

TLS 40

Target Acquisition Binoculars



Features

- Compact binocular target locating system
- Lightweight < 2 kg
- Eyesafe laser rangefinder
- 12-channel GPS
- Digital magnetic compass
- 1.3 megapixel still and video camera
- Composite PAL and NTSC video outputs
- Digital voice recording
- Low power consumption > 2000 shots
- USB, RS232 and RS422/RS485 serial interfaces



We make it visible.

TLS 40

Description

TLS 40 is an innovative product which combines a long-range laser rangefinder, observation binoculars, GPS, digital compass, digital camera and digital voice recorder, integrated into a compact and lightweight package, making it ideal for police forces, peace keeping forces, border and coastal surveillance, special forces, rescue services and armies.

The class 1 eyesafe laser rangefinder is safe under all conditions, yet effectively measures ranges in excess of 20 km. Single-pulse laser technology increases the probability of ranging to distant targets without the need for tripod stabilisation. The rangefinder will detect and display up to three multiple targets at any range and enables user-adjustable minimum range gate. The superb observation capability offered by the 7 x 42 binoculars eliminates the need to carry in-service binoculars, reducing the impact of any additional mass. The high-resolution data display is projected in the lower section of

the field of view, enabling unobscured vision of the target observation area. The aiming graticule automatically illuminates in low-light operating conditions. At the press of a button, TLS 40 will acquire and display the target range, bearing, elevation, own and target GPS locations. If required by the user, an image of the target and voice description may also be recorded. Real-time composite video output (NTSC and PAL) is also available for live viewing or recording of the image being viewed. TLS 40 is equipped with a high-speed external interface to enable effective transfer of target information to digital mapping systems or mission command. The target image and voice description facilitates target verification and mission planning, thereby reducing the risk of collateral damage.

TLS 40 features a fall-of-shot function, which provides fire correction data for artillery and mortar forward observer applications. A survey function enables the user to determine the distance between two objects. The system is compatible with a wide range of external GPS systems including, PLGR I, PLGR RI+96, PLGR II and Garmin.

Technical Data

Observation:

Type	7 x 42 binoculars
Field of view	7°
Independent eyepiece adjustment	-4 to +4 dioptres
Inter-pupil adjustment	60 mm to 72 mm
Anti-laser filter	Against 1064 nm
Graticule illumination	Adjustable
Internal multi-function display	5 line x 20 character

Laser rangefinder

Laser type	OPO shifted Nd:YAG
Laser class	Class 1 eyesafe (IEC60825-1 Ed 1.2 of 2001-08)
Measuring range	80 m to 20 km
Range accuracy	< 5 m
Range resolution	2 m
Standard measuring rate	1 measurement every 6 seconds
Fast measuring rate	1 measurement every 3 seconds
Multiple target detection	3 targets
Target discrimination	50 m
Adjustable range gate	Yes, 80 m to 8 000 m

Digital compass

Azimuth accuracy	0.6° (2sigma)
Elevation accuracy	0.2° (2sigma)
Elevation	± 45°
Bank range	± 30°

GPS

12-channel receiver	SPS
Receiver antenna	Integrated
Map datums selection	270

Digital camera

Type	1.3 megapixel, 24-bit colour
Field of view	0.9° (H) x 0.75° (V)
Composite video output	NTSC and PAL
Photo recording format	JPEG
Photo storage capacity	Min. > 180 low-resolution photos Min. > 35 high-resolution photos

Voice recorder

	10 seconds of audio stored per photo
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Power supply

Battery power	Commercial 3 x 3V lithium CR123
Battery life	> 2000 Shots
External power	6 to 15 Vdc

Interface

Mounting interface	Standard 1/4" BSW tripod mount 3 point mount
Electrical interface	RS232, RS422 / RS485 and USB1.0
External GPS compatibility	Rockwell Collins PLGR 1, PLGR 1+96, PLGR II+96 & Garmin

Physical

Size	187 mm L x 175 mm W x 91 mm H
Mass	< 2 kg
Operating temperature	-35°C to +55°C
Storage temperature	-40°C to +70°C

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