BOJHOTEXHUYKU UHCTUTYT MILITARY TECHNICAL INSTITUTE

МИНИСТАРСТВО ОДБРАНЕ РЕПУБЛИКЕ СРБИЈЕ REPUBLIC OF SERBIA MINISTRY OF DEFENCE



Battery command vehicle for artillery rocket units





Command vehicle of a battery commander for artillery rocket units for air defense actions on BOV OT transporter platform is intended for commanding the battery of artillery rocket units for air defense actions, no matter to the battery configuration, i.e. battery weapons type. The command vehicle is equipped with surveillnce-acquisition radar *RADA RPS-92 (nMHR)*. The radar *RPS-92* is upgraded *Full AESA (Active Electronically Scanned Array)*, software-defined, pulse-doppler radar (4D radar) platform, enabling detection of targets of wide spectrum of radar cross section and tracking the targets in hemisphere geometry. Detection ranges are up to 50 km. The surveillance-acquisition function of the radar in motion is also enabled.

The radar may also operate in C-RAM regime of locating the mortar weapon and artillery weapons. It possesses the active system of electronic control of radiation pattern, based on active antenna array in *X* frequency band. The radar is completely realized in semi-conducting technology, without rotation parts and it ensures full azimuth coverage by using four radars. One radar panel covers an angle of 90° per azimuth. In elevation, the angle and the maximum instrumental detection range depend on the selected operation mode. The software-defined platform of the radar enables for the same radar set to have more operational modes, with a limitation that it is possible to simultaneously conduct engagement of only one operational mode.

Together with the radar, the vehicle has telecommunication information subsystem integrated in it, made of three radio devices (2 x UHF and 1 x HF), energetic subsystem and computer-network subsystem.

TECHNICAL CHARACTERISTICS:

Antenna type Radar type

Instrumental range Maximum radial velocity

Spatial coverage Frequency band

Beam width

System weight

Reliability

Operational temperature Storage temperature

AESA (Active Electronically Scanned Array)

Pulse-doppler, 4D

50 km

2.000 m/s

Four panels = entire hemisphere

X-band

Elevation: 4º, Azimuth: 15º

One panel: 42 kg, Entire system: 215 kg

Over 6.400h MTBF -40° C up to +55° C -51° C up to +71° C





