

A-35/AG-35 Towed Anti-Aircraft 35mm Gun

The AG-35 and A-35 Towed Anti-Aircraft 35mm Guns are fire means designed to operate in an AA battery. They are intended to fight air targets as aircrafts (wing and rotary), cruise missiles and UAVs flying at low and very low altitudes, as well as light-armored ground and sea targets.

The guns have common design based on the 35mm automatic cannon (HSW), and differ in solution of aiming subsystem and fire control.

The **A-35** gun is to be connected to the tracking head vehicle and to work out the controls provided by vehicle's fire control system. The integrated aiming sight can be used to fight the ground and sea surface targets.

The AG-35 includes an additional integrated optoelectronic tracking head, a ballistic computer and a videotracker to set a fully operational aiming channel, capable of autonomous intercepting the threat and combat engagement.



Advantages:

- caliber 35mm, being an optimum resultant of many diverge requirements
- flexibility of solution allowing for operation in various configurations and modes
- high fire rate
- capability of precise striking
- high dynamics of drive subsystems
- capability of immediate switching over two types of ammunition

The common components of the **AG-35** and **A-35 guns**, besides of the 35mm HSW-produced automatic cannon which has a replaceable barrel, are a hydraulic gun control subsystem, a hydraulically deployed chassis, subsystem of drives, an automatic orientation and positioning subsystem, a communication and data exchange subsystem and an automated subsystem for programmable ammunition including the muzzle velocity measurement.

The subsystem of control of the automatic gun has dual-sided ammunition feeding from two magazines placed on both opposite sides of the automate cannon. Two types of ammunition for example the FAPDS-T and ABM, can be switched over.

The subsystem of drives is built with use of electronically steered brushless servomotors to get both high dynamics and precision of movement. The navigation subsystem (intertial and GPS) enables immediate localization of the gun at the fire position and accurate and continuous measurement of the azimuth, pitch and roll angle.

Communication and data transmission system provide co-operation with the superordinate command system, co-operation with the WG-35 Fire Control Vehicle, wire communication (voice and data) as well as remote control from a portable terminal. The functions are accomplished by digital phone and wideband radio.

Characteristics	
Effective firing	At maneouvering targets of 500 m/s speed (in automatic mode)
Maximum distance to targets (range):	
- conventional targets	6000 m
- "soft" targets (UAVs)	3000 m (with ABM)
– ground and sea surface targets	4000/6000 m (depending on ammo type)
Altitude of targets to be fighted	0 m to 3500 m (depending on ammo type)
Firing angle range:	
– in azimuth plane	n x 360°
– in vertical plane	
Rate of fire	550 rounds/min
Accuracy (dispersion)	1 mrad
Capacity of magazines	2 x 100 pcs
Power supply	3,5 kW/4,3 kVA and 4 accu battery

The ZGS-158 integrated tracking head consists of a 3rd generation termovision camera, (3–5 $\mu m)$, tv daylight camera , eye-safe laser rangefinder and IKZ-02 short range IFF interrogator.

Due to use of the optoelectronic head, the AG-35 gun can operate in multiple modes resulting from combinations of various possibilities od localizing the target: with use of the own tracking head , the WG-35 tracking head, the surveillance post and the operator of remote portable terminal.





