

TMQ-19/20 Thermal Imaging Monocular

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TMQ-19/20 is a digital ultra-compact thermal imaging device. Small dimensions of this device allow comfortable use of the monocular, having set it on a headgear or helmet. The device is used by emergency services and special units in urban conditions or on short distances indoors.

The device TMQ-19/20 is equipped with a lens of focal length of 19 mm or 20 mm, focused in the range from 10 m to infinity.

An optical circuitry of TMQ-19/20 provides 0.5x digital zoom (using a detector with 640 x 512 resolution) or 1x 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 automatic and manual brightness and contrast control. The design of TMQ-19/20 comes in a shockproof waterproof plastic housing with conveniently arranged controls. Power is supplied via 1 CR123 battery. There is also an option to connect an external power supply.

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

TMQ-19 is designed for tasks when minimal weight and dimensions are crucial. Meanwhile the monocular TMQ-19 is on level with other models both by functional characteristics and by image quality.

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MAN SIZED TARGET
(20 mm objective)
Detection – 650 m
Recognition – 160 m
Identification – 80 m

FEATURES

- ✓ USB interface for programming and device control.
- ✓ 2x, 4x digital zoom.
- ✓ Sensitivity settings of the detector.
- ✓ Different color schemes for the image refinement.
- ✓ Manual calibration of the detector.
- ✓ Option to connect an external power supply.
- ✓ Analog video output with a possibility of switching off.



DELIVERY SET

- ✓ Thermal imaging monocular TMQ-19/20.
- ✓ Video/charge adapter.
- ✓ 1 CR123 battery.
- ✓ Hand strap.
- ✓ User's manual.
- ✓ Case.
- ✓ Bag.

TECHNICAL CHARACTERISTICS

DETECTOR				
Technology	Uncooled VOx Microbolometer			
Resolution	336 x 256		640 x 512	
Pixel size	17µ			
Operating wavelength	7.5-13.5 µm			
Sensitivity	<30 mK			
OPTICS				
Objective	19 mm		20 mm	
Objective F number	F/1.0			
Field of view	17° x 13°	32° x 26°	16.3° x 12.5°	31.2° x 24.9°
Focusing range	10 m ÷ ∞			
Eye relief	50 mm			
Diopter correction	-6 ÷ +2			
ELECTRONICS				
Frame rate	9/25 Hz (PAL) 8/30 Hz (NTSC)			
Video output	PAL or NTSC, programmed			
Display	AMOLED, 800 x 600			
Interface	USB			
OPERATING PARAMETERS				

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)	objective 19 mm 95 x 48 x 50 mm	objective 20 mm 110 x 65 x 60 mm
Weight	0.2 kg	0.27 kg
Protection class	IP67	

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