

# TVS 11

## THERMAL MONOCULAR



Display

The TVS 11 is designed for tripod mounting as well as handheld use and utilizes an advanced high resolution thermal sensor. This thermal imaging monocular is well suited to a variety of tactical, law enforcement, search and rescue, and industrial applications. The device utilizes passive infrared sensing technology allowing users to detect extremely small differences in the temperature of objects, people and other heat sources within the field of view.

Unlike traditional night vision devices, the TVS 11 can be operated 24 hours a day, in daytime and at night, even in the total darkness of an enclosed space. The device can also see through smoke, fog and other obscurants. The unit features "black hot" and "white hot" image polarity and can also be connected to external display devices allowing other parties to view the observed image in real time.

| Sensor                                 | TVS 11                            |
|--|-----------------------------------|
| Generation                             | Pico 640 Gen 2                    |
| Sensor material                        | Amorphous silicon                 |
| Resolution (pixels)                    | 640x480                           |
| Detector pitch (µ)                     | 17                                |
| Operating wavelength (µ)               | 8 - 14                            |
| Sensitivity (mK @F1.0)                 | <55                               |
| Frame rate (Hz)                        | 50                                |
| Video interface                        | Composite Video, PAL              |
| Video output bandwidth (MHz)           | 5                                 |
| Memory (GB)                            | 32                                |
| DRI range (m)*                         |                                   |
| Human                                  | 1,200/300/150                     |
| Vehicle                                | 3,150/800/400                     |
| Optics                                 |                                   |
| Objective focal length (mm)            | 35                                |
| Field of view (°)                      | 17.6x13.3                         |
| Eye relief (mm)                        | 25                                |
| Dioptric correction                    | -6 to +2                          |
| Zoom                                   | 1x, 2x, 4x                        |
| Mechanics, Electronics & Environmental |                                   |
| External power adaptor                 | (optional) 12V input              |
| Dimensions (mm)                        | 165x105x65                        |
| Weight without batteries (g)           | 650                               |
| Battery type                           | 4x AA                             |
| Battery life, non-rechargeable (hours) | 5                                 |
| Battery life, rechargeable (hours)     | 3.5                               |
| Maximum power consumption (W)          | 2.5                               |
| Operating temperature (°C)             | -30 to +55                        |
| Storage temperature (°C)               | -30 to +55                        |
| Operating humidity permissible (%)     | 95                                |
| Shockproof                             | 5 drops on sand from height of 1m |
| Waterproofing                          | MIL-STD-810G                      |
| Country of origin                      |                                   |
| Device                                 | Canada                            |
| Detector                               | ULIS, France                      |
| Signal processing unit                 | Lithuania                         |

\*Maximum Detection/Recognition/Identification to target