TSA-7 Thermal Imaging Sighting System

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Thermal imaging sight TSA-7 is the latest development of “Thermal Visio Technologies” company. High-performance capabilities, excellent operating capacities, wide functionality – these are distinctive features of thermal imaging sighting system TSA-7.

Key advantage of TSA-7 is a ballistic calcu-lator: it is capable to consider atmospheric conditions (received from the built-in weather station or entered manually), wind of any direction and speed of 10 m/s, derivation, angle of sight and the Coriolis force. Temperature of dustpowder is also considered together with susceptibility factor (automatically or manually). Moreover, the complex automatically remembers adjustment conditions for a specific cartridge and enters firing correction under other conditions. Both standard (G1, G7) and specific drag functions (based on Lapua Radar Data or generated by external ballistic programs) are supported in TSA-7.

Laser rangefinder of 1550 nm range, integrated in thermal sight, allows to accurately measure distance on the distant range.

Optical system characteristics and unique functions make a device an indispensable tool for a wide range of use with any weapon, including large caliber sniper rifles and machine guns.

The device is equipped with a highly sensitive passive receiver of far infrared band (LWIR). TSA-7 has a built-in colour high-resolution micro display and an eyepiece with diopter adjustment.

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

Thermal imaging sighting system TSA-7 has a serial interface for programming and remote control, option of downloading and editing target reticles, ballistics table for every type of programmed arms. The device is equipped with sensors of ambient light and proximity, angle of sight, level of horizon, constant monitoring of distance shot. A built-in recording module allows to take photos and shoot video in several modes.

The design comes in a shockproof waterproof plastic housing with conveniently arranged controls. Power is supplied via quick detach battery cassette, cassette of 4 AA type batteries (lithium batteries or rechargeable batteries) or external power supply.

AT Comm

MAN SIZED TARGET
(75 mm objective)
Detection – 2200 m
Recognition – 600 m
Identification – 300 m

FEATURES

- ☑ Integrated laser rangefinder.
- ☑ Built-in compass and accelerometer.
- ☑ Built-in weather station.
- ☑ Windage calculation.
- ☑ Automatic compensation for changing of adjustment conditions.
- ☑ Ballistic table development.
- ☑ USB interface for programming and device control.
- ☑ Bluetooth interface for connection of the external weather station and device control.
- ☑ 2x, 3x, 4x digital zoom.
- ☑ Sensitivity settings of the detector.
- ☑ Different color schemes for the image refinement.
- ☑ Built-in video module.
- ☑ Manual and automatic calibration of the detector.
- ☑ Automatically predicted impact point.

DELIVERY SET

- ☑ Thermal imaging sight TSA-7.
- ☑ Rechargeable batteries cassette – 2 pcs.
- ☑ AA type batteries cassette – 1 pcs.
- ☑ Redundant power supply RBP-8.
- ☑ Charger 220V.
- ☑ Vehicle charger 12V.
- ☑ USB cable.
- ☑ Cable adapter.
- ☑ Blind.
- ☑ 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	<50 mK			
OPTICS				
Objective	50 mm	75 mm	50 mm	75 mm
Objective F number	F/1.0			
Field of view	6.5° x 5.0°	4.4° x 3.4°	12.5° x 10.0°	8.3° x 6.4°
Focusing range	10 m ÷ ∞			
Eye relief	50 mm			
Diopter correction	-6 ÷ +2			
RANGEFINDER				
Max.distance measured by LRF	2500 m			
LRF wavelength	1550 nm			
BALLISTIC COMPUTER				
Max. measurable distance	2500 m			
Drag functions	G1, G7, multi BC or user defined			
Calculation time	200 msec			
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 50 mm* 268 x 114 x 117 mm	*objective 75 mm* 283 x 120 x 117 mm
Weight	1.5 kg	1.6 kg
Protection class	IP67	

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