



TVG 675

IN-VEHICLE LOCATION TRACKING COMBINED WITH VEHICLE DIAGNOSTICS

The TVG 675 is designed to support enterprise customers requiring a full set of fleet features with cellular and Bluetooth connectivity options, plus a triple-axis accelerometer that detects and acts on hard braking, aggressive acceleration, or vehicle impacts. The built-in ECU (Engine Control Unit) interface reads and transmits engine condition and performance data such as engine temperature and fault codes from both heavy duty and light duty vehicles to provide the best possible real-time picture of vehicle health.

All configuration parameters and post-installation upgrades can be activated over-the-air, avoiding vehicle downtime.

SOLUTIONS THAT USE THIS HARDWARE:

- ▶ Trimble PULSE®

Key Features

- ▶ LTE or HSPA configurations
- ▶ Includes both heavy duty or light duty vehicle ECU interfaces
- ▶ Serial ports with switched power
- ▶ Comprehensive I/O system with 8 inputs, 7 outputs, 4 A/D inputs, and 2 1-Wire™ interfaces
- ▶ High performance internal antennas
- ▶ Built-in triple-axis accelerometer for driver behavior, motion sensing, hard braking, impact detection
- ▶ 32 built-in geo-fences, plus any combination of circle or polygon zones, up to 5290 points
- ▶ 1000mAh backup battery
- ▶ Automatic, over-the-air configuration and firmware download
- ▶ Low power sleep modes



GENERAL

Communication Modes	LTE/UMTS/HSPA/EDGE
Messages	20,000 buffered messages
Location Technology	.50+ channel GPS (with SBAS)
Geo-Fence	32 radial and 32 polygonal geo-fences on-board device, user definable
Configuration	Automatic over-the-air firmware and configuration updates

GPS

Location Technology	GPS, GLONASS, Galileo
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-148 dBm
Location Accuracy	2.0m CEP
AGPS capable	

CELLULAR

Data Support	LTE/UMTS/HSPA
North America AT&T Variant:	
4G LTE Cat 1	Bands 2, 4, 5 and 12
3G UMTS/HSPA	700, 850, 1700, 1900 MHz
North America Verizon Variant:	
4G LTE Cat 1	Bands 4 and 13
European/Africa/Asia Variant:	
3G UMTS/HSPA	800, 850, 900, 1800, 1900, and 2100MHz
2G GSM/GPRS	850, 900, 1800, 1900

COMPREHENSIVE I/O

Ignition Input	1 fixed bias
Digital Inputs	4 (high/low selectable 0-30 VDC)
Digital Outputs	3 (open collector relay 150mA)
A/D Inputs	2 (0-30VDC, +/-0.1V accuracy)
1-Wire® Interface	1 (driver ID, temperature sense)
Power Output	1 switched V_IN
Status LEDs	GPS, cellular, VBUS, LAN
Serial Interfaces	RS-232 serial port, TTL level port

ELECTRICAL

Operating Voltage	9-30 VDC (Start-up, Operating), 7-32 VDC (Momentary)
Power Consumption	7 mA @ 12V (deep sleep), 20mA @ 12V (idle on network) 150mA @ 12V (active tracking with VBUS active)
Back Up Battery (Optional)	Lithium-Ion 1000mAh

ENVIRONMENTAL

Temperature*	-30° to +60° C (connected to primary power) -40° to +85° C (storage). Except Battery*
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	.U.S. Military Standards 202G, SAE J1455
EMC/EMI	SAE J1113-13 (4 kV limit)

PHYSICAL

Dimensions	5.7 x 2.1 x 1.3" (145 x 55 x 32mm)
Weight	.5 oz, (140 g)

CONNECTORS, SIM ACCESS

Vehicle BUS I/F	16-Pin Molex
Power, I/O	24-Pin Molex
Internal	SIM Access

INTERFACE STANDARDS

Bluetooth	4.0 Dual-Mode Classic, BLE
Heavy Duty Truck Data	J1708, J1939
Light Duty Vehicle Data	J1850 PWM, J1850 VPW, ISO 9141-2, KWP 2000, ISO-15765, CAN

CERTIFICATIONS

Fully certified FCC, CE, IC, PTCRB, Applicable Carriers

MOUNTING

- Screw mounting bracket
- Tie-wrap, adhesive, or velcro

OPTIONAL FEATURES/FUNCTIONS

- Connectorized I/O wiring harness
- Built-in or external backup batteries

About us

Trimble provides visibility into field and fleet operations so businesses can streamline efficiency and increase productivity. From the field to the office, there's life in your work. Trimble PULSE connects, monitors, and analyzes the moving parts of your business to make your work smarter, faster, easier, and more profitable. A wide range of device options are available to connect your fleet.

Learn more

For more information visit:
www.trimblepulse.com

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