



## Vehicle IOT Gateway VG33 Datasheet

# 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

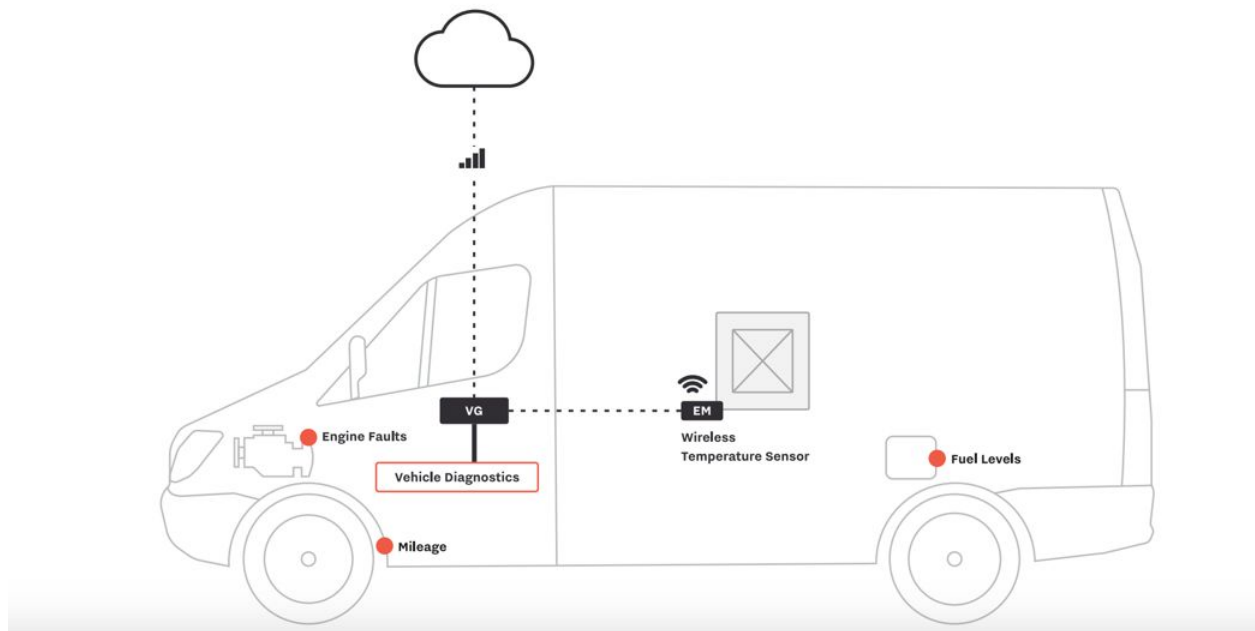
A powerful software platform analyzes each vehicle's behavior, providing operators with insight to fleet utilization, expected maintenance, and fuel efficiency. Analytics and reports are automatically generated in the cloud, providing operations team with the data they need in just a few clicks.

## 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.

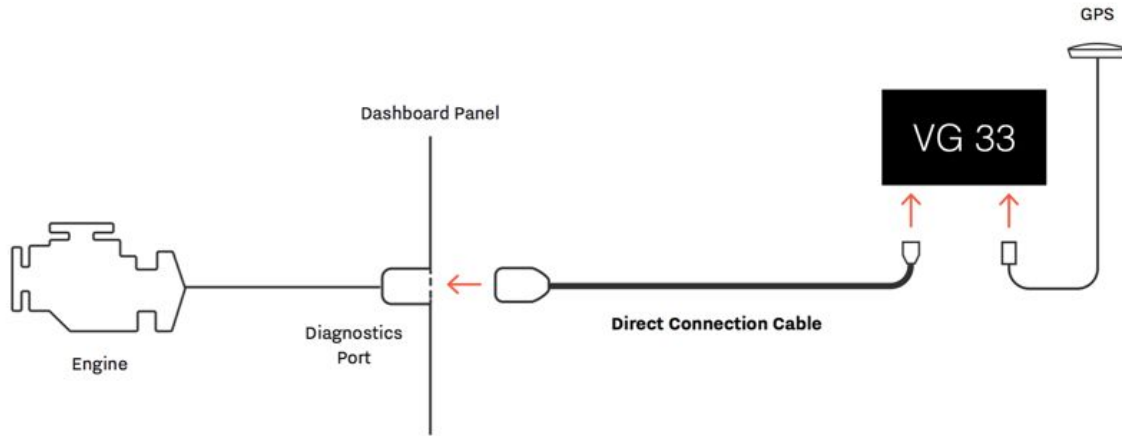
## Part of a complete solution

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.

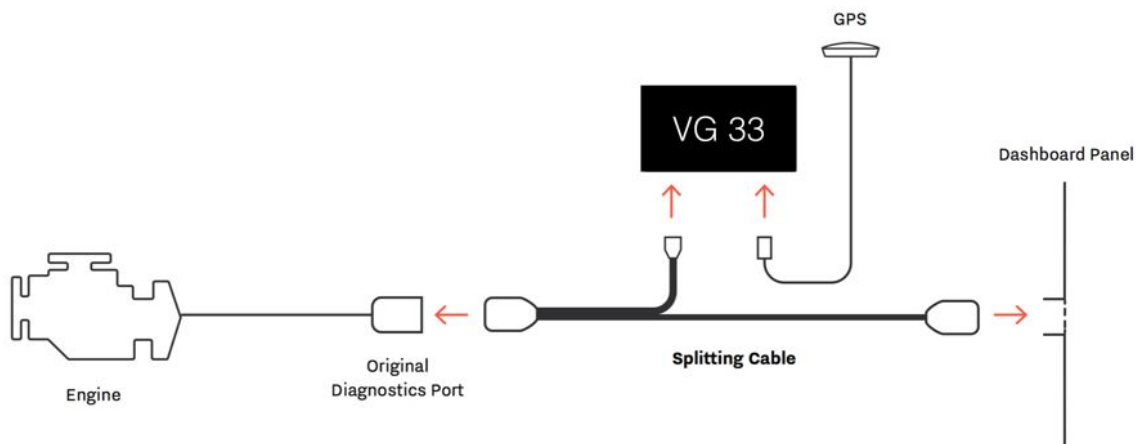


# Installation Instructions

## Direct Connection Cable



## Splitting Cable



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

Note: Cables Not Included

# Technical Specifications

## Data Sources

<b>CAN bus / diagnostics interface</b>	OBD II (cars, light trucks) J1939 (heavy trucks)
<b>Location</b>	GPS , GLONASS, and BEIDOU Geolocation (approximates location if GPS is unavailable)
<b>Wireless sensors</b>	Samsara wireless sensors provide additional monitoring (environmental, specialized equipment, industrial sensors)
<b>Accessory ports</b>	Accessory port for GPS and future expansion

## Wireless Sensors and Input Modules

<b>Connectivity</b>	Proprietary low-energy wireless sensor connectivity (2.4 Ghz)
<b>Compatibility</b>	Works with Samsara wireless sensors and input modules
<b>Auto-discovery</b>	Automatically detects and connects to any sensor associated with the same account
<b>Range</b>	Line of sight: 100+ ft Range depends on RF interference, building materials, and physical obstacles

## Internet Connectivity

<b>Cellular</b>	Continuous 3G cellular connectivity Global coverage, works in over 150 countries
<b>Cellular Bands</b>	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
<b>WiFi</b>	802.11 a/b/g/n (2.4G/5GHz) 5G operating B1,B4 and Bluetooth WPA2-PSK authentication
<b>Data security</b>	All Internet connectivity secured via SSL with 256-bit AES encryption (the encryption standard for sensitive data including military and financial applications)

## Data Transmission and Storage

<b>Real-time connectivity</b>	Streams sensor data to the Samsara Cloud in real time
<b>Built-in storage for offline logging</b>	Sensor data stored in on board flash memory when Internet connectivity is unavailable

## Power

<b>Power consumption</b>	Vehicle on: 1W typical power draw Vehicle off: 100mW auto-sleep mode for battery longevity
<b>Input power</b>	12V-48V DC Powered via diagnostic port connection or direct wiring harness

## Enclosure

<b>Dimensions</b>	112 x 69 x 25.5 mm
<b>Weight</b>	132g
<b>Operating Temperature</b>	-15C to 40C

## License

### Cloud License

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

## FCC Regulations:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with radio frequency (RF) exposure limits adopted by the Federal Communications Commission for an uncontrolled environment. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times.

## IC Regulations:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

High-power radars are allocated as primary users (i.e. priority users) of the bands 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

## IC RF Exposure Compliance

This equipment complies with IC RSS-102 RF exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times.

## Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé pour assurer un minimum de 20 cm l'espacement à toute personne en tout temps.