

# SPEAR

120mm autonomous soft recoil mortar system for light-wheeled platforms; unprecedented tactical mobility, effectivity and accuracy



Elbit Systems' SPEAR is a fully autonomous, vehicle-mounted 120mm soft recoil mortar system for high-mobility platforms. SPEAR delivers effective fire support by combining the flexibility and effectiveness of accurate mortar firepower with exceptional tactical mobility. The mortar is a derivative of the CARDOM battle-proven mortar system - more than 1,000 systems extensively used by the US Army, NATO, Israeli Defense Forces (IDF) and others.

**Elbit Systems™**

Land

# SPEAR

120mm autonomous soft recoil mortar system for light-wheeled platforms; unprecedented tactical mobility, effectivity and accuracy

**Improved area coverage and survivability** – equipped with a recoil reduction system that reduces the mortar's firing loads from 30+ tons to as low as 12-15 tons, the "soft recoil" allows the SPEAR to be mounted on a variety of high-mobility light tactical vehicles such as HMMWVs, jeeps and other high-mobility rapid deployment wheeled platforms as well as bigger wheeled or tracked platforms.

**Command and Control** – SPEAR is equipped with computerized aiming and navigation devices, enabling the mortar system to be operated autonomously and aimed without the need for external reference points. SPEAR can be easily integrated with a variety of C<sup>4</sup>I or Battle Management Systems (BMS).

**Flexible configuration** – the system can operate independently with forward observers and/or deployed forces. The system can also be deployed standalone or as part of the battery/platoon configuration.

**Improved accuracy** – targeting information is relayed to the Fire Control System (FCS) which computes the ballistic data and orders the mortar's automatic laying system to position the mortar barrel to the exact azimuth and elevation. The system is embedded with an Inertial Navigation System (INS) to provide maximum accuracy.

**Enhanced situational awareness** – the system generates a comprehensive tactical picture that includes both friendly and enemy forces along with additional battlefield elements, enabling accurate threat analysis and an attack result forecast.

## Key Benefits

- Adaptable to a wide range of High Mobility light vehicles due to a unique soft recoil mechanism
- Rapid deployment, improved area coverage and survivability
- Operated as a standalone mortar or as part of the battery/platoon configuration
- Automated and accurate mortar barrel laying
- Easily operated by 2-3 crew members.
- Increased fire power and efficient use of ammunition

## Key Features

- Modern generation of the combat-proven vehicle-mounted mortar – the CARDOM
- Easily integrated with C<sup>4</sup>I or BMS and with Target Acquisition systems.
- For use with all types of qualified 120mm smooth bore ammunition
- Rapid deployment; in and out of action within 60 seconds
- High level of accuracy with integrated GPS & INS
- Burst rate of fire - 12-16RPM
- Sustained rate of fire - 3-4RPM for 10-20 minutes
- Full manual backup for laying an aiming (suitable for GFE optical sights).



Elbit Systems Land

E-mail: [land@elbitsystems.com](mailto:land@elbitsystems.com) [www.elbitsystems.com](http://www.elbitsystems.com)

Follow us on   