BOJHOTEXHUYKU UHCTUTYT MILITARY TECHNICAL INSTITUTE

МИНИСТАРСТВО ОДБРАНЕ РЕПУБЛИКЕ СРБИЈЕ REPUBLIC OF SERBIA MINISTRY OF DEFENCE



Operators target indicator for portable air defense systems ŠILO (TRACER)





The system for operators target indication for portable air defense systems ŠILO – TRACER system is a reconnaissance device intended for surveillance and guidance of light portable rocket systems for air defense actions in order to destroy targets in air space during day and night. The system collects and processes digital data on the target, obtained by the modernized radar Giraffe, as well as by other radars according to the protocol of radar data exchange (ASTERIX).

The system consists of three opto-electronic (OE) blocks possessing the thermal vision camera, digital compass, inclinometer, global navigation satellite signals receiver (GNSS) and OLED screen, as well as telecommunication subsystem ("Thales" radio device) and tactical computers. OE block with a carrier is mounted on a portable air defense rocket system 9K38 SILO. The system is operated by a commander and three shooters.

The commander conducts all the necessary computations, prepares data for targeting and guidance to the three shooters with the azimuth of the assigned target. On a tactical computer the commander has a symbolic overview of positions and data on all three shooters obtained via radio device, as well as data on targets and trajectories of all three targets. The commander can assign the same or different target to all the shooters. On OLED screen the shooter has a continual overview of camera image, as well as of the actual azimuth. After receiving data on the target, the OLED screen automatically displays an arrow for directing the rocket system to the assigned azimuth.

TECHNICAL CHARACTERISTICS:

Target detection range
Target data refreshing
Operational temperature
TMV camera resolution
Horizontal FOV of TMV camera
OE block weight
Operational autonomy
Ocular OLED screen resolution

Maximum crew members distance

5500 m < 1 s -20°C up to +50°C

640×512 pixels

10.2°

2.3 kg (with a carrier 4 kg)

>10 hours 800 x 600 pixels







2500 m