# **TL Series**



Multispectral Fusion Thermal Monocular

## Triple Light, Total Insight



#### Introduction

The TL Series is the first multispectral fusion thermal monocular of Guide Sensmart whose all-in-one design meets the needs of all-day and all-weather observation. Equipped with a 12µm high-end thermal sensor, 1920×1080 CMOS sensor and 1920×1080 AMOLED display, the TL Series offers significantly sharp and richly contrasted images with an integrated laser rangefinder with up to 600m accurate ranging. Integrated with a built-in GPS, laser rangefinder, and gyroscope, target latitude and longitude, target distance, and device angle information can be obtained for quick aiming.

### **Features**

- o Integrated thermal and night vision for all-day and all-weather observation.
- 0 12μm HD thermal sensor and 1920x1080 AMOLED display for reduced visual fatigue.
- o Built-in laser rangefinder for 600m accurate target detection.
- o Built-in GPS for accurate target positioning.
- o Combined multispectral viewing modes for faster observation.
- Removable single 18650 battery for 5 hours of battery life.
- o OTA firmware upgrade by connecting to the TargetIR APP.
- o IP67 encapsulation, rugged and durable.





Visible





Fusion 1

Fusion 2

## **Specifications**

Product model	TL430	TL450	TL630	TL650
Sensor		·		
Туре	Thermal: Uncooled VOx Infrared Detector, 8 to 14μm; Digital: CMOS			
Resolution	Thermal: 400×300@12μm; Digital: 1920×1080@4μm			
NETD	30mK			
Frame rate	50Hz			
Lens				
Objective lens	Thermal: 35mm, F1.0; Digital: 22mm, F1.5	Thermal: 50mm, F1.2; Digital: 22mm, F1.5	Thermal: 35mm, F1.0; Digital: 17mm, F1.4	Thermal: 50mm, F1.2; Digital: 17mm, F1.4
Field of view	7.8°×5.9°	5.5°×4.1°	12.4°×9.3°	8.7°×6.6°
FOV m@100m	14×10	10×7	22×16	15×12
Magnification	2.3x~9.2x	3.3x~13.2x	1.5x~12x	2.0x~16.0x
Detection range	1800m/1950yd	2600m/2800yd	1800m/1950yd	2600m/2800yd
Focus	Manual			
Display				
Display type	0.39" AMOLED 1920×1080			
Color palettes	IR: White Hot, Black Hot, Red Hot, Iron Red, Blue Hot; Visible: Day, Night, Low-light			
Image modes	IR, Visible, Fusion 1, Fusion 2, Fusion 3			
Eyepiece	Eye relief: 15mm; Diopter: -4 to +4; Zoom: 13.8x			
Hardware				
Laser rangefinder	600m/650yd			
WIFI	2.4G			
Interface	USB-C			
Others	GPS, Compass, Gyroscope, Bluetooth			
System				
Recording function	Photo/Video			
Memory capacity	64GB			
Power				
Battery type	Single, Replaceable 18650 Battery			
Operating time	5 hours			
Environmental				
Operating temp.	-20°C to 50°C / -4°F to +122°F			
Encapsulation	IP67			
Physical				
Weight (g/oz)	530/18.70	567/20.00	530/18.70	567/20.00
Size (mm/in)	170×70×90/ 6.69×2.76×3.54	190×70×90/ 7.48×2.76×3.54	180×70×90/ 7.09×2.76×3.54	190×70×90/ 7.48×2.76×3.54
Standard	Device, Battery Charger, 18650 Battery ×1, 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			

<sup>\*</sup> 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.