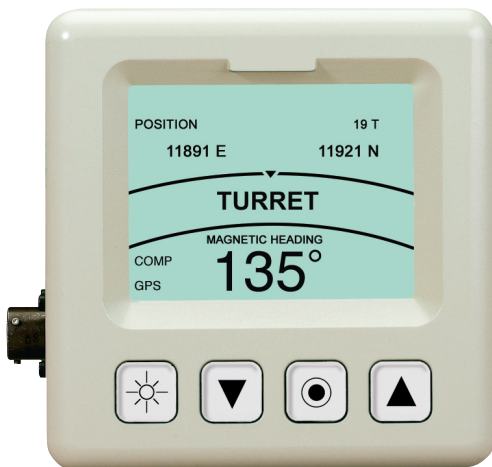


# TACNAV TLS

emcore®

## Digital Compass-based Target Location System for Turreted Armored Vehicles



### Key Features and Attributes

- 100% situational awareness with or without GPS availability
- Heading accuracy within 2-3°
- Dead reckoning and odometer interface for accuracy within 2-3% of distance travelled
- Compass-referenced steer-to navigation display
- Links with laser rangefinder to provide 150 meter CEP far target location at 5 km distance
- Multiple interfaces: Ethernet, CANbus, RS-422, RS-485

### The Easy-to-Integrate, Affordable Navigation Solution for Turreted Vehicles

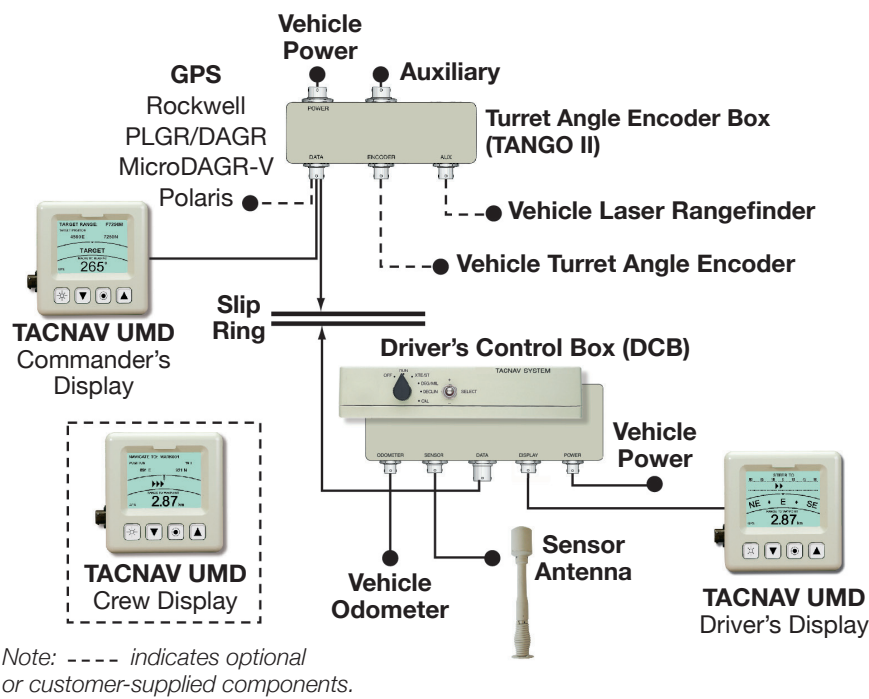
EMCORE's TACNAV TLS is a tactical navigation and targeting system designed for turreted vehicles, including cavalry, reconnaissance, armored personnel carriers, and light armored vehicles. The system offers a range of capabilities, including far target location, GPS backup and enhancement, vehicle position, hull and turret azimuth, and steer-to/cross-track error displays.

TACNAV TLS provides continuous, jam-proof position data to improve operational effectiveness. With its Universal Multilingual Displays for commander and driver, TACNAV TLS brings a new level of flexibility and performance to armored vehicle navigation, including far target location and turret orientation features. TACNAV TLS supports Ethernet, CANbus, RS-422 and RS-485 interfaces.



*Vehicle commanders and crews rely on EMCORE's TACNAV TLS when they need an easy-to-integrate, versatile battle management, tactical navigation, and targeting solution for turreted vehicles.*

System Diagram



Technical Specifications

General Performance

Heading Accuracy:	2.5° RMS
Dead Reckoning:	2-3% of distance travelled
Start-up:	Stores heading and location at shutdown
Pitch and Roll Accuracy:	±3° up to ±15° (static)
Interfaces:	Ethernet, CANbus, RS-422, RS-485
Far Target Location:	2D/150 m CEP at 5 km (with GPS position fix)

Physical

Power Consumption:	24 watts
Dimensions:	122.2 mm x 250 mm x 52 mm (4.81" x 9.84" x 2.05")
Weight:	1.4 kg (3.1 lbs)

Environmental

Temperature:	MIL-STD-810G, Operating -40°C to +65°C (-40°F to 149°F); 10 minutes display warm-up needed below -20°C (+4°F)
Altitude:	15,000 meters (50,000 feet)
Environment:	MIL-STD-810G: humidity, salt fog, sand, dust & fungus
Shock:	MIL-STD-810G
EMI/RFI:	MIL-STD-461F, Class A3, digital equipment
Vibration:	MIL-STD-810G, Category 8L 5-2000 Hz random
MTBF:	10,500 hours

For More Information

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