THERMAL IMAGING DEVICES

TSA-7



ARCHER-LPP TSA-7, objective 75 mm, mounted on a rifl



THERMAL IMAGING SIGHTING SYSTEM **TSA-7**

Thermal imaging sight ARCHER-LPP TSA-7 is the flagship of the company. High-performance capabilities, excellent operating capacities, and comprehensive functionality are distinctive features of the thermal imaging sighting system ARCHER-LPP TSA-7.

The system's key advantage is a ballistic calculator: it can 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 dust powder is also considered together with susceptibility factor (automatically or manually). Moreover, the complex automatically remembers adjustment conditions for a specific cartridge and enters firing corrections 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 the system.

The laser rangefinder of 1550 nm range, integrated into thermal sight, accurately measures 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-calibre sniper rifles and machine guns. The device is equipped with a highly sensitive passive receiver of a far infrared band (LWIR). ARCHER-LPP TSA-7 has a built-in colour high-resolution microdisplay and an eyepiece with diopter adjustment. Several set colour schemes and sensitivity settings allow choosing the necessary display option depending on the tasks performed.

The system has a serial interface for programming and remote control, an option for downloading and editing target reticles,

ballistics table for every type of programmed arm. The device is equipped with sensors of ambient light and proximity, angle of sight, level of horizon, and 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 or rechargeable batteries) or external power supply.

— FEATURES

- > Integrated laser rangefinder.
- > Built-in compass, accelerometer and 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, 6x digital zoom.
- >> Sensitivity settings of the detector.
- > Different colour schemes for image refinement.
- > Built-in video module.
- > Manual and automatic calibration of the detector.
- > Automatically predicted impact point.

- DELIVERY SET

- > Thermal imaging sight ARCHER-LPP TSA-7.
- > Rechargeable batteries cassette 2 pcs.
- ➢ AA type batteries cassette − 1 pcs.
- > Charger 220V, Vehicle charger 12V.
- > USB cable, Cable adapter, Blind, User's manual, Case, and Bag.



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TECHNICAL CHARACTERISITICS

| DETECTOR | |
|----------------------|-----------------------------|
| TECHNOLOGY | Uncooled VOx Microbolometer |
| RESOLUTION | 640 x 512 |
| PIXEL SIZE | 12 µm |
| OPERATING WAVELENGTH | 7.5-13.5 μm |
| OPTICS | |
| OBJECTIVE | 75 mm |
| OBJECTIVE F NUMBER | F/1.0 |
| FIELD OF VIEW | 8.3° x 6.4° |
| FOCUSING RANGE | 10 m : ∞ |
| EYE RELIEF | 50 mm |
| DIOPTER CORRECTION | -6 : +2 |

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 | 6 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) | 290 x 135 x 92 mm |
| WEIGHT | 1.68 kg |
| PROTECTION CLASS | IP67 |
| | |

RANGEFINDER MAX. DISTANCE MEASURED BY LRF

LRF WAVELENGTH





TAG Global Systems 575 Washington Street Pembroke, MA 02359

1-800-630-4708 sales@tagglobalsystems.com www.tagglobalsystems.com

MAN SIZED TARGET

(75 mm objective)

| · | j | , |
|----------------|----------|---|
| Detection | – 3650 m | |
| Recognition | – 910 m | |
| Identification | – 450 m | Under ideal conditions; 12 μm; Johnson's Criteria @ 50% probability |
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