

# TU 3.0 Series

Thermal Imaging Scope



Travel Light, Perform Strong



## 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 12μm thermal detector with 18mK NETD for exceptional sensitivity.
- o Hyper-light algorithm delivers ultra-detailed infrared imaging.
- o Shutterless 3.0 design ensures smooth, uninterrupted visuals.
- o Center-mounted focus wheel and zoom lever for ergonomic control.
- o IP68-rated, shock-resistant up to 6000J.
- o Dual-band 2.4G/5G Wi-Fi for faster data transfer.
- o OTA upgrade via TargetIR APP, ballistic solutions via Ballistic APP.

## Applications

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



## Specifications

Product model	TU435 3.0	TU635 3.0	TU650 3.0
Sensor			
Type	Uncooled VOx Infrared Detector, 8 to 14μm		
Resolution	400×300@12μm	640×512@12μm	
NETD	20mK	18mK	
Frame rate	50 Hz		
Lens			
Objective lens	35mm, F1.0		50mm, F1.0
Field of view	7.4°×4.4°	11.8°×7.1°	8.2°×5.0°
FOV m@100m	13×8	21×12	14×9
Magnification	4.4x~17.6x	2.8x~22.4x	3.9x~31.2x
Detection range	1800m/1950yd		2600m/2800yd
Focus	Manual		
Display			
Display type	0.49" AMOLED 1920×1080		
Color palettes	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia		
Eyepiece	Eye relief: 48mm; Diopter -5 to +5; Zoom: 14x		
Hardware			
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	128GB		
Power			
Battery type	18500 ×1 Battery (Built-in) and 18650 ×1 Battery (External)		
Operating time	12 hours		
Environmental			
Operating temp.	-20°C to 50°C / -4°F to +122°F		
Shock	6000J		
Encapsulation	IP68		
Physical			
Weight (g/oz)	738/26.03	745/26.28	776/27.37
Size (mm/in)	374×89×76/14.72 ×3.50× 2.99		377×89×76/14.84 ×3.50× 2.99
Standard	Device, Quick-Release Scope Mount, Carry Bag, 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, Laser Rangefinder, 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.