



ADVANCED CENTRIC SYSTEMS B.V

ROBOTIC MULTI-TASK AUTONOMOUS DOZER
Product brochure



THE PROBLEM

Battlefield orientation and accurate navigation are among the most fundamental requirements for situational awareness – which is the key to battlefield effectiveness.

Just like naval vessels at sea and aircraft in the air, ground vehicles also depend on accurate navigation to determine their own positions, reach their destinations and conduct their operations relative to the terrain and other friendly and enemy elements.

In today's battlefield, manual navigation methods (dead reckoning, compass bearing to a charted object, etc.) are too inaccurate and time-consuming to be effective. The two primary navigation techniques currently in use are GPS (Global Positioning System) navigation – a method based on input from a satellite system, and INS (Inertial Navigation System) – a method based on continuous electronic computation of motion data relative to a known initial point.

Tactical vehicles, both wheeled and tracked, require a modern, compact, lightweight and efficient navigation system to relieve operators of the burdensome task of manual navigation during battlefield operations.

THE SOLUTION

ACS presents LANS-GTV – Lightweight Accurate Navigation System for Ground Tactical Vehicles.

LANS-GTV is a small, lightweight ground navigation system that utilizes the two most widely-used navigation technologies: GPS and INS. For INS navigation, the system relies on fiber-optic gyroscopes and implements the Kalman Filter algorithm.

LANS-GTV enables wheeled and tracked vehicles to determine their own position and navigate accurately to any destination or objective.

KEY FEATURES & MAJOR ADVANTAGES

Key Features & Major Advantages

- Pinpoint accuracy
- Self-designation or external designation
- Enhanced penetration
- Superior lethality
- Minimum collateral damage
- Programmable detonation
- Effective against urban targets and light fortifications
- Combat-proven seeker

- Guidance modes:
 - GPS
 - Laser designation
 - Combined Laser/GPS
- Physical characteristics:
 - Total weight: 115kg
 - Warhead weight: 92kg
 - Length: 170cm
 - Diameter: 208mm
 - Accuracy (Laser-guided): CEP <1m
 - Penetration: up to 3 floors
 - Seeker characteristics:
 - Field of regard: 100° cone
 - FOV: 40°

