

TAD

towed artillery digitization



The Towed Artillery Digitization Digital Fire Control System produced by General Dynamics Armament and Technical Products provides the M777A1 lightweight 155mm towed howitzer with the sensors, displays, mission computer, power supply and communication systems necessary for the towed artillery to navigate, aim, point and operate with higher-level fire direction systems.

The TAD DFCS enhances the emplacement time and accuracy of the M777A1. System interoperability is strengthened through digital data exchange with the Fire Direction Center. The system will improve section survivability and effectiveness by providing more accurate indirect capability.

GDATP is teamed and under contract with BAE SYSTEMS and the Joint Program Management Office for the production and integration of the system. GDATP is teamed with General Dynamics Canada in Ottawa, Ontario, for the mission computer and displays. Espey Electronics is developing the power supply and providing the system batteries.

Specifications

Self-locating	10m CEP, vertical and horizontal
System azimuth & QE pointing accuracy	1.0 mil RMS (az), 0.5 mil RMS (el)
System indirect bias CEP	150m CEP at low angle (≤ 800 mils)
Weight	500 pounds (226.8 kg) (thres)
System rate of fire	4 rounds per minute (thres), 8 rounds per minute (maximum) (obj) for 2 minutes at low angle (≤ 800 mils)
Surge condition operating duration	4.5 hours (thres), 10 hours (obj)
Environments	Temperature of -46°C (min), 49°C (max) EMRO/EMI/EMC with no degradation; air droppable using LVAD from C130 or larger; operate in air and marine transport modes; ford ≤ 5 feet water
Mounting	No affect on M777A1 structure, optical sight, or troop movement/actions
Reliability	1,500 hours MTBF (thres), 3,000 hours MTBF (obj)
Maintainability	≤ 30 minute unit mean time to repair
Interoperability	AFATDS and BCS

GENERAL DYNAMICS

Armament and Technical Products

Four LakePointe Plaza, 2118 Water Ridge Parkway, Charlotte, NC 28217 ■ www.gdatp.com
Tel 704 714 8000 ■ Fax 704 714 8232 ■ E-mail GDBusDev@gdatp.com