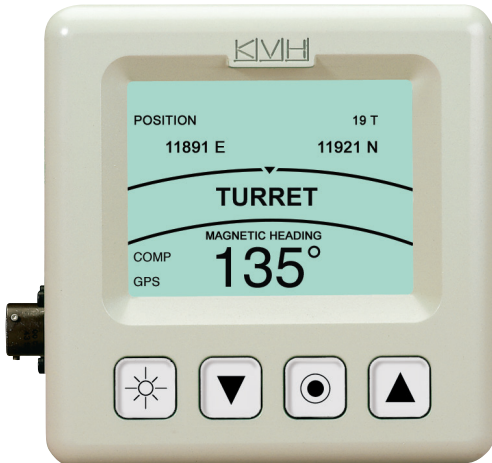




KVH TACNAV TLS

Digital Compass-based Target Location System
for Turreted Armored Vehicles



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

KVH'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.

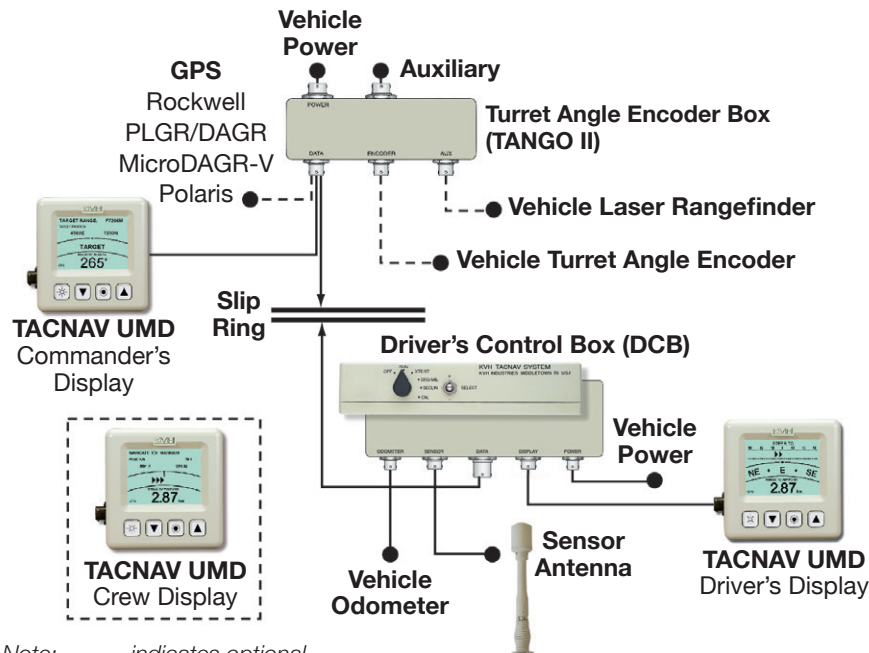
Key Features and Attributes

- 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



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

System Diagram



Note: ---- indicates optional or customer-supplied components.

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 |



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