



PRODUCT TECH SHEET

SCAN FOR INFO

MODEL	TD653L - GEN 3			
STYLE	Thermal Monocular with LRF			
RELEASE	July 2025	RRP \$3499		
				
				
DIMENSIONS				
LENGTH	190mm (7.5")			
WIDTH	68mm (2.7")			
HEIGHT	88mm (3.5")			
WEIGHT	472g (excl batt)			
PROTECTION				
IP67 (water resistant to 1m for 30 mins)				
POWER				
1 x 18650 Li-ion Battery				

SUMMARY

The **GUIDE TD653L GEN 3** monocular is a feature-packed thermal monocular perfect for quick spotting and range assessment – with a laser rangefinder that is accurate to up to 1000m. Packing an amazing 640 x 512 sensor that features a NETD of <20mK, this palm-sized handheld with its large 50mm lens has a detection range of 2600m, with an identification range just over 650m. An 8x digital magnification varies from the base magnification of 2.6x up to 20.8x.

The 50mm lens gives the **TD653L** a 15m x 12m field of view at 100m with a generous 8.8° x 6.6° spread, with images popping-up crystal clear on its 0.36" AMOLED 1280x960 viewing screen. 32GB of internal EMMC memory, dual-band wi-fi (2.4G and 5.0G), Bluetooth and a huge offering of seven (7) colour palettes to choose from, all come in a compact device that has a huge 10 hour battery life via one 18650 battery (one supplied in the box).

At just 472g, or 517g including the battery, this small unit slots nicely into a hunting pocket, with single index-finder focus control and one-handed operation with all buttons close-to-hand.

KEY FEATURES

- 640 x 512 resolution @12µm thermal detector for crisp thermal detail.
- High sensitivity thermal module NETD <20 mK (@25°C, F# = 1.0), ensuring perfect image quality and detail recognition even in the toughest weather conditions.
- 50mm germanium F1.0 thermal lens with a detection range up to 2600m.
- 1000m laser rangefinder built under the main lens.
- 0.36" AMOLED 1920x1080 display screen for excellent clarity.
- 7 Colour Palettes – *White Hot; Black Hot; Red Hot; Green Hot; Iron Red; Blue Hot; Sepia*.
- Up to ten (10) hours of continuous operation using 1 x 18650 Li-ion rechargeable, replaceable battery.
- 472g lightweight, compact and ergonomic design with rubber lens cover and faux-leather, 'grippy' outer skin and a reversible strap for left- or right-hand use. Carry case included.

THERMAL MODULE:

Image Sensor	VOx Uncooled Focal Plane Arrays CMOS
Maximum Resolution (Thermal)	640 x 512
Frame Rate	50Hz
Pixel Interval	12 µm
Response Waveband	8µm to 14µm
NETD	Greater than 20 mK (@25°C), F# = 1.0
Lens (Focal Length)	50mm, F1.0
Focus Mode	Focus Dial (upper rear of device)
Detection Range	2600m
Recognition Range	1300m
Identification Range	650m
Minimum Focusing Distance	1m
Magnification	2.6x to 20.8x (8x)
Field of View (Degrees) @100m	8.8° x 6.6°
Field of View (H x V) @100m	15m x 12m

IMAGE DISPLAY:

Display	0.36" AMOLED 1280x960
Palettes (Thermal)	White Hot, Black Hot, Red Hot, Green Hot, Iron Red, Blue Hot, Sepia
Exit Pupil	8mm
Eye Relief	20mm
Dioptr (Range)	-6 D to +6 D
Zoom	13.8x

SYSTEM:

Capture Snapshot	Yes
Audio Recording	Yes
Video Recording	Yes
Standby Mode	Yes (includes SMART Auto Screen Off on tilt)
Storage	Built-in EMMC (32GB)
Local Album	Yes
Wi-Fi	Dual Band - 2.4GHz and 5Ghz
Bluetooth	Yes

POWER SUPPLY:

Battery Operating Time	Approximately <10 hours (at 25°C)
Battery Type	1 x rechargeable, replaceable Li-ion Battery (1 supplied)
Type-C Power Supply	USB Type-C (Power Supply/USB 2.0)

GENERAL:

Protection Level	IP67 (30 minutes under 1m of water)
Dimensions	190mm x 68mm x 88mm (7.5" x 2.7" x 3.5")
Weight	472g excluding battery, 517g including battery.
Working Temperature	-20°C to +50°C
Mounting Adaptor (Tripod)	1/4" Internal Thread -20-UNC
Included in Box	Device, Dust-Free Cloth, Hand Strap, Eye Mask, Battery Charger, 18650 Battery x1, 5V 2A Adapter (US or UK or Australia or Europe), USB-A to USB-C Cable, Quick Start Guide, Warranty Card

LASER RANGEFINDER:

Safety Class for Laser	Class 1
Wavelength	905nm
Maximum Measuring Range	1000m
Measurement Accuracy	±1m
Minimum Measuring Range	3m