PRODUCT TECH SHEET



MODEL	TU451-LRF			
STYLE	Thermal Scope (with LRF)		F)	
RELEASE	Feb 2024	RRP	\$3,999	





DIMENSIONS				
LENGTH	381mm (15.00")			
WIDTH	106mm (4.17")			
HEIGHT	99mm (3.90")			
WEIGHT	1151g (excl batt)			

PROTECTION

IP67 (dust and water resistant to 1m for 30 minutes.)

POWER

1 x 18650 Internal Battery 1 x External Customised Battery

SUMMARY

The **TU451-LRF Thermal Scope** is part of a new GEN 2 series of high-sensitivity thermal scopes from GUIDE, coming equipped with a 400 x 300 resolution, 12µm thermal sensor... with an amazing NETD of 25mK and a Frame Rate of 50Hz for a highly detailed, smooth viewing experience that is easy on the eye.

Paired with the robust *PureIR* image algorithm, the **TU451-LRF** provides users with a more vivid and detailed visual experience via its 0.49" High Definition 1440 x 1080, AMOLED display - and a detection range up to 2600m. Furthermore, the **TU451-LRF** keeps its firmware continually by connecting to GUIDE'S *TargetIR* App so the scope can be upgraded over time, and an IP67 weather rating keeps it all safe and secure...

All this is delivered with an incredible 12 hour battery life via its twin battery configuration (one fixed onboard and a second, external battery), a huge 128MB onboard memory for photos and video, Bluetooth, WiFi connectivity and a choice of seven colour palettes that can be changed for every situation!

With a 50mm lens, the **TU451-LRF** also offers up to 14x magnification and a 10m x 7m field of view at 100m.

KEY FEATURES

- 400 x 300@12µm thermal sensor for crisp detail, operating with a NETD of 25mK.
- 50mm, F1.0 optical lens with a detection range up to 2600m.
- 5.5° x 4.1° Field of View with an impressive 10m x 7m window at 100m.
- 4.7x 18.9x Magnification.
- Smooth 50Hz Frame Rate for seamless viewing.
- 0.49" AMOLED 1920 × 1080 Full-HD display screen for excellent clarity.
- Seven Colour Palettes White Hot; Black Hot; Red Hot; Green Hot; Iron Red; Blue Hot; Sepia.
- Approximately 12 hours of operation using an internal and external battery configuration.
- Approximately 1200g with batteries installed, sleek design with sturdy plastic lens cover.
- Eye relief of 48 mm; Dioptre -4D to +4D and a 14x Zoom.
- IP67 protection rating dustproof and resistant to water at 1m for 30 minutes.

TECHNICAL DETAILS

[3 Year Warranty]

THERMAL SENSOR:

Image Sensor

Maximum Resolution
NETD

Frame Rate

Uncooled, VOx Infrared Detector, 8µm to 14µm.

400 x 300@12µm

25mK 50Hz

LENS:

Lens (Focal Length)
Field of View (HxV), Degrees
Field of View m @100m
Magnification
Detection Range

50mm, Fl.0 5.5° x 4.1° 10m x 7m 4.7x ~ 18.9x 2600m

IMAGE DISPLAY:

Display Colour Palettes

Picture-in-Picture (PiP)

Eye Relief Diopter Zoom 0.49" AMOLED 1920×1080

White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia.

Yes 48mm -4D to +4D 14.0x

SYSTEM:

WiFi Bluetooth Interface Tube Diameter Capture Snaps

Capture Snapshot
Audio Recording
Video Recording
Standby Mode
Local Album
Storage

2.4GHz Yes

USB Type-C; Micro HDMI 30mm (Standard)

Yes Yes Yes Yes Yes

Built-in EMMC (128GB)

LASER RANGEFINDER:

Maximum Distance IR Illuminator

1500m 905nm

POWER SUPPLY:

Battery Operating Time Battery Type (Internal/Fixed) Battery Type (External)

Power Supply

Approximately 12 hours (at 25°C)

1 x Rechargeable, 18650 Battery

1 x Customised, Rechargeable Battery

USB Type-C for Internal Battery; Charging Stand for External Battery

GENERAL:

Protection Level Recoil Shock Resistance Dimensions

Weight

Working Temperature

Included in Box

IP67 (dustproof and water resistant to 1m for 30 minutes) 800g at 1ms half-sine pulse (as per IEC60068-2-27) 381mm x 106mm x 99mm (15.00" x 4.17" x 3.9")

1151g (excl external battery); 1200g (with all batteries installed)

-30°C to +50°C

Device; Device Lens Cover; Eye Rubber; Carry Bag; 2 x Customised Batteries; Battery Charger; 5V 2A Adapter for Australia; USB Type C Cable; Micro HDMI Cable; Quick Start Guide; Warranty Card.

