



107 mm, M16

Towed rocket launcher



Towed rocket launcher system 107 mm M16 is a multiple launch rocket system used by land artillery to deliver powerful, sudden and rapid fire strikes against high-valued and big area targets both on land and water.

The multiple rocket launcher system (MLRS) 107 mm is designed to carry out the following tasks:

- Neutralization and destruction of enemy troops and sheltered or unsheltered weapons,
- Neutralization and destruction of enemy units in the assembly areas,
- Neutralization and suppression of enemy convoys,
- Neutralization and destruction of enemy artillery and mortar units on firing positions,
- Neutralization of air and amphibious assaults,
- Neutralization and destruction of enemy command posts and communication centers within range.

Technical characteristics:

- Barrel caliber 107mm
- Number of tubes 32
- Bore smooth
- Field of action in traverse $\pm 20^\circ$
- Field of action in elevation 0° to 48°
- Laying in traverse and elevations manually and semi-automatic
- Lanyard (cord) length 25 m
- Crew 6 servicemen and squad commander
- Operating temperature range -30°C to $+50^\circ\text{C}$

Fire modes:

- Single fire from one tube 3 to 5 rounds/min
- Ripple fire rate 0.3 s to 1.5 s

Reaction times:

- Transition from travelling to combat position with loading 7 min
- Launcher loading 3 min
- Transition from combat to travelling position 2 min

Dimensions and weight:

- Tube length 912 mm
- Launcher length
 - combat position 3750 mm
 - travelling position 4150 mm
- Launcher width
 - combat position 3500 mm
 - travelling position 2260 mm
- Launcher height
 - elevation 0° 1590 mm
 - elevation 48° 1900 mm
- Clearance in travelling position 268 mm
- Wheel track 2035 mm
- Wheel dimensions 225/75R 16 C

Launcher weight in combat position:

- Unloaded 1285 kg
- Loaded 1890 kg

Launcher weight in travelling position with spare parts, tools and accessories (SPTA) kit:

- Unloaded launcher 1345 kg
- Loaded launcher 1985 kg
- Weapon SPTA kit weight ~ 60 kg
- Battery SPTA kit weight ~ 40 kg
- Force on the trails (horizontal position) 100 daN
- Force on the towing hook 80 daN
- Height of the hook on the vehicle 800 mm

Speed of the loaded launcher:

- on first-class roads up to 60 km/h
- on poor quality roads up to 30 km/h
- off road up to 10 km/h

TOWED ROCKET LAUNCHER 107 mm M16 is used for launching:

Rockets 107 mm M15:

- Maximum range 8600 m
- Warhead high explosive
- Fuze UTI M84
- Propellant charge double-base(nitroglycerine) rocket fuel
- Electric primer EK M15
- Rocket length with fuze 827 mm
- Rocket weight 18.6 kg
- Warhead explosive weight 1.250 kg

Advantages MLRS 107 mm M16:

Semi-automatic laying in traverse and elevation is enabled by automatic mechanism and an autonomous power source incorporated in MLRS and allowing for the traverse and elevation angles of the launcher to be set by joystick with an accuracy of up to 1 mil.

An electronic trigger, specially designed for MLRS 107 mm, enables:

- selection of firing mode (ripple or single mode),
- selection of rockets to be fired in both modes, up to 32 rockets,
- selection of ripple firing rate (time interval between two shots) and
- increased safety during transportation of loaded launcher.

