MOSKITO

Compact Day & Night Observation & Location Unit

Features	Benefits
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

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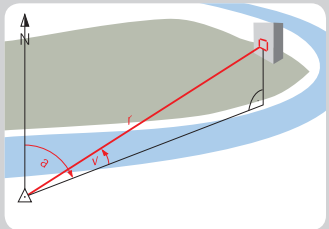
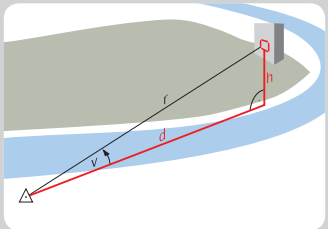
Around the clock security

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.

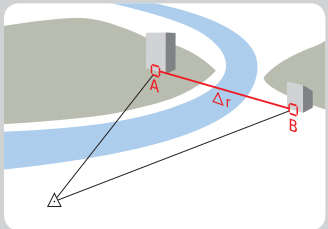
MOSKITO includes all the essential day/night viewing, measuring and geo-location functions in a most compact and user-friendly package. Like the highly successful VECTOR Rangefinder Binoculars, MOSKITO measures range, azimuth and vertical angle. In addition, it incorporates the latest image intensifier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



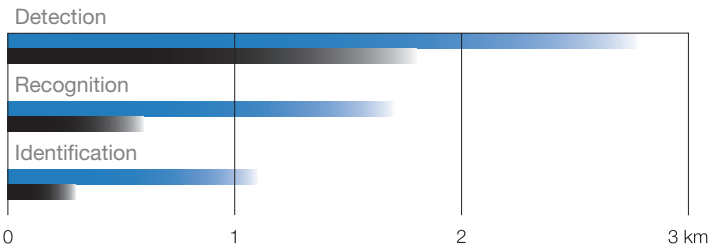
MOSKITO also displays:
d horizontal distance
h height difference



MOSKITO also computes and displays relative values between two remote objects such as:
Δr slope distance from A to B

Typical applications
Reconnaissance
Law enforcement
Site protection
Fire control
Close air support
Search and rescue
Border surveillance

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.



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.

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

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

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

LASER CLASS 1
Eye-safe
in accordance with
IEC 60825-1 Ed 1.2 (2001-08)

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

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