

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 AMOLED 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	TD631 LRF
Sensor				
Type	Uncooled VOx Infrared Detector, 8 to 14 μm			
Resolution	384 \times 288, 12 μm		640 \times 480, 12 μm	
NETD	$\leq 35\text{mK}$			
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°	12.5° \times 9.4°
Optical zoom	1.4x	1.9x	2.6x	1.7x
Digital zoom	1x, 2x and 4x			1x, 2x, 4x and 8x
Focus	Manual			
Display				
Display type	0.23" AMOLED			
Resolution	640 \times 400			
Eyepiece	Exit pupil distance ≥ 12 mm; Diopter: -4 to +2; Zoom: 18x			
Video output	Analog video			
Range Performance				
Detection range	800 m	1000 m	1400 m	
Hardware				
Laser rangefinder	Max. measuring range: 600m			
Functions				
Scene modes	Enhanced, Highlight and Natural			
Color palettes	Black Hot, White Hot, Red Hot, Iron Hot, Blue Hot			
WIFI	2.4 G			
Supported Application	TargetIR			
Firmware OTA	Upgrade device firmware via app connection			
Others	PIP, Hot spot tracking			
Power				
Battery type	Single, replaceable 18650 battery			
Operating time	≥ 10 hours		≥ 8 hours	
Interface				
USB	USB Type-C			
Mechanical interface	UNC 1/4"-20 (Tripod mounting), Mechanical expansion interface			
Environmental				
Storage temperature	-30 °C to 60 °C			
Humidity	10 % to 95 % non-condensing			
Shock	30 G at 11 ms half sine pulse (as per IEC60068-2-27)			
Drop	1 m			
Encapsulation	IP66			
Certification	IP66, FCC, CE, RoHS, EAC, WEEE, un38.3, IEC 60825-1 Class 2			
Physical				
Weight	≤ 383 g	≤ 360 g	≤ 393 g	≤ 399 g
Size	150 \times 75 \times 74 mm		150 \times 77 \times 74 mm	153 \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			