MOSKITO

Purpose-built, fully integrated threat location unit
Smaller size and lighter weight for maximum agility

All-in-one instrument for observing and measuring
Fewer mission essential pieces of kit to carry

Same user interface in day and night operations
Higher user confidence and reduced training effort

Runs 24 hrs on two commercial CR123A batteries
Improved sustainability and reduced logistic burden

Proven technology and Swiss quality
Low risk investment and high reliability
A radically new design from Vectronix offers security forces a universal optronic device to support them through the full spectrum of a 24/7 deployment.

MOSKITO includes all the essential day/night viewing, measuring and geo-location functions in a most compact and user-friendly package. Like the highly successful VECTOR Rangefinder Binoculars, MOSKITO measures range, azimuth and vertical angle. In addition, it incorporates the latest image intensifier technology for night time viewing.

**MOSKITO measures the polar vector from the observer’s position to the target object:**
- $r$: range (slope/slant distance)
- $a$: azimuth (bearing, angle between north and object)
- $v$: vertical angle (inclination, elevation)

**MOSKITO also displays:**
- $d$: horizontal distance
- $h$: height difference

**MOSKITO also computes and displays relative values between two remote objects such as:**
- $\Delta r$: slope distance from A to B
Detect, recognize, identify and locate

Rapidly varying light conditions, especially in the urban environment, demand an optical day viewing channel plus a quickly activated night channel. MOSKITO’s night channel uses an autogated image intensifier tube which dynamically adjusts itself to different levels of brightness.

Detection, Recognition, Identification

Day: NATO Target (2.3 x 2.3 m, reflectivity 10 %), observer visibility 10 km
Night: 10 mlux, quarter moon

Observation by day
High resolution glass optics with 5x magnification for clear recognition and identification of threats.

Observation at night
The night operation mode is immediately activated whenever required. Measurements can be taken just like by day.
MOSKITO: the fastest all-in-one for observation and targeting

Two options exist for precise geo-location of threats: first a built-in C/A code GPS receiver, second a connection to an external device such as the Rockwell Collins PLGR, DAGR, or several models from Garmin.

Error-free data transmission to command post, PDA and other peripheral devices is established via cable or wireless technology.

In setting mode the graphic matrix display presents the user with parameter options.

A swivel lever allows the operator to easily switch between day, night and setting mode (patent pending).

A pair of commercial 3 V lithium batteries is sufficient for more than 2000 measurements plus 24 hours of observation in night vision mode.

### Technical Data

#### Day viewing
- Magnification: 5x
- Field of view: 6° / 108 mil
- Glass reticle: with mil graduation

#### Night viewing
- Image intensifier tube: Photonis XR-5
- Magnification: 3x
- Field of view: 10.5° / 186 mil

#### Rangefinding
- Laser diode: 1550 nm
- Eye safety: class 1 per IEC 60825-1
- Range capability: 5 m to 10 km
- Specified performance: 4 km to standard NATO target
- Accuracy, 1σ: ± 5 m

#### Angle measurement
- Orientation accuracy, 1σ: ± 10 mil
- Accuracy of vertical angles, 1σ: ± 3 mil

#### Power supply
- 2 lithium batteries 3 V, type CR123A
- Autonomy: 24 hours night vision operation and >2000 measurements

#### Physical
- Dimensions (l x w x h): 185 x 130 x 80 mm
- Weight: < 1.2 kg

MOSKITO is subject to international export regulations and requires an export permit granted by the Swiss Secretariat for Economic Affairs (SECO).