



APEX  
VISION

## TN 2.0 Series

Handheld Thermal Imaging Binoculars

# One Finger Focus, Ready for Action

# outdoor

### Introduction

The TN 2.0 Series handheld thermal imaging binoculars embody innovation and precision, redefining all-weather optical imaging solutions. Designed for hunting, law enforcement, and professional applications, the series integrates advanced thermal imaging technology, a laser rangefinding module, and high-efficiency system design to deliver dependable performance and reliability—making it a trusted choice for demanding users.

### Features

- o **APEXVISION:** Next-gen infrared imaging system for ultra-clarity
- o **Ultra-Clear Detection:** 12 $\mu$ m thermal detector + 15mK NETD with Hyper-light 2.0 enhancement algorithm.
- o **Lightweight Design:** Classic slim binocular structure with stepless adjustable 58–72mm interpupillary distance.
- o **Intuitive Control:** Precision focus wheel for effortless one-handed use.
- o **Laser Range:** Pinpoint target locations with accuracy, up to 1500m.
- o **Smart Connectivity:** Dual-band Wi-Fi connection, OTA upgrade via TargetIR APP.
- o **Rugged & Efficient:** IP67-rated with auto screen-off for both energy saving and discreet use.

### Applications

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



## Specifications

Product model	TN450LS	TN650LS
<b>Sensor</b>		
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	
<b>Lens</b>		
Objective lens	50mm, F1.0	
Field of view	5.2°×3.1°	8.2°×4.9°
FOV m@100m	9×5	14×9
Magnification	6.2x-24.8x	3.9x-31.2x
Detection range	2600m/2800yd	
Focus	Manual	
<b>Display</b>		
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: 20mm; Diopter: -6 to +6; Interpupillary distance adjustment: 60~70mm; Zoom: 13.8x	Eye relief: 20mm; Diopter: -6 to +6; Interpupillary distance adjustment: 58~72mm; Zoom: 13.8x
<b>Hardware</b>		
Laser rangefinder	1500m/1630yd	
Wi-Fi	2.4G, 5G	
Interface	USB-C (Support charging)	USB-C (Charging/Power supply/USB2.0)
Others	Microphone, Compass, Gyroscope, Bluetooth	
<b>System</b>		
Recording function	Photo/Video (Audio recording included)	
Memory capacity	64 GB	
<b>Power</b>		
Battery type	Customized Battery (Built-in) and 18650 ×1 Battery (External)	
Operating time	8 hours	7 hours
<b>Environmental</b>		
Operating temp.	-20°C to 50°C / -4°F to +122°F	
Encapsulation	IP67	
<b>Physical</b>		
Weight (g/oz)	722/25.47	720/25.4
Size (mm/in)	208×137×68.5/8.2×5.39×2.69	210×136×71/8.27×5.35×2.80
Standard	Device, Eye Mask, Neck Strap, Carry Bag, Accessory Bag, 18650 Battery ×2, Battery Charger, 5V 2A Adapter (US or UK or Australia or 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.