



VG33 Vehicle IOT Gateway Datasheet

VG-Series Vehicle Gateway



Overview

The VG33 Vehicle IoT Gateway is an advanced GPS location and sensor platform, providing fleet operators with real-time visibility and business-relevant reports that lower operating cost and increase productivity.

The VG33 is part of Samsara's complete fleet management solution including dispatching, real-time traffic, route analysis, geo-fencing, fuel efficiency reports, maintenance reports, driver safety analysis, and real-time alerts.

HIGHLIGHTS

- Advanced GPS location technology with real-time visibility
- Provides complete visibility: Location, driver behavior, engine diagnostics, cargo sensor data, and more
- Compatible with cars, light duty trucks, and heavy duty trucks
- Part of a complete solution to monitor vehicles, drivers, cargo, assets, and more

Powerful, Easy-to-Use Fleet Telematics

Instantly-Accessible, Real-Time Fleet Visibility

An always-on cellular connection reports data in real-time to the Samsara Cloud. Operators gain instant visibility into the movements and status of their entire fleet simply by logging into the dashboard from their desktop or mobile device.

Designed to Increase Efficiency

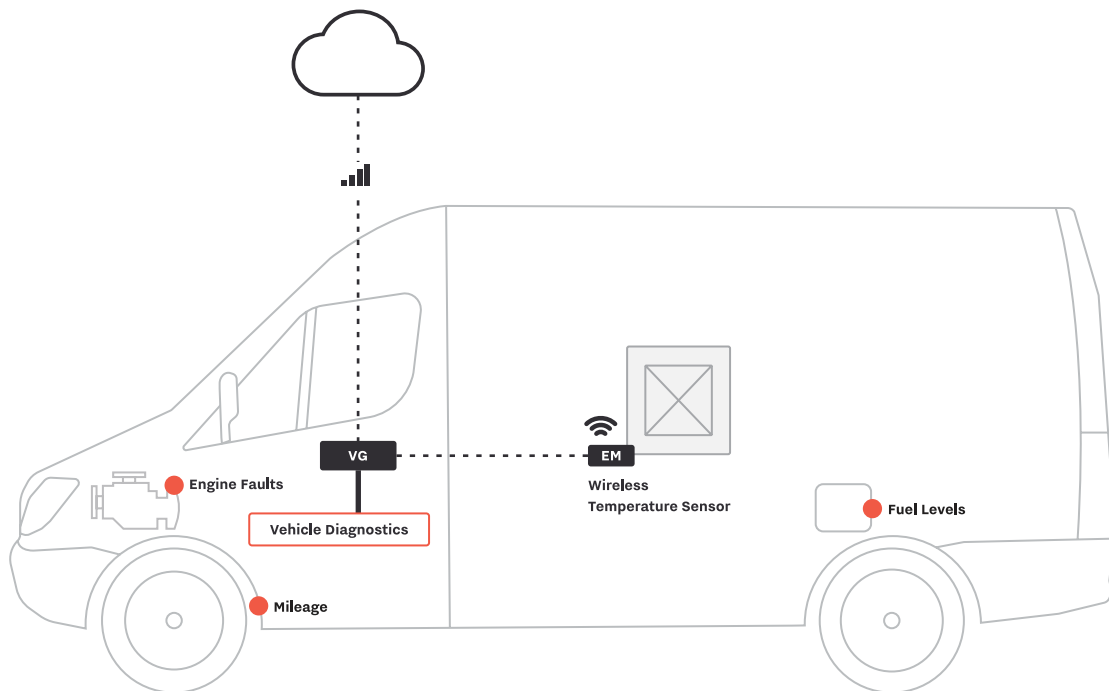
A powerful software platform analyzes each vehicle's behavior, providing operators with insight to fleet utilization, expected maintenance, and fuel efficiency. Analytics and reports are automatically generated in the cloud, providing operations team with the data they need in just a few clicks.

Telematics Beyond GPS

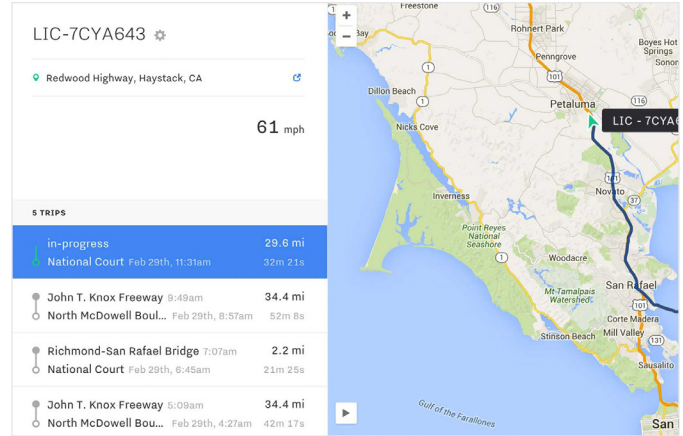
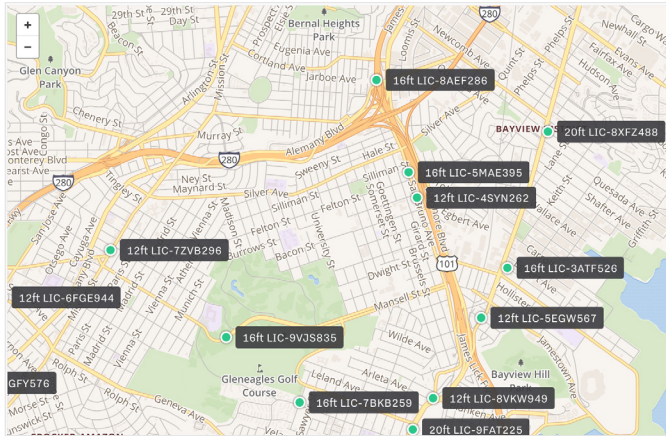
Samsara gateways integrate traffic, temperature, and other sensor data with real time location, streamlining route planning and improving fleet efficiency. Samsara's cloud architecture provides operators with a wealth of actionable data, from real-time traffic and trip history to efficiency reports that save fuel and increase utilization.

Part of a complete solution

Samsara brings complete visibility to physical operations: Monitor the temperature of refrigerated compartments with real-time alerts to prevent spoilage. Protect high-value cargo from extreme temperature, humidity, or shock. And monitor specialized vehicles by adding pressure sensors, flow meters, and more - all from a single system.

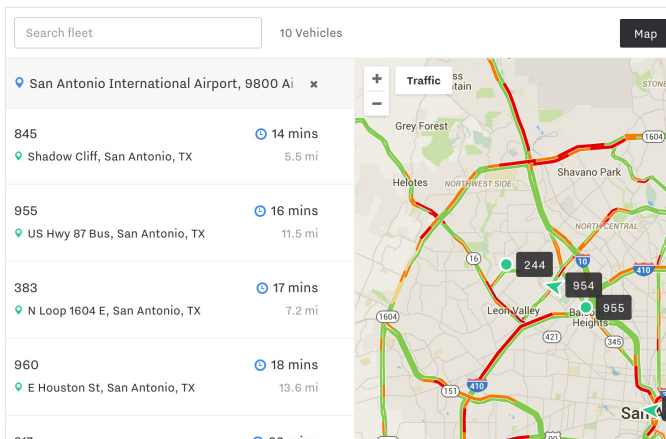


Real-Time Visibility, Analytics and Reporting

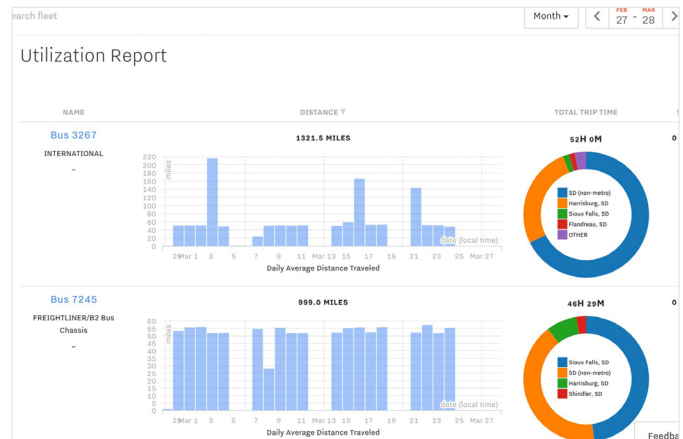


Up to the second reporting of mobile devices on desktops

View automatically segmented trip history to understand route efficiency, vehicle utilization, and more



Streamline vehicle dispatch by quickly identifying vehicles closest to destination



Intelligent analytics engine helps determine asset utilization and schedule maintenance before problems occur

Technical Specifications

Data Sources

CAN bus / diagnostics interface	OB2 II (cars, light trucks) J1939 and J1708 (heavy trucks)
Location	Advanced positioning system simultaneously reads from multiple independent satellite systems including GPS (American), Galileo (European Union), GLONASS (Russian), and BeiDou (Chinese) global navigation satellite systems. Internal antenna for discreet installation. Optional external antenna available for specialized applications. Industry leading -167 dBm navigation sensitivity 1 second time to fix (hot start)
Wireless sensors	Compatible with EM-series wireless temperature monitors, Driver IDs, and IM-series industrial input modules Automatically detects and connects to up to 4 Samsara wireless sensors associated with the same account
Auxiliary inputs	2 x auxiliary inputs monitor status of specialized vehicles, e.g. snow plow up / down, power takeoff on / off, etc. Maximum voltage 30V, Vih 2.2V, Vil 0.8V

Connectivity

Cellular	Continuous 3G cellular connectivity Global coverage, works in over 150 countries GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz UMTS/HSPA+: Five band 800/850/900/1900/2100MHz Optimized for remote areas with weak signals
Data security	All Internet connectivity secured via SSL with 256-bit AES encryption (the encryption standard for sensitive data including military and financial applications)
Offline storage	Built-in flash memory logs data when Internet connectivity is unavailable

Power

Power consumption	Vehicle on: 1W typical power draw Vehicle off: 100mW auto-sleep mode for battery longevity
Input power	12V-24V DC Powered via diagnostic port connection or direct wiring harness
Battery	Battery-powered tamper detection sends alert (via Samsara Cloud) if gateway is unplugged or power is interrupted

Enclosure

Dimensions	111 x 69 x 26 mm (4.4 x 2.7 x 1.0 inches)
Weight	150g
Operating Temperature	-15C to 60C

License

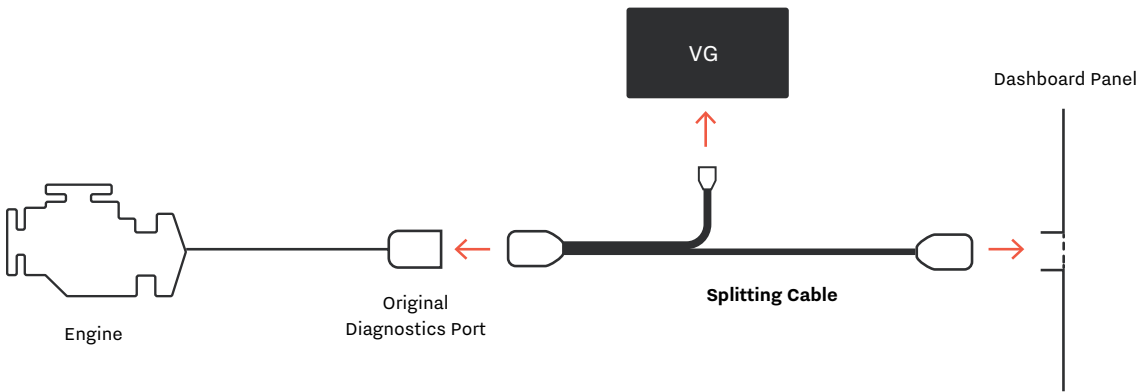
Cloud License

All-inclusive	Includes maintenance and support, full dashboard access, unlimited sensor data storage, monthly feature updates, and continuous cellular connectivity
Simple Pricing	No long-term contracts, early termination fees, or per-feature licenses

Accessory Cable

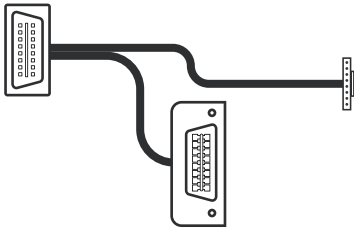
Splitting Cable

Preserves access to the vehicle diagnostics port. Installs behind dash.



Accessory Cable Types

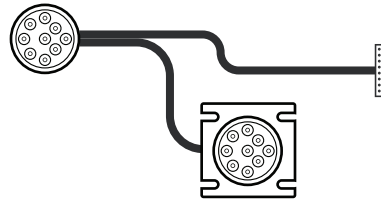
Car/Light Duty Vehicles



ACC-AOBDII-Y1

OBDII (J1962) to Samsara VG33 cable with type 1 Y-splitting bypass harness

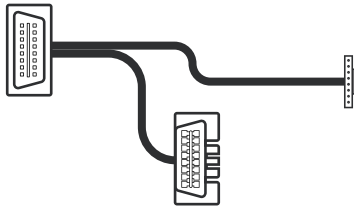
Heavy Duty Vehicles



ACC-AJ1939-Y1

ACC-AJ1708-Y1

J1939 or J1708 to Samsara VG33 cable with type 1 y-splitting bypass harness and auxiliary (discrete voltage) inputs



ACC-AOBDII-Y2

OBDII (J1962) to Samsara VG33 cable with type 2 Y-splitting bypass harness

ACC-APC

Direct-wire non-diagnostic power cable

ACC-AGPS

External GPS antenna

Ordering Information

Gateway

HW-VG33	Samsara Vehicle IoT Gateway (requires license and accessory harness)
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License

LIC-VG-1YR	1-year license for VG-series gateways
LIC-VG-3YR	3-year license for VG-series gateways
LIC-VG-5YR	5-year license for VG-series gateways

Accessories

ACC-AJ1939-Y1	J1939 heavy-duty diagnostics harness with type 1 Y-splitting cable
ACC-AJ1708-Y1	J1708 heavy-duty diagnostics harness with type 1 Y-splitting cable
ACC-APC	Direct-wire non-diagnostic power cable
ACC-AOBDII-Y1	OBD II (J1962) light-duty diagnostics harness with type 1 Y-splitting cable
ACC-AOBDII-Y2	OBD II (J1962) light-duty diagnostics harness with type 2 Y-splitting cable
ACC-AGPS	External GPS antenna