



FLASH

Remotely controlled weapon station 14.5/30 mm



RCWS armed with 14,5 mm HMG and automatic grenade launcher 30 mm represents a modern weapon system intended for integration with light multi-role armored vehicles. It is intended for shooting on targets at effective range up to 2000 m. It can be used electrically and manually.

Remote controlled weapon station comprises:

- Combat station placed on a vehicle
- Control-command block with FCS and the electronics for electromotor drive placed inside the vehicle.

Combat station comprises:

- Armoured mount movable only in azimuth (electromotive drive) and cradle with armament movable only in elevation (electromotive drive)
- Optoelectronic block connected to the machine gun cradle and ammunition box with the capacity of 150 rounds placed on the right side of the armoured hull.

Optoelectronic block is comprised of:

- laser range finder
- day sight channel for opservation and aiming
- night channel for observation and aiming-thermal camera

Control command block is located inside the vehicle and it comprises:

- command block with controls for camera selection and control sticks with joystick for moving the weapon station in elevation and azimuth.
- Integrated RCWS dramatically increases total vehicl firepower, situation awareness and crew survivability. Observation and engagement of targets can be done in daylight and night conditions at long ranges, due to high resolution CMOS camera, thermal imaging camera and laser rangefinder. Targets can be engaged with fast and accurate machine gun fire due to advanced integrated FCS featuring ballistic computer with automatic reticule generation.

TECHNICAL DATA FOR RCW:

Type: **Remotely controlled weapon station with FCS**

- RCWS drive in traverse and elevation electrical
- Azimuth field of action $n \times 360^\circ$
- Elevation field of action -10° to $+65^\circ$

TECHNICAL DATA FOR ARMAMENT:

- Type HMG KPVT/ AGL
- Caliber 14,5 x 114/30 mm
- Operation mode gas operated
- Maximum range of firing:
 - Against aerial targets $\sim 2,000$ m
 - Against ground targets $\sim 2,000/1000$ m
- Type of feeding belt fed
- Number of rounds per belt 150/30 pcs
- Rate of fire 600/350 rounds/min
- Armament weight 49/29 kg
- Muzzle velocity 1000/185 m/s

RCWS FIRE CONTROL SYSTEM:

Weapon control, sighting and firing remote via joystick, and computer with fire control system software

System components:

- Sighting devices
 - Day channel High resolution CMOS camera
 - Night channel Thermal imaging camera
- Laser channel Laser rangefinder
- Computer unit Ruggedized tablet PC
- Control unit
- Power supply unit
- Stabilization unit

SIGHTING DEVICES:

Day Sight (CMOS camera) basic technical data:

- Image sensor 1/2.8" CMOS
- Optical zoom 36x
- Angle of view (H) 63.7° (wide) to 2.3° (tele)

Night Sight (Thermal imaging camera) basic technical data:

- Image sensor 640x512 VOx Microbolometer
- Spectral band 7.5 - 13.5 μm
- FOV $10.4^\circ \times 8.3^\circ$

Laser Range finder basic technical data:

- Eye safe wavelength 1540 nm
- Range finder range 80 - 8000 m
- Absolute measuring error ± 5 m

FIRE CONTROL SOFTWARE:

Provides:

- video processing,
- automatic reticule generation and overlay,
- ballistic calculation for up to 4 different weapon systems,
- laser range selection,
- manual range input,
- sighting procedure recording,
- gun zeroing procedure,
- mean point of impact correction,
- lead angle calculation.

SERVO DRIVE:

Type: electric, consists of:

azimuth and elevation electric motors & mechanisms
control electronics
drive electronics
azimuth and elevation position sensors
slip ring
cabling set
joystick

- Azimuth angular velocity: up to $50^\circ/\text{s}$,
- Elevation angular velocity: up to $40^\circ/\text{s}$,
- Azimuth range: $n \times 360^\circ$
- Elevation range: -10° to $+65^\circ$
- Two - axis stabilization system

SIZE AND WEIGHT CHARACTERISTICS:

- L x W x H (mm): 2200 x 1530 x 1100
- Total weight (without ammunition): 750 kg

