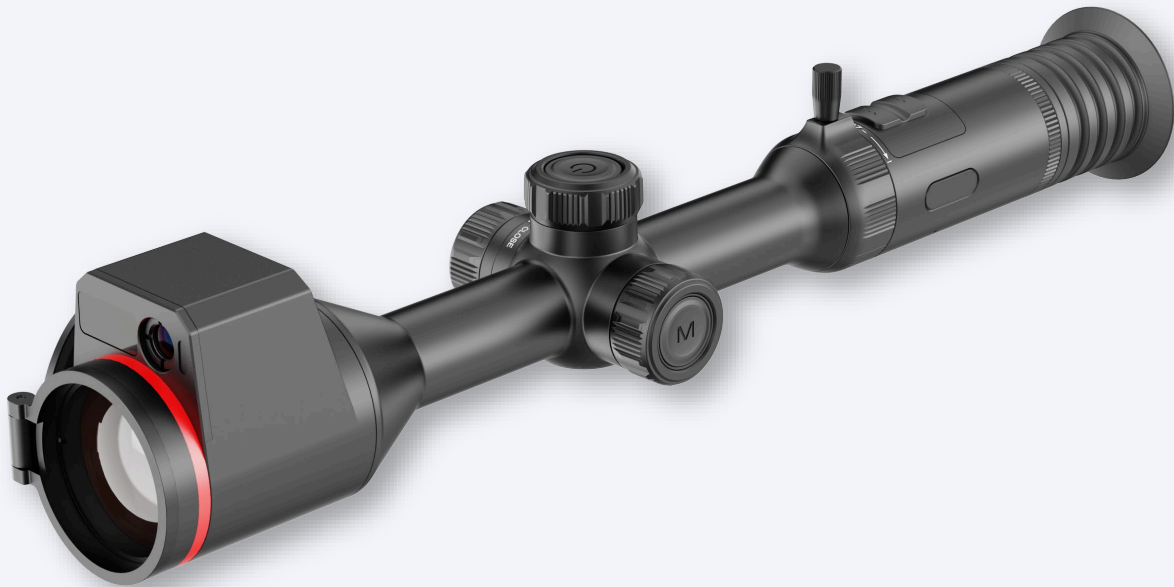


# TU Muo 3.0 Series

Multispectral Thermal Imaging Scope



Brilliance in Thermal & Optical



## Introduction

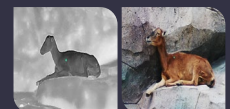
The TU 3.0 Series redefines precision optics with advanced thermal imaging, modular design, and AI-powered performance. Offered in six sub-series—from ultra-light compact units to dual-spectrum, long-range solutions—they meet the demands of hunters, professionals, and tactical users alike. Featuring AI-enhanced imaging, shutterless design, ergonomic controls, IP68 protection, and dual-band Wi-Fi, they deliver reliable performance in any environment.

## Features

- o Integrated thermal and night vision for all-day, all-weather targeting.
- o 12 $\mu$ m detector + 18mK NETD + Hyper-light algorithm — Exceptional clarity.
- o QHD 2560×2560 AMOLED display for clear, smooth visuals.
- o Shutterless 3.0 design ensures smooth, uninterrupted visuals.
- o Center-mounted focus wheel and zoom lever for ergonomic control.
- o Pinpoint target locations with accuracy, up to 1500m.
- o IP68-rated, shock resistance up to 6000J.

## Applications

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



## Specifications

Product model	TU650M 3.0		TU1250M 3.0	
Sensor				
Type	Thermal: Uncooled VOx Infrared Detector, 8 to 14μm; Digital: CMOS			
Resolution	Thermal: 640×512@12μm (NETD 18mK); Digital: 1920×1080@2.9μm		Thermal: 1280×1024@12μm (NETD 18mK); Digital: 1920×1080@2.9μm	
Frame rate	50 Hz			
Lens				
Objective lens	Thermal: 50mm, F1.0; Digital: 35mm, F4.0			
Field of view	Thermal: 8.8°×7.0°; Digital: 6.4°×5.1°		Thermal: 17.5°×14.0°; Digital: 6.4°×5.1°	
FOV m@100m	Thermal: 15×12; Digital: 11×9		Thermal: 31×25; Digital: 11×9	
Magnification	Thermal: 3.7x~29.6x; Digital: 3.7x~29.6x		Thermal: 1.9x~30.4x; Digital: 3.7x~59.2x	
Detection range	Thermal: 2600m/2800yd; Digital: 500m/550yd			
Focus	Manual			
Display				
Display type	1.03" AMOLED 2560×2560			
Color palettes	IR: White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia; Visible: Day, Night, Low-light			
Eyepiece	Eye relief: 60mm; Diopter -5 to +5; Zoom: 7.8x			
Hardware				
Laser rangefinder	1500m/1630yd			
WIFI	2.4G, 5G			
Interface	USB-C (Charge/USB2.0)			
Tube diameter	Standard 30 mm			
Others	Microphone, Bluetooth			
System				
Recording function	Photo/Video (Audio recording included)			
Memory capacity	256GB			
Power				
Battery type	18650 ×2 Battery (Built-in) and 18650 ×1 Battery (External)			
Operating time	14 hours		12 hours	
Environmental				
Operating temp.	-20°C to 50°C / -4°F to +122°F			
Shock	6000J			
Encapsulation	IP68			
Physical				
Weight (g/oz)	1013/35.73		1090/38.45	
Size (mm/in)	457×90×84/17.99×3.54×3.30			
Standard	Device, Quick-Release Scope Mount, Carry Bag, IR Illuminator, IR Illuminator Bracket, 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, 18650 Battery			

\* 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.