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.

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.

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.

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 from mobile devices or 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 | OBD 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

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>111 x 69 x 26 mm (4.4 x 2.7 x 1.0 inches)</th>
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</thead>
<tbody>
<tr>
<td>Weight</td>
<td>150g</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-15°C to 60°C</td>
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</tbody>
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License

Cloud License

<table>
<thead>
<tr>
<th>All-inclusive</th>
<th>Includes maintenance and support, full dashboard access, unlimited sensor data storage, monthly feature updates, and continuous cellular connectivity</th>
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<tbody>
<tr>
<td>Simple Pricing</td>
<td>No long-term contracts, early termination fees, or per-feature licenses</td>
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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

ACC-AOBDII-Y2
OBDII (J1962) to Samsara VG33 cable with type 2 Y-splitting bypass harness

Heavy Duty Vehicles

ACC-A1939-Y1
ACC-A1708-Y1
J1939 or J1708 to Samsara VG33 cable with type 1 y-splitting bypass harness and auxiliary (discrete voltage) inputs

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) |

## 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 |