

Artillery Electronic Goniometer

Visual observation is the basic and most numerous form of artillery scouting from the land, which employs artillery units, artillery reconnaissance units and forward observers from infantry or mechanized units for collecting scout data on the enemy and the land necessary for securing the combat operations of artillery units, their development for the battle, planning and execution of their fire mission tasks.

AEG consists of 5 basic parts:

1. Sensor Head, FOU-SH,
2. Goniometer, FOU-G,
3. Power supply,
4. Tripod,
5. Tablet PC.

Basic technical data:

Sensor head (SH):

Optical sight

- field of view: 7°
- magnification: 7x
- diopter adjustment: ±5

Laser rangefinder:

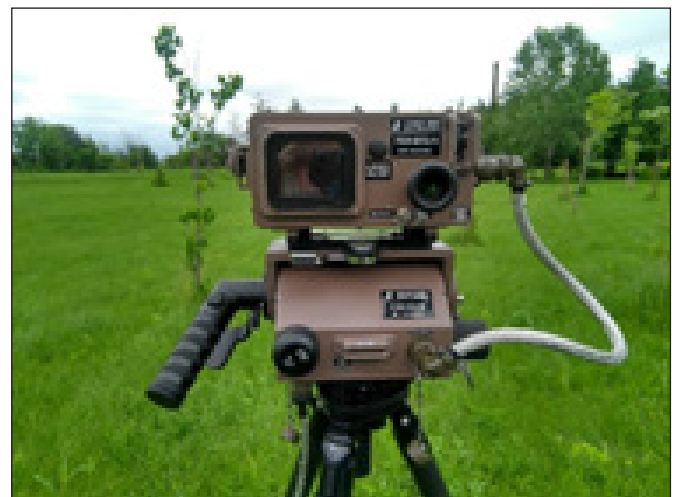
- laser wavelength: 1064 nm
- laser energy: 15 mJ
- laser beam divergence: 1.3 mrad
- distance measuring range: 180-20000 m
- distance measuring accuracy: ±5 m
- measured distance display: for 2 targets
- measuring distance frequency: max 6 measures/min
- * target size of 2,3 m x 2,3 m with 30% reflectivity at a visibility of 20 km

Digital magnetic compass:

- north accuracy in horizontal position (orientation 1) 0,45° (8 mils)
- pitch tilt range ±85°
- pitch accuracy:
 - measuring range <85° 0,3°
 - measuring range <15° 0,1°
- roll tilt range ±85°
- roll accuracy:
 - measuring range <85° 0,3°
 - measuring range <15° 0,1°

GPS device:

- position accuracy in horizontal plane (CEP) 2 m*
- position accuracy in vertical plane 4 m*
- * GPS accuracy is without differential, WAAS or EGNOS mode.



Thermal camera

- detector type: uncooled
- spectral range: LWIR 7.5-13.5um
- resolution: 640x512 pixel
- field of view: 6,2°x5°
- digital zoom: 8x, 16x, 32x, 64x
- lens: 100 mm
- Display:
 - type digital TFT LCD
 - display size 3,5"
 - resolution 480x272 pixel

Goniometer (G):

- range of measuring angles in horizontal plane: 0-6400 mils
- accuracy of measuring angles in horizontal plane: 1 mils
- range of measuring angles in vertical plane: ± 500 mils
- accuracy of measuring angles in horizontal plane: 1 mils
- bubble lever sensitivity: 2'2 mm
- input power: 20-36 V DC
- mass: 7 kg
- dimensions: 370x280x190 mm

Tripod:

- plate height:
 - with fully extended and spaced legs 1630 mm
 - with drawn in and spaced legs 520 mm
- mass 2,4 kg

FOU (integrated):

- operating temperature: -20°C to +55 °C
- power supply: Li-ion 25,2 V 6,8 Ah
- power input: (external): 22-29 V DC
- interface: RS 232
- power consumption: 0,5 A, max. 3 A (impulse)
- mass (FOU-SH, FOU-G, FOU- Power supply, tripod):21 kg



Tablet PC:

- PC type Algiz 10X Capacitive
- processor Intel® quad-core N2930 1.83 GHz Processor with 2.16 GHz boost.
- RAM 4 GB DDR3
- data storage 128 GB SSD
- operating system Windows 10 enterprise
- display 10,1", 1920x1200 pixel
- keyboard touchscreen
- battery power supply 7.4V/5,3 Ah