

TN 2.0 Series

Handheld Thermal Imaging Binoculars



One Finger Focus, Ready for Action



Introduction

The all-new TN 2.0 Series handheld thermal imaging binoculars redefine all-weather optical imaging with innovation and precision. Designed for hunting, law enforcement, and other professional applications, the series integrates advanced thermal imaging technology, Hyper-light image enhancement algorithms, and a high-performance design—delivering outstanding image quality and reliability, making it the ideal choice for complex environments.

Features

- o Classic slim binocular structure with stepless adjustable 58–72mm interpupillary distance.
- o 12 μ m thermal detector + 18mK NETD with Hyper-light enhancement algorithm.
- o Precision focus wheel for effortless one-handed use; customizable mute buttons for a personalized user experience.
- o Pinpoint target locations with accuracy, up to 1500m.
- o Dual-band Wi-Fi connection, OTA upgrade via TargetIR APP.
- o IP67-rated with auto screen-off for both energy saving and discreet use.

Applications

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



Specifications

Product model	TN435L 2.0	TN450L 2.0	TN635L 2.0	TN650L 2.0
Sensor				
Type	Uncooled VOx Infrared Detector, 8 to 14μm			
Resolution	400×300@12μm		640×512@12μm	
NETD	20mK		18mK	
Frame rate	50Hz			
Lens				
Objective lens	35mm, F1.0	50mm, F1.0	35mm, F1.0	50mm, F1.0
Field of view	7.4°×4.4°	5.2°×3.1°	11.8°×7.1°	8.2°×5.0°
FOV m@100m	13x8	9×5	21x12	14×9
Magnification	4.4x~17.6x	6.2x~24.8x	2.7x~21.6x	3.9x~31.2x
Detection range	1800m/1950yd	2600m/2800yd	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: 20mm; Diopter: -6 to +6; Interpupillary distance adjustment: 58~72mm; Zoom: 13.8x			
Hardware				
Laser rangefinder	1200m/1310yd	1500m/1630yd	1200m/1310yd	1500m/1630yd
WIFI	2.4G, 5G			
Interface	USB-C (Support charging)			
Others	Microphone, Compass, Gyroscope, Bluetooth			
System				
Recording function	Photo/Video (Audio recording included)			
Memory capacity	64GB		128GB	
Power				
Battery type	Customized Battery (Built-in) and 18650 ×1 Battery (External)			
Operating time	8 hours		7 hours	
Environmental				
Operating temp.	-20°C to 50°C / -4°F to +122°F			
Encapsulation	IP67			
Physical				
Weight (g/oz)	632/22.29	722/25.47	641/22.61	712/25.11
Size (mm/in)	191×134×64/ 7.52×5.28×2.52	208×137×68.5/ 8.2×5.39×2.69	191×134×64/ 7.52×5.28×2.52	208×137×68.5/ 8.2×5.39×2.69
Standard	Device, Neck Strap, 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, 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.