



**ARCHER**  
LPP

**CATALOGUE**



## IN-HOUSE OPTOELECTRONICS **ARCHER-LPP**

ARCHER-LPP s.r.o. is known for producing optoelectronic systems such as **thermal imaging sights, binoculars, monoculars, night vision, and other special devices**. The company is constantly developing, improving its products and expanding their range. The principles on which the company is built are the highest quality, undeniable reliability and excellent functionality of ARCHER-LPP devices.

ARCHER-LPP, as a part of LPP Holding, is involved in providing comprehensive solutions, including its optoelectronic systems. These systems are used for various integrations either within the **soldier level as rifle scopes and handheld devices** or within the **vehicular level as optical reconnaissance systems** and driving assistance and security systems. The produced imaging devices are also integrated into **intelligence security systems such as face recognition and person, object and gun detection**.



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TAG Global Systems offers **products that push boundaries and deliver the latest advanced technology** in the B2B markets. The company owner has over 20 years of industry experience with an expert management team.

TAG takes their strategy very seriously and is prepared to stand behind these statements that measures their success. One key and critical measure of success, lies entirely in the customer's hands. Customer referrals, introductions, and feedback on technology needed today directly impact the products and offerings TAG manufactures. It is recognized that referring something or someone is not taken lightly and results from a few key values: confidence, past experience, loyalty, and trust. TAG is known as a **trusted advisor for the most innovative, advanced technology today.**

What lies entirely in TAG's hands is to deliver tomorrow's technology...today time and time again.

**WE ARE THE OFFICIAL US RESELLER  
OF THE ARCHER-LPP PRODUCTS.**

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**ARCHER-LPP**  
**THERMAL IMAGING DEVICES**

PHOENIX, ARIZONA, USA

## TSA-7

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



## 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.
- > Redundant power supply RBP-8, Charger 220V, Vehicle charger 12V.
- > USB cable, Cable adapter, Blind, User's manual, Case, and Bag.



THERMAL IMAGING DEVICES

# TSA-7

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



## TECHNICAL CHARACTERISTICS

### DETECTOR

TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
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
DIOPTRER 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

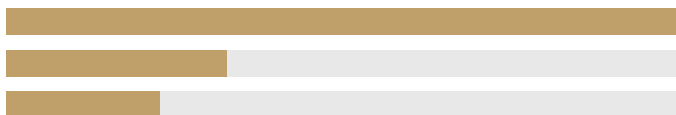
STARTING TIME	6 sec
TEMPERATURE RANGE	-30°C ÷ +55°C
OPERATING TIME, NO LESS THAN	5 h
OPERATING TIME FROM REDUNDANT POWER SUPPLY, NO LESS THAN	8 h
DIMENSIONS (L X W X H)	290 x 135 x 92 mm
WEIGHT	1.68 kg
PROTECTION CLASS	IP67

### RANGEFINDER

MAX. DISTANCE MEASURED BY LRF	3500 m
LRF WAVELENGTH	1550 nm

## MAN SIZED TARGET (75 mm objective)

Detection	- 3650 m
Recognition	- 910 m
Identification	- 450 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability

## TSA-9

ARCHER-LPP TSA-9, objective 75 mm, mounted on a rifle



## THERMAL IMAGING SIGHT TSA-9

ARCHER-LPP TSA-9 is the best sight in its series. Extremely long distances and severe conditions won't be an obstacle to keeping accurate shooting anymore. Advanced functionality and new software of the sight will be excellent assistants in performing the most complex tasks.

Having kept the excellent technical specifications of its predecessors, ARCHER-LPP TSA-9 has received a wide range of significant advantages. Sight electronics is equipped with a set of sensors and communication tools that widen the functionality and operating capabilities and improve the usage of the device.

The sight is equipped with a highly sensitive passive receiver of a far infrared band (LWIR) with resolution and sensitivity within 20-30 mK. Several lens modifications (50 mm, 75 mm and 100 mm) allow for choosing a sight model that best meets the objective. All models have a manual focus for the comfortable and effective usage of the device.

A built-in colour high-resolution microdisplay and an eyepiece with diopter adjustment provide a high-quality image of aiming reticles and a minimal movement step during adjustment fire. Aiming reticles are implemented in automatic reverse functions for saving reticles' contrast and automatic scaling depending on the enlargement range. Reticule coordinates can be adjusted both in clicks and in centimetres. A ballistic calculator allows compensating changes in atmospheric conditions, the temperature of dust powder and windage. The device is equipped with sensors of ambient light and proximity, and angle of sight. ARCHER-LPP thermal imaging sight TSA-9 has a serial interface for programming and remote control, an option for downloading and editing target reticles, ballistics table for every type of programmed weapon.

A built-in recording module allows to take photos and shoot video in several modes. The data is read via a wired (USB) interface. The device has a sealed multi-purpose connector for power charging, video output and control.

The design comes in a shockproof, waterproof plastic housing with pumped inert gas resistant to corrosive environment. Conveniently arranged controls are protected from accidental use. Two quick detach battery cassettes and a rechargeable battery allow you to change power supply blindly.

### FEATURES

- > Built-in compass and accelerometer.
- > USB interface for programming 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.
- > Semi-automatically predicted impact point.
- > Windage calculation.
- > Automatic compensation for changing adjustment conditions.
- > Ballistic table development.

### DELIVERY SET

- > Thermal imaging sight ARCHER-LPP TSA-9.
- > 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, and Bag.





THERMAL IMAGING DEVICES

# TSA-9

ARCHER-LPP TSA-9, objective 75 mm, mounted on a rifle



## TECHNICAL CHARACTERISTICS

DETECTOR	
TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
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
DIOPTRER CORRECTION	-6 ÷ +2

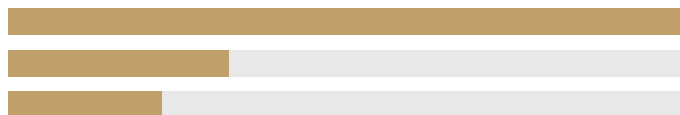
BALLISTIC COMPUTER	
MAX. MEASURABLE DISTANCE	2500 m
DRAG FUNCTIONS	G1, G7, multi BC or user-defined
CALCULATION TIME	200 msec

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	5 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 99 92 mm
WEIGHT	1.38 kg
PROTECTION CLASS	IP67

### MAN SIZED TARGET (75 mm objective)

- Detection – 3650 m
- Recognition – 910 m
- Identification – 450 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability

# TSA-10 TSA-11

ARCHER-LPP TSA-11, objective 50 mm, mounted on a rifle



## THERMAL IMAGING SIGHTS TSA-10, TSA-11

ARCHER-LPP TSA-11 is the newest sight specially designed for using small tactical arms. The peculiarity of the thermal sight is its small size and objective with a fixed focus that provides a sharp image from 25 m to infinity. However, the device has maintained all ARCHER-LPP sights' operational advantages, like flexible configuration mode, editable target reticles, and profiles for different types of arms and ammunition. The device has a mechanical selector switch, which allows not only to switch the device „by touch“ but immediately select one of the preset operating modes. The device can be equipped with a 40 mm objective with fixed focus or a 50 mm objective with a manual focusing mechanism.

The sight is equipped with a highly sensitive passive receiver of a far infrared band (LWIR) with a sensitivity of less than 30 mK.

A built-in colour high-resolution microdisplay and an eyepiece with diopter adjustment provide a high-quality image of aiming reticles and a minimal movement step during adjustment fire. Aiming reticles are implemented in automatic reverse functions for saving reticles' contrast and automatic scaling depending on the enlargement range.

ARCHER-LPP TSA-11 is equipped with proximity sensors and a serial interface for programming and remote control. A built-in recording module allows to take photos and shoot video in several modes. The device has a multipurpose jack for charging, video output and programming.

The design comes in a shockproof, waterproof plastic or aluminium housing with pumped inert gas resistant to corrosive environment. Conveniently arranged controls are protected from accidental use. Batteries are charged in a device with the help of a built-in recharger.

There is also a mounting for installing additional equipment and a hand strap for comfortable and secure holding of the device while using it as an observation instrument.

### FEATURES

- Option of downloading target reticles with automatic reverse and scaling.
- Ballistics table.
- Electronic level.
- Profiles for different arms and ammunition.
- Built-in photo- and video module.
- USB interface for programming and device control.
- 1.5x optical magnification.
- 2x, 3x, 4x, 6x digital zoom.
- Different colour schemes for image refinement.
- Operative adjustment of sensitive sensor parameters with the help of preset modes.
- A proximity sensor for switching a display off while removing user's face from the device.
- Manual and automatic calibration of the detector.

### DELIVERY SET

- Thermal imaging sight ARCHER-LPP TSA-10 / TSA-11
- AA-type rechargeable batteries – 4 pcs.
- Redundant power supply RBP-8.
- Charger 220V, Vehicle charger 12V.
- USB cable, Cable adapter, User's manual, Case, and Bag.



**THERMAL IMAGING DEVICES**

**TSA-10  
TSA-11**

ARCHER-LPP TSA-10, objective 50 mm, mounted on a rifle



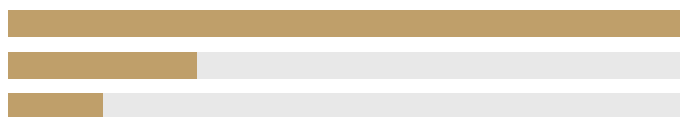
**TECHNICAL CHARACTERISTICS**

<b>DETECTOR</b>	
TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
OPERATING WAVELENGTH	7.5-13.5 µm
<b>OPTICS</b>	
OBJECTIVE	50 mm
OBJECTIVE F NUMBER	F/1.0
FIELD OF VIEW	12.5° x 10.0°
FOCUSING RANGE	25 m ÷ ∞
EYE RELIEF	50 mm
DIOPTRER CORRECTION	-6 ÷ +2
<b>BALLISTIC COMPUTER</b>	
MAX. MEASURABLE DISTANCE	1500 m
DRAG FUNCTIONS	G1, G7, multi BC or User-defined
CALCULATION TIME	200 msec

<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	7 sec
TEMPERATURE RANGE	-30°C ÷ +55°C
OPERATING TIME, NO LESS THAN	4 h
OPERATING TIME FROM REDUNDANT POWER SUPPLY, NO LESS THAN	8 h
DIMENSIONS (L X W X H)	245 x 96 x 78 mm
WEIGHT	0.96 kg
PROTECTION CLASS	IP67
<b>RANGEFINDER</b>	
MAX. DISTANCE MEASURED BY LRF	800 m
LRF WAVELENGTH	905 nm

**MAN SIZED TARGET**  
(50 mm objective)

- Detection - 2430 m
- Recognition - 600 m
- Identification - 300 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability

# TCN-11

ARCHER-LPP TCN-11, objective 75 mm, mounted on a rifle



## THERMAL IMAGING CLIP-ON TCN-11

The compact pre-lens thermal imaging clip-on ARCHER-LPP TCN-11 is intended for use with daylight optical sights. The frequency of a daylight sight is from 3x to 8x.

It is difficult to overestimate the ease of this device's usage paired with daytime optics: while a day sight is always on a rifle, the high-quality thermal imaging clip-on allows solving tasks even in extreme weather conditions while not disrupting the adjustment of the day sight.

The fixed focus of the objective relieves the necessity of image focusing.

The ARCHER-LPP TCN-11 clip-on can be operated remotely. The device is equipped with a quick detached mount on a Picatinny rail. Power is supplied via 4 AA-type batteries (lithium or rechargeable batteries).

### FEATURES

- › Electronic level and angle of sight sensor.
- › Built-in photo- and video module.
- › USB interface for programming and device control.
- › 1x optical zoom.
- › 2x, 3x, 4x digital zoom.
- › Different colour schemes for image refinement.
- › Operative adjustment of sensitive sensor parameters with the help of preset modes.
- › Ambient light sensor for automatic adjustment of display brightness.
- › Manual and automatic calibration of the detector.

### DELIVERY SET

- › Thermal imaging sight ARCHER-LPP TCN-11
- › AA-type rechargeable batteries – 4 pcs.
- › Redundant power supply RBP-8.
- › Charger 220V, Vehicle charger 12V.
- › USB cable, Cable adapter, User's manual, Case, and Bag.



THERMAL IMAGING DEVICES

# TCN-11

ARCHER-LPP TCN-11, objective 75 mm, mounted on a rifle



## TECHNICAL CHARACTERISTICS

DETECTOR	
TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
OPERATING WAVELENGTH	7.5-13.5 µm

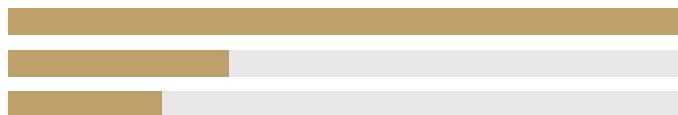
OPTICS	
OBJECTIVE	75 mm
OBJECTIVE F NUMBER	F/1.0
FIELD OF VIEW	8.3° x 6.4°
FOCUSING RANGE	25 m ÷ ∞
EYE RELIEF	50 mm
DIOPTRER CORRECTION	-6 ÷ +2

ELECTRONICS	
FRAME RATE	9/25 Hz (PAL) 8/30 Hz (NTSC)
VIDEO OUTPUT	PAL or NTSC, programmed
DISPLAY	AMOLED, 800 x 600
INTERFACE	USB

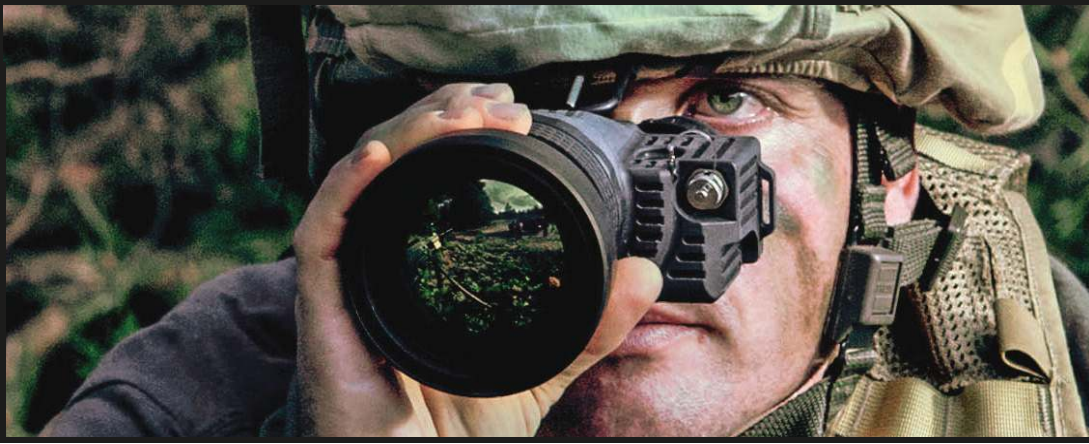
OPERATING PARAMETERS	
STARTING TIME	3 sec
TEMPERATURE RANGE	-30°C ÷ +55°C
OPERATING TIME, NO LESS THAN	5 h
OPERATING TIME FROM REDUNDANT POWER SUPPLY, NO LESS THAN	8 h
DIMENSIONS (L X W X H)	280 x 99 x 92 mm
WEIGHT	1.35 kg
PROTECTION CLASS	IP67

### MAN SIZED TARGET (75 mm objective)

- Detection – 3650 m
- Recognition – 910 m
- Identification – 450 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability



## THERMAL IMAGING BINOCULAR TGX-3

Thermal imaging binocular ARCHER-LPP TGX-3/75 is a modern compact optical device. The high-performance capabilities of the optical system, an extended set of functions and the ergonomic design of ARCHER-LPP TGX-3/75 make it an indispensable device for a wide range of applications.

Digital thermal device ARCHER-LPP TGX-3/75 is designed for monitoring and observing areas in limited visibility conditions: poor lighting, smoke, fog, and objects hidden by vegetation or merged with underlying terrain. The device is equipped with a highly sensitive passive receiver of a far infrared band (LWIR) with resolution and sensitivity within 20-30 mK. The binocular has two built-in colour high-resolution microdisplays and eyepieces with diopter adjustment and the ability to adjust the distance between the eyes.

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

An optical circuitry of ARCHER-LPP TGX-3/75 provides 3x optical magnification (using a detector with 640 x 512 resolution).

The device's display indicates operation modes, device status, and battery discharge. There are also modes of brightness and contrast control.

The device is equipped with proximity sensors that much reduce the risk of disclosure. ARCHER-LPP TGX-3/75 design comes in a shockproof, waterproof plastic housing with conveniently arranged controls. Power is supplied via 6 AA-type batteries (lithium or rechargeable batteries).

### FEATURES

- › USB interface for programming and device control.
- › 2x, 3x, 4x, 6x digital zoom.
- › Sensitivity settings of the detector.
- › Different colour schemes for image refinement.
- › Manual and automatic calibration of the detector.

### DELIVERY SET

- › Thermal imaging binocular ARCHER-LPP TGX-3/75
- › AA-type rechargeable batteries – 6 pcs.
- › Redundant power supply RBP-8.
- › Charger 220V, Vehicle charger 12V.
- › USB cable, Neck strap, User's manual, Case, and Bag.



THERMAL IMAGING DEVICES

# TGX-3

ARCHER-LPP TGX-3, objective 75 mm, handheld



## TECHNICAL CHARACTERISTICS

DETECTOR	
TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
OPERATING WAVELENGTH	7.5-13.5 µm

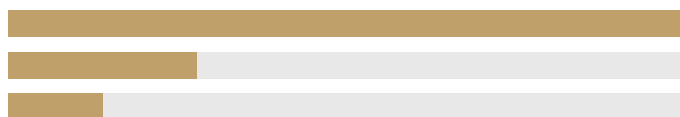
OPTICS	
OBJECTIVE	75 mm
OBJECTIVE F NUMBER	F/1.0
FIELD OF VIEW	8.3° x 6.4°
FOCUSING RANGE	5 m ÷ ∞
EYE RELIEF	50 mm
DIOPTRER CORRECTION	-6 ÷ +2

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	4 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)	220 x 132 x 86 mm
WEIGHT	1.3 kg
PROTECTION CLASS	IP67

### MAN SIZED TARGET (75 mm objective)

- Detection - 3650 m
- Recognition - 910 m
- Identification - 450 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability

# TGX-8

ARCHER-LPP TGX-8, objective 75 mm, stationary



## THERMAL IMAGING BINOCULAR TGX-8

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

The high-performance capabilities of the optical system, an extended set of functions and the ergonomic design of ARCHER-LPP 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 a far infrared band (LWIR) with resolution and sensitivity within 20-30 mK. The binocular has two built-in colour high-resolution microdisplays and eyepieces with diopter adjustment and the ability to adjust the distance between the eyes.

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

An optical circuitry of ARCHER-LPP TGX-8/75 provides 3x optical magnification (using a detector with 640 x 512 resolution).

The device's display indicates operation modes, device status, and battery discharge. There are also modes of brightness and contrast control.

The device is equipped with proximity sensors that much reduce the risk of disclosure.

ARCHER-LPP TGX-8/75 design comes in a shockproof, waterproof plastic housing with conveniently arranged

controls. Power is supplied via 6 AA-type batteries (lithium or rechargeable batteries).

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

### FEATURES

- USB interface for programming and device control.
- 2x, 3x, 4x, 6x digital zoom.
- Sensitivity settings of the detector.
- Different colour schemes for 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 ARCHER-LPP 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, and Bag.





THERMAL IMAGING DEVICES

# TGX-8

ARCHER-LPP TGX-8, objective 75 mm, stationary



## TECHNICAL CHARACTERISTICS

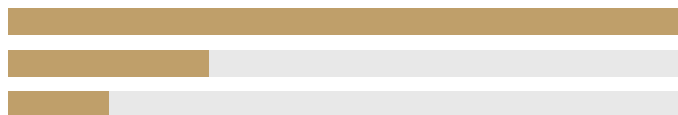
DETECTOR	
TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
OPERATING WAVELENGTH	7.5-13.5 µm
OPTICS	
OBJECTIVE	75 mm
OBJECTIVE F NUMBER	F/1.0
FIELD OF VIEW	8.3° x 6.4°
FOCUSING RANGE	5 m ± ∞
RANGEFINDER	
MAX. DISTANCE MEASURED BY LRF	3500 m
LRF WAVELENGTH	1550 nm

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	4 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)	220 x 132 x 86 mm
WEIGHT	1.3 kg
PROTECTION CLASS	IP67

### MAN SIZED TARGET (75 mm objective)

Detection	- 3650 m
Recognition	- 910 m
Identification	- 450 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability

# MSB-8

ARCHER-LPP MSB-8, objective 75 mm, stationary



## MULTISENSOR BINOCULAR MSB-8

Multisensor binocular ARCHER-LPP MSB-8 is a specialized three-channel system designed for surveillance, observation of areas, and target acquisition in limited visibility conditions day and night.

The device is designed for military and security operations for infantry, special forces, intelligence gathering, infrastructure, and border surveillance.

It includes a digital day channel and an uncooled thermal imager that provides crisp images simultaneously in the visible and long-wave IR spectrum. It makes the binocular indispensable for various applications and gives greater situational awareness for nighttime scenarios.

The ARCHER-LPP MSB-8 is also equipped with a compact laser rangefinder of 1550 nm range, ballistic calculator, GPS and magnetic compass, enabling accurate target geolocation.

A binocular has two built-in colour high-resolution microdisplays and eyepieces with diopter adjustment and the ability to adjust the distance between the eyes. Several set colour schemes allow choosing the necessary display option depending on the tasks performed.

The multisensor binocular ARCHER-LPP MSB-8 can be used as a standalone hand-held unit or as a system mounted on a tripod or a pan-and-tilt platform, for example, for surveillance in a given sector.

### FEATURES

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

### DELIVERY SET

- › Multisensor binocular ARCHER-LPP MSB-8
- › AA-type rechargeable batteries – 6 pcs.
- › Redundant power supply RBP-8.
- › Charger 220V, Vehicle charger 12V.
- › USB cable, Neck strap, User's manual, Case, and Bag.



THERMAL IMAGING DEVICES

# MSB-8

ARCHER-LPP MSB-8, objective 75 mm, stationary



## TECHNICAL CHARACTERISTICS

THERMAL CHANNEL	
DETECTOR	Uncooled VOx
RESOLUTION	640 x 512
PIXEL SIZE	17µ
WAVELENGTH	7.5-13.5 µm
OBJECTIVE	75 mm
F NUMBER	F/1.0
FIELD OF VIEW	8.3° x 6.4°
FOCUSING RANGE	5 m ± ∞

ELECTRONICS	
FRAME RATE	9/25 Hz (PAL) 8/30 Hz (NTSC)
VIDEO OUTPUT	PAL or NTSC / HDMI
DISPLAY	AMOLED, 800 x 600
INTERFACE	USB, RS422, BLE
VIDEO RECORDING	MJPEG 30Hz, 64 GB

RANGEFINDER	
MAX. DISTANCE	Up to 2500 m
WAVELENGTH	1550 nm, Eye safe, Class I
ACCURACY	Less than 2 m

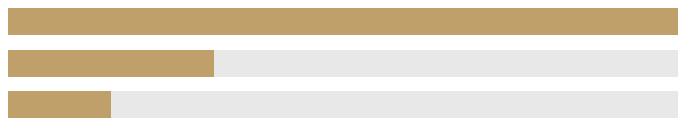
MAN SIZED TARGET (75 mm objective)	Detection	- 3650 m
	Recognition	- 910 m
	Identification	- 450 m

DAY CHANNEL	
DETECTOR	High sensitivity 1/2.8"
RESOLUTION	1980 x 1080 px
FOCAL LENGTH	5.6 – 122 mm
HORIZONTAL FOV	47.6° to 2.99°(full zoom)
FOCUS & ZOOM	Motorized

OPERATING PARAMETERS	
STARTING TIME	30 sec
TEMPERATURE RANGE	-30°C ± +55°C
OPERATING TIME, NO LESS THAN	4.5 h
OPERATING TIME FROM REDUNDANT POWER SUPPLY, NO LESS THAN	8 h
DIMENSIONS (L X W X H)	261 x 205 x 104 mm
WEIGHT	2.84 kg
PROTECTION CLASS	IP67

GPS & DMC	
GPS	Multi-band GNSS receiver. high precision
DMC	High precision digital magnetic compass

GPS and built-in compass data provide real-time integration with maps



# TMA-30M TMA-55M

ARCHER-LPP TMA-30M, objective 30 mm, handheld



## THERMAL IMAGING MONOCULARS TMA-30M, TMA-55M

Digital tactical thermal imaging device ARCHER-LPP TMA-30M/55M – new monoculars of TMA series. The device is equipped with a high-aperture lens with a manual focus and proximity sensors that much reduce the risk of disclosure.

The device is equipped with a highly sensitive passive receiver of a far infrared band (LWIR). ARCHER TMA-30M/55M has a built-in colour high-resolution microdisplay and an eyepiece with diopter adjustment.

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

An ARCHER-LPP TMA-30M/55M optical circuitry provides 2x optical magnification (using a detector with 640 x 512 resolution).

The device's display indicates operation modes, device status, and battery discharge. There are also modes of automatic and manual brightness and contrast control.

ARCHER-LPP TMA-30M/55M design comes in a shockproof, waterproof plastic housing with conveniently arranged controls. Power is supplied via 4 AA-type batteries (lithium or rechargeable batteries).

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

### FEATURES

- › USB interface for programming and device control.
- › 2x, 3x, 4x, 6x digital zoom.
- › Sensitivity settings of the detector.
- › Different colour schemes for image refinement.
- › Manual and automatic calibration of the detector.
- › Analog video output with the possibility of switching off.

### DELIVERY SET

- › Thermal imaging monocular ARCHER TMA-30M/55M.
- › Video/charge adapter.
- › AA-type rechargeable batteries – 6 pcs.
- › Hand strap, User's manual, Case, and Bag.



THERMAL IMAGING DEVICES

# TMA-30M TMA-55M

ARCHER-LPP TMA-55M, objective 55 mm, handheld



## TECHNICAL CHARACTERISTICS

DETECTOR	
TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17µ
OPERATING WAVELENGTH	7.5-13.5 µm

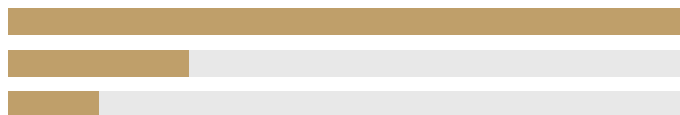
OPTICS	
OBJECTIVE	30 mm (TMA-30) 55 mm (TMA-55)
OBJECTIVE F NUMBER	F/1.0
FIELD OF VIEW	18° x 14° (TMA-30) 11.4° x 8.8° (TMA-55)
FOCUSING RANGE	2 m ÷ ∞ (TMA-30) 5 m ÷ ∞ (TMA-55)
EYE RELIEF	50 mm
DIOPTER CORRECTION	-6 ÷ +2

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	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)	145 x 74 x 51 mm (TMA-30) 192 x 99 x 71 mm (TMA-55)
WEIGHT	0.42 kg (TMA-30) 0,72 kg (TMA-55)
PROTECTION CLASS	IP67

### MAN SIZED TARGET (55 mm objective)

- Detection - 2430 m
- Recognition - 600 m
- Identification - 300 m



Under ideal conditions; 12 µm; Johnson's Criteria @ 50% probability

# TMQ-19

ARCHER-LPP TMA-19, objective 19 mm, helmet mounted



## THERMAL IMAGING MONOCULAR TMQ-19

ARCHER-LPP TMQ-19 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 ARCHER-LPP TMQ-19 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 ARCHER-LPP TMQ-19 provides 0.5x digital zoom (using a de-tector with 640 x 512 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 ARCHER-LPP TMQ-19 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.

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

### FEATURES

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

### DELIVERY SET

- › Thermal imaging monocular ARCHER-LPP TMQ-19/20.
- › Video/charge adapter.
- › 1 CR123 battery.
- › Hand strap, User's manual, Case, and Bag.



THERMAL IMAGING DEVICES

# TMQ-19

ARCHER-LPP TMA-19, objective 19 mm



## TECHNICAL CHARACTERISTICS

### DETECTOR

TECHNOLOGY	Uncooled VOx Microbolometer
RESOLUTION	640 x 512
PIXEL SIZE	17μ
OPERATING WAVELENGTH	7.5-13.5 μm

### OPTICS

OBJECTIVE	19 mm
OBJECTIVE F NUMBER	F/1.1
FIELD OF VIEW	32° x 26°
FOCUSING RANGE	10 m ÷ ∞
EYE RELIEF	50 mm
DIOPTRER 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

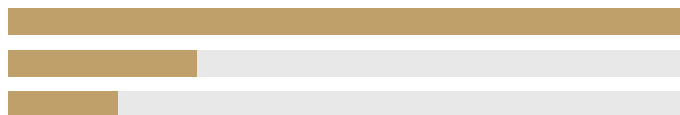
### OPERATING PARAMETERS

STARTING TIME	3 sec
TEMPERATURE RANGE	-30°C ÷ +55°C
OPERATING TIME, NO LESS THAN	2 h
OPERATING TIME FROM REDUNDANT POWER SUPPLY, NO LESS THAN	10 h
DIMENSIONS (L X W X H)	95 x 48 x 50 mm
WEIGHT	0.2 kg
PROTECTION CLASS	IP67

## MAN SIZED TARGET

(19 mm objective)

Detection	- 950 m
Recognition	- 235 m
Identification	- 125 m



Under ideal conditions; 12 μm; Johnson's Criteria @ 50% probability

