

**APEX  
VISION**

## TU Pro 3.0 Series

Thermal Imaging Scope

# Engineered for Compact Precision

outdoor

### Introduction

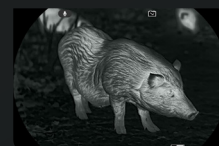
The TU 3.0 Series redefines precision optics through advanced thermal imaging, modular architecture, and AI-driven performance. Spanning a full range from lightweight, compact models to dual-spectrum and integrated rangefinding solutions, it addresses the varied needs of hunters, law enforcement, and professional users. Standard features include AI-enhanced imaging, a 3.0 shutterless architecture, ergonomic controls, IP68-rated protection, and dual-band Wi-Fi—ensuring stable and reliable operation even in extreme conditions.

### Features

- **APEXVISION:** Next-gen infrared imaging system for ultra-clarity & precision
- **Exceptional Imaging:** NETD < 15mK infrared detector paired with Hyper-light 2.0 Scenario-Optimized Algorithm
- **Comfortable Viewing:** QHD 2560×2560 AMOLED display for clear, smooth visuals.
- **Shutterless Design\*:** Innovative 3.0 shutterless design ensures smooth, uninterrupted visuals.
- **Seamless Control:** Centrally positioned focus wheel & zoom lever, ergonomically designed for effortless operation.
- **Laser Range:** Built-in LRF lens design delivers precise targeting up to 1200m.
- **Rugged Design:** IP68-rated, shock resistance up to 6000J.
- **Long Battery Life:** 14 hours of operation, and supports hot-swappable batteries.

### Applications

- Night Hunting
- Law Enforcement
- Search & Rescue
- Personal security



\*Note: The shutter module has been retained to ensure high image quality during startup and under significant temperature variations.

## Specifications

| Product model      | TU435LS                                                                                                                                                                 | TU635LS      | TU650LS                   |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------|
| Sensor             |                                                                                                                                                                         |              |                           |
| Core technology    | Equipped with full ApexVision S1 system architecture: Detector ApexCore S1 + Platform Nexus 1.0 + Algorithm Hyper-Light 2.0                                             |              |                           |
| Type               | Uncooled VOx Infrared Detector, 8 to 14μm                                                                                                                               |              |                           |
| Resolution         | 400×300@12μm                                                                                                                                                            | 640×512@12μm |                           |
| NETD               | 15mK                                                                                                                                                                    |              |                           |
| Frame rate         | 50Hz                                                                                                                                                                    |              |                           |
| Lens               |                                                                                                                                                                         |              |                           |
| Objective lens     | 35mm, F0.9                                                                                                                                                              |              | 50mm, F0.9                |
| Field of view      | 7.9°×5.9°                                                                                                                                                               | 12.5°×10.0°  | 8.8°×7.0°                 |
| FOV m@100m         | 14×10                                                                                                                                                                   | 22×18        | 15×12                     |
| Magnification      | 4.2x~16.8x                                                                                                                                                              | 2.6x~20.8x   | 3.7x~29.6x                |
| Detection range    | 1800m/1950yd                                                                                                                                                            |              | 2600m/2800yd              |
| Focus              | Manual                                                                                                                                                                  |              |                           |
| Display            |                                                                                                                                                                         |              |                           |
| Display type       | 1.03" AMOLED 2560×2560                                                                                                                                                  |              |                           |
| Color palettes     | White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia                                                                                                     |              |                           |
| Eyepiece           | Eye relief: 60mm; Diopter -5 to +5; Zoom: 7.8x                                                                                                                          |              |                           |
| Hardware           |                                                                                                                                                                         |              |                           |
| Laser rangefinder  | 1200m/1300yd                                                                                                                                                            |              |                           |
| Wi-Fi              | 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    | 128 GB                                                                                                                                                                  |              | 256 GB                    |
| Power              |                                                                                                                                                                         |              |                           |
| Battery type       | 18650 ×2 Battery (Built-in) and 18650 ×1 Battery (External)                                                                                                             |              |                           |
| Operating time     | 14 hours                                                                                                                                                                |              |                           |
| Environmental      |                                                                                                                                                                         |              |                           |
| Operating temp.    | -20°C to 50°C / -4°F to +122°F                                                                                                                                          |              |                           |
| Shock              | 6000J                                                                                                                                                                   |              |                           |
| Encapsulation      | IP68                                                                                                                                                                    |              |                           |
| Physical           |                                                                                                                                                                         |              |                           |
| Weight (g/oz)      | 875/34.44                                                                                                                                                               |              | 935/32.98                 |
| Size (mm/in)       | 420×89×80/16.5×3.50×3.15                                                                                                                                                |              | 421×89×80/16.57×3.50×3.15 |
| Standard           | Device, Quick-Release Scope Mount, Carry Bag, Lint-Free Cloth, Battery Charger, 18650 Battery ×2, 5V 2A Adapter, 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.