

## TGX-8/75 Thermal Imaging Binocular

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Thermal imaging binocular TGX-8/75 is an ultramodern compact optical device, designed for monitoring and observing areas in limited visibility conditions: poor lighting, smoke, fog, objects hidden by vegetation or merged with underlying terrain. A distinctive feature of this binocular is an integrated compact laser rangefinder of 1550 nm range that allows to accurately measure distance on the distant range.

High-performance capabilities of optical system, an extended set of functions and ergonomic design of TGX-8/75 make it an indispensable device for a wide range of applications.

The device is equipped with a highly sensitive passive receiver of far infrared band (LWIR) with resolution and sensitivity within 20-30 mK. A binocular has two built-in colour high-resolution micro displays and eyepieces with diopter adjustment and the ability to adjust the distance between the eyes.

Several set colour schemes allow to choose the necessary display option depending on the tasks performed.

An optical circuitry of TGX-8/75 provides 3x digital zoom (using a detector with 640 x 512 resolution) or 6x digital zoom (using a detector with 336 x 256 resolution).

Operation modes, device status, battery discharge are indicated on the display of the device. There are also modes of brightness and contrast control. The device is equipped with sensors of proximity that much reduce the risk of disclosure.

The design of TGX-8/75 comes in a shockproof waterproof plastic housing with conveniently arranged controls. Power is supplied via 6 AA type batteries (lithium batteries or rechargeable batteries).

Due to high-tech electronics unit excellent functional capacities of the device are realized by minimal dimensions and power consumption.



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#### MAN SIZED TARGET

(75 mm objective)

Detection – 2200 m

Recognition – 600 m

Identification – 300 m

#### FEATURES

- ✓ USB interface for programming and device control.
- ✓ 2x, 3x, 4x digital zoom.
- ✓ Sensitivity settings of the detector.
- ✓ Different color schemes for the image refinement.
- ✓ Integrated laser rangefinder.
- ✓ Built-in compass and accelerometer.
- ✓ Built-in video module.
- ✓ Manual and automatic calibration of the detector



### DELIVERY SET

- ✓ Thermal imaging binocular TGX-8/75.
- ✓ AA type rechargeable batteries – 6 pcs.
- ✓ Redundant power supply RBP-8.
- ✓ Charger 220V.
- ✓ Vehicle charger 12V.
- ✓ USB cable.
- ✓ Neck strap.
- ✓ User's manual.
- ✓ Case.
- ✓ Bag.

### TECHNICAL CHARACTERISTICS

<b>DETECTOR</b>	
Technology	Uncooled VOx Microbolometer
Resolution	336 x 256      640 x 512
Pixel size	17μ
Operating wavelength	7.5-13.5 μm
Sensitivity	<30 mK
<b>OPTICS</b>	
Objective	75 mm
Objective F number	F/1.0
Field of view	4.4° x 3.4°      8.3° x 6.4°
Focusing range	5 m ÷ ∞
<b>RANGEFINDER</b>	
Max.distance measured by LRF	2500 m
LRF wavelength	1550 nm
<b>ELECTRONICS</b>	

Frame rate	9/25 Hz (PAL) 8/30 Hz (NTSC)
Video output	PAL or NTSC, programmed
Display	AMOLED, 800 x 600
Interface	USB
<b>OPERATING PARAMETERS</b>	
Starting time	3 sec
Temperature range	-30°C ÷ +55°C
Operating time, no less than	5 h
Operating time from redundant power supply, no less than	8 h
Dimensions (L x W x H)	215 x 146 x 104 mm
Weight	1.65 kg
Protection class	IP67

### **TGX-8/75 - Thermal Imaging Binocular**