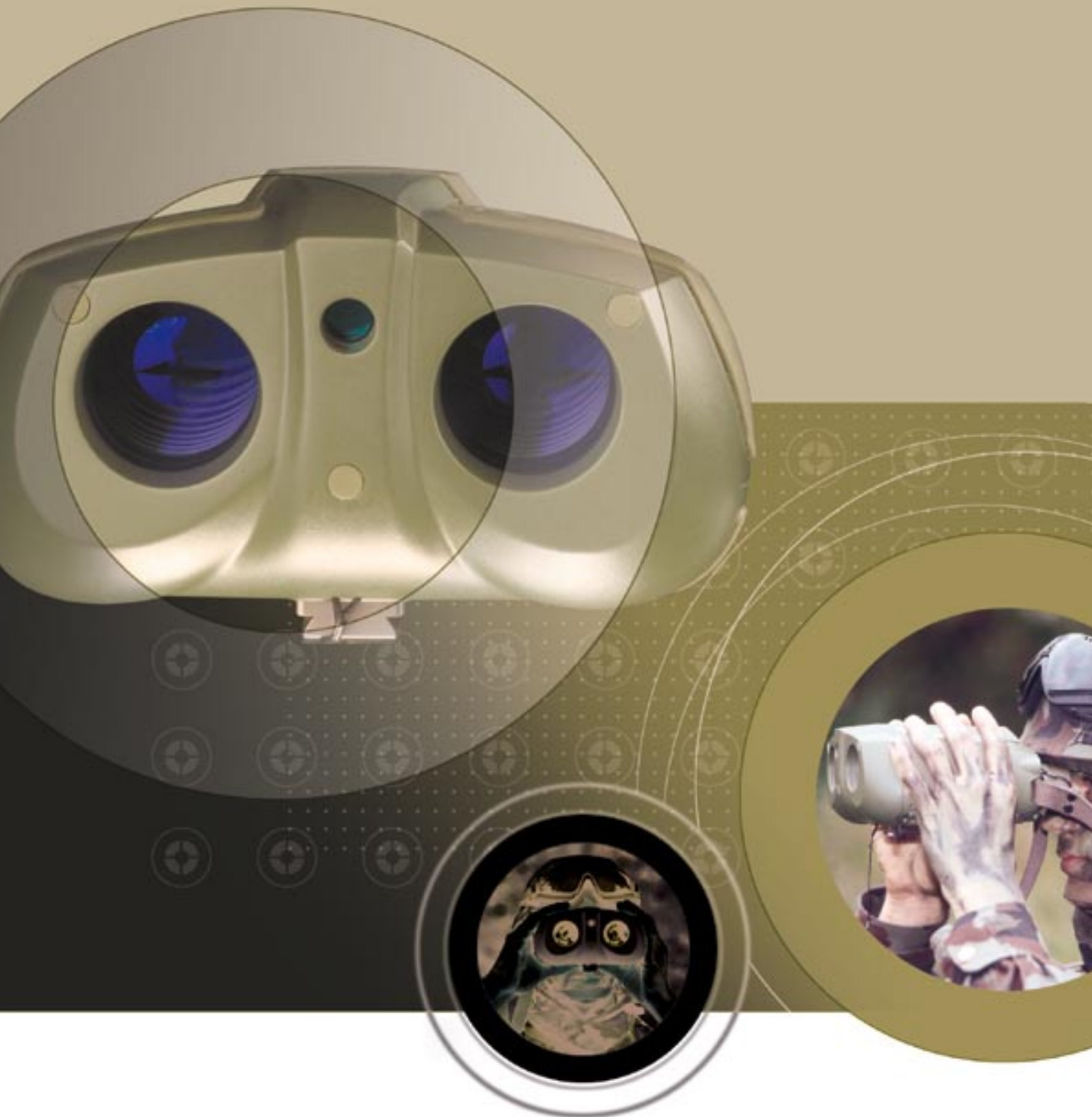


The eyes of digital battlefield



Rangefinder Binoculars
with Electronic Compass

M E T R I X

Fotona[•]

METRIX is a common name for a family of robust, light weight, high-performance binocular instruments for observation and terrain assessment in which stereoscopic view through excellent optics is supplemented with the capability of instantly measuring distances and topographic angles to objects in view. The design is based on state of the art Er:glass laser technology mastered by Fotona and on 40 years of continuous innovative development and production of laser based survey instruments.

Prompt and continuous situational awareness of a well-equipped soldier or a small army unit is becoming a condition of survival on the 21st century battlefield. Position determination, target location and other field measurements are but a few activities that become simple with the aid of the versatile members of METRIX family of laser binoculars. In addition, digital data can be transferred from METRIX to other equipment. When connected into a tactical communication network, **METRIX supports the concept of digital battlefield by bringing digitisation down to individual soldiers.**

METRIX is equipped with a powerful yet eye safe Er:glass laser which offers a number of advantages over semiconductor lasers, frequently used in laser binoculars.

- It has an inherently longer ranging capability, based on a simple time-of-flight measurement;
- METRIX assures more reliable and accurate measurements of small targets on short ranges and under poor visibility;
- METRIX determines the range to the target at distances of up to 20 km (METRIXPlus) with a single, strong pulse, minimizing the possibility of detection by enemy laser warning systems;
- Shorter time of measurement and narrower laser beam means more reliable measurements of moving targets;

Applications

METRIX is the best choice when quick determination of target coordinates and their preparation for further processing is needed, especially on longer ranges or/and under adverse weather conditions. Infantry, surveillance units, artillery forward observers, marines, special forces, peace keeping units and border control units have been identified as users of METRIX.

Interoperability

METRIX is designed to operate either as a stand-alone instrument, connected to PLGR+96 GPS receiver or to a tactical data terminal. General purpose RS 232 or RS 485 data link is provided for connection to C4I equipment.



Technical data

- Power**
- NiMH power pack, for 1000 measurements within Mil-STD specified temperature range. Battery charger operating on 180 – 240 V_{AC} as well as on 12 – 24 V_{DC} is provided with this option;
 - 6 x 1,5 V AA type commercial batteries, a non-expensive and widely available option;
 - Connection to an external power supply (car battery) – when all other solutions fail;

Eye safety	Class I, according to IEC 825-1/2001
Laser	Er:glass
Wavelength	1,543 μm
Range	50 m – 6 km (Metrix VI, Metrix VI C)* 50 m – 10 km (Metrix, Metrix C)* 50 m – 20 km (MetrixPlus, MetrixPlus C)*

*Note: C in the name of Metrix family member denotes built-in compass

Repetition rate	10 shots / minute
Accuracy	± 3 m
Optics	7 x 39, binocular
Dioptry adjustment	± 4 dpt
Eye distance	adjustable between 59 and 72 mm
Data display	2 x 6 digit LED in the eyepiece
Number of targets	3 (2+1)
Compass	Azimuth range 360° Elevation range ± 30° Azimuth accuracy ±0.5° rms Elevation accuracy ±0.2° rms

Weight	1.95 kg
Dimensions	210 x 190 x 101 mm (including eyepieces)
Accessories	<ul style="list-style-type: none"> • Cable to the external supply • Cable to GPS receiver • External trigger • Battery charger • Tripod • Tripod adapter