



INS/GNSS GUIDED ALL UP ROUND  
MUNITION

#Guidance



INS/GNSS GUIDANCE  
LONG RANGE  
RIPPLE RELEASE  
FRAGMENTATION WARHEAD



**aselsan**



## INS/GNSS GUIDED ALL UP ROUND MUNITION

TOLUN F is a INS/GNSS guided gliding all up round ready 250 lb. weapon system carried on Smart Pneumatic Quad Rack (SPQR) (SADAK 4T).

TOLUN F is designed to maximize the number of weapons that can be loaded per aircraft. Additionally, it can be deployed and utilized in a standalone configuration, designated as TOLUN FSI due to mounting interface difference.

The TOLUN features an advanced fragmentation warhead designed to effectively defeat both armored and non-armored targets. The system offers a delayed initiation mode via a fuse that is equipped with electronic safety and cockpit-programmable functionality, allowing precise control over detonation timing for diverse mission requirements.

The TOLUN F is equipped also with an advanced proximity sensor that triggers the warhead's detonation before impact, maximizing blast and fragmentation effects for superior target destruction.

With its cutting-edge technology and high targeting precision TOLUN F provides a reliable solution for a wide range of operational needs.

### Main Features

- Launchable up to 4 in ripple release against single or multiple targets in one sortie
- High precision
- Adjustable proximity sensor
- Extended range with diamond shaped wings
- In all-weather conditions
- Day/night operations
- Prosecute targets of opportunity
- Integrated INS/GNSS navigation
- Resistant to jamming threat with 4-channel CRPA antijam antenna
- Embedded spoofing resistance software
- Re-targeting during captive flights
- Waypoints tracking
- Selectable impact angle in advance
- Low operational and life cycle cost
- High reliability and low maintenance
- Can be launched from internal weapon bay
- Combat proven

### Technical Specifications

- Range :  $\leq 47$  NM (87 km) (Fighter)  
:  $\leq 28$  NM (52 km) (UAV)
- Altitude : 0- 40.000 ft (MSL) (Fighter)  
: 0- 30.000 ft (MSL) (UAV)
- Accuracy (CEP) :  $< 10$  ft (3m)
- Guidance : INS/GPS
- Warhead Weight : 70 kg
- Carriage/Release : Quad (SADAK-4T) (TOLUN F)  
Dual (SADAK-2T) (TOLUN F)  
Single (TOLUN FSI)
- Warhead : Fragmentation

### Physical Specifications

- Weight (Including Bomb) : 119 kg
- Length : 1770 mm x 191 mm x 274 mm
- Diameter : 185 mm

### Potential Platforms

- F-16, AKINCI, ANKA-III



Specifications are subject to change without any notice. | All tolerances are within  $\pm 10\%$ .