



G09

RUGGEDIZED TELEMATICS DEVICE



G09: RUGGED® TELEMATICS DEVICE - THE MOST POWERFUL YET.

Geotab's G09 RUGGED® telematics device is the most powerful yet. The G09 RUGGED offers a 32-bit processor, 4x more memory and 5x more RAM than the G08 RUGGED®. Similar to the G08 RUGGED, the G09 RUGGED offers state-of-the-art GPS technology, G-force monitoring, GEOTAB IOX® expandability, engine and battery health assessments, and communication on the LTE network*.

Vehicle Tracking

Using Geotab's patented tracking algorithm, the G09 RUGGED accurately recreates vehicle trips and analyzes incidents. The G09 RUGGED also offers in-vehicle alerts to instantly notify drivers of infractions and — with hardware Add-Ons — provides live coaching for driver's on-road performance. The G09 RUGGED does not require a dash-mounted antenna or any wire splicing.

TOP FEATURES

- IP68 & IP69K rated for water, dust ingress and pressure spray protection
- LTE connectivity
- Simple device design for covert installations
- Intelligent in-vehicle driver coaching
- Breakthrough collision detection and notification
- External device expandability via IOX Technology
- Built-in auto-calibrating accelerometer and gyrometer
- Near-real-time vehicle data
- Fast GPS acquisition time using Almanac OTA support
- Support for GPS+GLONASS connectivity
- Additional native support for more

SECURITY

- GO device and network interfaces use authentication, encryption, and message integrity verification.
- GO devices are individualized. Each device uses a unique ID and non-static security key, making it difficult to fake a device's identity.
- Over-the-air updates use digitally-signed firmware to verify that updates come from a trusted source.
- Geotab uses independent third-party experts to validate the platform from end-to-end.
- Multiple harness options available.



TECHNICAL SPECIFICATIONS AND FEATURES

INTERFACES

Engine Management:

Legacy OBD (SAE J1850 PWM/VPW, ISO 9141-2, and ISO 14230 (KWP2000))

ISO 15765 CAN (including WWH-OBD, GMLAN, VW TP2.0) @ 125/250/500 kbps

J1708/1587, J1939 500/250 kbps

2- or 3-wire installation support
(for older vehicles/asset tracking)

Modbus and secondary CAN

Input/Output:

LEDs — Ignition, GPS, Cellular
IOX (more details below)
Internal GPS/Cellular antennas

CELLULAR

Availability varying on certification full list of supported countries [here](#).

GO9 RUGGED LTE ATT/TELUS/ROGERS

LTE (CAT-1): Bands 2/4/5/12
3G: Bands 2/5

GO9 RUGGED LTE Verizon

Single mode LTE (CAT-1): Bands 4/13

GO9 RUGGED LTE CATM1 Oceania

LTE (CAT-M1): Bands 3, 28

GO9 RUGGED LTE CATM1 EMEA

LTE (CAT-M1): Bands 1, 3, 5, 8, 20, 28
2G: 850/900/1800/1900 MHz

GO9 RUGGED 3G/2G Global

3G: 800/850/900/1900/2100 MHz
2G: 850/900/1800/1900 MHz

3GPP Compliant

GPS RECEIVER

72-channel engine (GPS/GLONASS)

Under 1 second Time-To-First Fix for hot and aided starts

Cold start: 26s

Concurrent GPS & GLONASS system

A-GNSS

Accuracy: ~2.0 m CEP

OTA FW updates supported

ENVIRONMENTAL & EMC

Operating Temperature: -40 to +85 °C

SAE J1455:

Temperature Cycle (Section 4.1.3.1)

Thermal Shock (Section 4.1.3.2)

Humidity Cycle (Section 4.2)

Salt Spray Fog (4.3.3.1)

Swept Sine Vibration (4.10.4.1)

Random Vibration (4.10.4.2)

Mechanical Shock (4.11.2.3)

Inductive Switching,

Burst Transients, Starter Motor

Engagement (Section 4.13.2.2.1)

Coupled Transients

(Section 4.13.2.2.2)

Electrostatic Discharge Handling,

Operation and non-operational

(Section 4.13.2.2.3)

Radiated Immunity

Radiated and Conducted Emissions

IEC 60529:

IP6X (Section 13.4 & 13.6)

IPX8 (Section 14.2.8)

IPX9K (Section 14.2.9)

ACCELEROMETER & GYROSCOPE

3D accelerometer and 3D gyroscope. Full-scale acceleration range of $\pm 8g$ and an angular rate range of ± 250 dps.

Acceleration and angular rate output data rate of 1.66 kHz.

MECHANICAL

Weight: 396 g (0.87 lbs)

Casing Dimensions: 159 mm L × 122 mm W × 31 mm H

Cable Length: 1000 mm

Housing: Polycarbonate (PC) thermoplastic two-piece housing (Flammability rating: UL 94 V-0)