



GUIDE

Triple Light, Total Insight

TL Series

Multispectral Fusion
Thermal Monocular

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 12 μ m high-end thermal sensor, 1920 \times 1080 CMOS sensor and 1920 \times 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

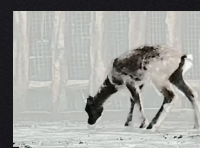
- o Integrated thermal and night vision for all-day and all-weather observation
- o 12 μ m HD thermal sensor and AMOLED display for reduced visual fatigue
- o Built-in laser rangefinder for 600m accurate target detection
- o Built-in GPS for accurate target positioning
- o Combined multispectral viewing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



Visible



IR



Fusion 1



Fusion 2

Specifications

Product model	TL430	TL450	TL630	TL650
Sensor				
Type	Thermal: Uncooled VOx Infrared Detector, 8 to 14μm; Digital: CMOS			
Resolution	Thermal: 400×300@12μm; Digital: 1920×1080@4μm		Thermal: 640×480@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
Display				
Display type	0.39" AMOLED 1920x1080			
Color palettes	IR: White Hot, Black Hot, Red Hot, Iron Red, Blue Hot			
Scene modes	Visible: Day, Night, Low-light			
Image modes	IR, Visible, Fusion 1, Fusion 2, Fusion 3			
Eyepiece	Exit pupil distance 15 mm; Diopter: -4 to +4; Zoom: 13.8x			
Hardware				
Laser rangefinder	600m/650yd			
WIFI	2.4G			
Interface	USB Type-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	A device, Wrist strap, Battery charger, single 18650 battery, 5V2A adapter (US, Britain, Australia and Europe), USB Type-C cable, Quick use guide, Warranty card			
Optional	Bluetooth remote control, 18650 battery, Dovetail guide			