

TD Gen2 LRF

Handheld Thermal
Imaging Monocular

Thermal Imaging with Laser Ranging, All in Your Control



Introduction

The TD Gen2 Series laser rangefinder version is the industry's first entry-level full-featured handheld thermal imaging monoculars. While inheriting the characteristics of the previous generation, such as being lightweight, portable, easy to operate, and durable, it integrates a high-precision laser rangefinder module to accurately detect targets within 600 meters. It adopts an OLED display, providing clear imaging and a comfortable viewing experience, making it the ideal equipment for outdoor night vision.



Features and Benefits

- Boot up in 2 seconds and ready to use
- High-brightness OLED display for a comfortable observation
- Upgraded image algorithm for richer details
- Built-in laser rangefinder for 600m accurate target detection
- Super long battery life of up to 10 hours
- IP66 encapsulation, rugged and durable
- New UI and interaction design for easier operation
- OTA firmware upgrade by connecting APP

Applications

- Outdoor
- Wild Adventure
- Law Enforcement
- Search & Rescue
- Personal Security
- Livestock Breeding

Specifications

Product model	TD411 LRF	TD421 LRF	TD431 LRF
Infrared Detector			
Detector type	VOx, 8 to 14 μ m		
Detector resolution	384 \times 288, 12 μ m		
NETD	\leq 40mk		
Frame rate	50 Hz		
Lens			
Focal length	19 mm; F1.0	25 mm; F1.1	35 mm; F1.0
Field of view	13.6° \times 10.3°	10.4° \times 7.9°	7.5° \times 5.6°
Optical zoom	1.4x	1.9x	2.6x
Digital zoom	1x, 2x and 4x		
Focus	Manual		
Power			
Battery type	Single, replaceable 18650 battery		
Battery life	\geq 10 hours		
Interface			
USB	Type C (USB 2.0 standard), supporting analog video and power supply		
Video interface	USB Type C		
Mechanical interface	UNC 1/4"-20 (Tripod mounting), Mechanical expansion interface		
Display			
Display type	0.23" OLED		
Resolution	640 \times 400		
Eyepiece	Monocular, exit pupil distance \geq 12 mm, diopter adjustment: -4 to + 2		
Eyepiece zoom	18x		
Video output	Analog video		
Functions			
Hot spot tracking	Available		
Rough ranging	Available with APP		
PIP	Upper left, Upper middle, Upper right, Closed		
Scene modes	Enhanced, Highlight and Natural		
Color palettes	Black Hot, White Hot, Red Hot, Iron Hot, Blue Hot		
Compensation modes	Automatic, shutter and scene compensation		
WIFI	Transmission of real-time video via WIFI for remote control in the 2.4G frequency band and within 15 meters		
Laser	Laser rangefinder (up to 600 m)		
Environmental			
Storage temperature	-30 $^{\circ}$ C to 60 $^{\circ}$ C		
Humidity	10 % to 95 % non-condensing		
Shock	30 G at 11 ms half sine pulse (as per IEC60068-2-27)		
Vibration	10 Hz~150 Hz~10 Hz 0.15 mm (as per IEC60068-2-6)		
Drop	1 m		
Encapsulation	IP66		
Certification	IP66, FCC, CE, RoHS, EAC, WEEE, un38.3, IEC 60825-1 Class 2		
Detection Range			
Detection range	800 m	1000 m	1400 m
Physical			
Weight	\leq 383 g	\leq 360 g	\leq 393 g
Size (L \times W \times H)	150 \times 75 \times 74 mm		150 \times 77 \times 74 mm
Standard	A device, lens cover and lanyard, Battery charger, single 18650 battery, USB Type-C cable, Wrist strap, Carry bag, Eye mask, Quick use guide, Warranty card		