## **Technical Surveillance Countermeasures (TSCM) devices**

## 5 professional devices for Surveillance and Control

Devices combine compact design with excellent optical characteristics: high magnification, wide field of view and exceptional quality of image.

### **ANLAS** camera detector with laser light source

It is designed for search and visualization the place of portable systems of secret observation, camouflaged in the interior items, working or disconnected compact cameras. It operates with an average detection range of 25m and can be used in premises. Device allows detecting electro-optical surveillance systems through the window as well as toned glass, organic glass, and semitransparent mirror.

Basic operation principle is "cat's eye" effect (light-reflecting effect) lying in ability of optical objects to reflect probing radiation in opposite direction with angle close to its incidence angle. Semi-conducting laser IR diode (transmitting channel) serves as the source of probing radiation. The reflected signal is registered by sensitive video camera on the basis of interleave transfer sensor 1/3// (reception channel). The Device is developed on non-parallax optical scheme, i.e. with optical alignment of reception and transmitting channels.



### **Technical characteristics**

Type of receiver	1/2",CCD
Size of receiver	752x582 p
Focal distance	25 mm
Angle of the field of vision	8° x 6°
Focusing range	1 m∞



## **SPLAS** camera detector with laser light source

Electrooptical instrument SPLAS is designed for remote detection and visualization the place of covert electrooptical surveillance systems (ESS) including night vision devices (NVD) and sniper sights (SS) camouflaged in the various items. Device equipped with long-focus lenses (up to 1000m) and conducting counter-surveillance under conditions of both intensive light and at night.

The effect of light reflection consisting in ability of optical objects to reflect the probing radiation in the opposite direction at an angle, close to a corner of its falling is the basis of the device operation principle. Semiconductor laser IR the diode (transferring the channel) is a source of the probing radiation. Then the transferring channel forms a laser beam in the form of vertically located rectangular raster.



### **Technical characteristics**

Type of receiver	1/2",CCD
Size of receiver	752x582 p
Focal distance	75 mm
Angle of the field of vision	4.9° x 3.56°
Focusing range	2 m 1000m

## **KONV-614** night vision device (NVD)

The main competitive advantage of our NVD is the progressive black and white image. Compact device is designed to maintain high-quality surveillance, reconnaissance, securing facilities. This device will be useful to private security companies' employees, police, special units of the law enforcement agencies, securing services and other organizations.

#### **Technical characteristics**

Electro optical converter type	black-and-white 2+
Photocathode luminous sensitivity, no worse	550 mA/lm
Gain of brightness	25000
Resolution	57 l/mm
Focal lens	25 mm
FOV	30°
Zoom	1x
Minimum viewing distance	1 m
Maximum range of detection	200 m



# **KAIR** portable uncooled searching thermal imager

Infrared imager is intended for creation and visualization objects thermal images in long-focus infrared (IR) range with capability to store video files in the internal memory of the device. The device is effective during round-the-clock search and surveillance objects of intelligence and also under conditions of strong optical interference, such as smoke, fog.



#### **Technical characteristics**

Type of the receiver	Uncooled microbolometer
Conversion frequency of image, at least	25 Hz.
Format of the receiver	640x480 pix.
Minimum discernible temperature difference	0,06 ℃
Operating spectral range	8 – 14 mkm
Readiness time, up to	7 s
Focal length	60 mm
Viewing angle	10,4°x7,8°
Focusing range	1m∞
Detection range /recognition of man	1060/350 m

## **KAIR-SM** wearable thermal imaging camera

Portable thermal imaging camera is intended to observe objects or protected areas at any time of the day under bad weather conditions, as well as to tackle anti-terrorist and special tasks, conduct patrol works, search and rescue operations, including during natural disasters, while operating in moderate climate conditions both outdoors and indoors.



#### **Technical characteristics**

Radiation receiver type	aSi uncooled microbolometer
Number of sensitive detector elements (matrix)	384x288 pixels
Minimum discernible	0,05 ℃
temperature difference	
Operating spectral range	8 – 14 mkm
Readiness time, up to	5 s
Viewing angle	29° x 22°
Focusing range	0.5 m ∞
Maximum detection range of human / car, at least	220/680 m
Maximum recognition range of human/ car, at least	70/220 m