

# AG53-Powered Asset Gateway

FOR TRAILERS | AG53 DATASHEET



#### **OVERVIEW**

The Powered Asset Gateway for Trailers is ideal for tracking and monitoring dry-vans, chassis, flatbeds, reefers, tankers, and other specialty trailers. It features a ruggedized, waterproof enclosure, fast and precise location tracking even in low coverage areas, and discreet undercarriage installation for seamless plug-and-play deployment.

The Powered Asset Gateway for Trailers enables improved operational efficiency, maintenance, safety, and compliance to manage trailer fleets at scale.

#### **SUPPORTED TRAILER TYPES**

- Dry-vans
- Chassis and flatbeds
- Thermo King reefers
- Tankers
- Specialty trailers (agriculture, liquid and chemical transport, etc.)

#### **HIGHLIGHTS**

- Real-time location: High precision tracking from multiple satellite systems for real-time geolocation and robust signal in low coverage areas
- Remote diagnostics: Trailer and ABS fault codes and power connection monitoring
- **Easy installation:** Rapid, discrete undercarriage installation for fast and efficient deployment
- Operational efficiency data: Maintenance, utilization, time on site, and detention insights for fleet right-sizing and accurate billing
- Cargo and temperature monitoring: Sensor connectivity for door, cargo and temperature monitoring
- Reefer Integration: 1-way monitoring and 2-way temperature control for reefers
- Unified platform: Unlocks a wide array of customizable reports, alerts, and mobile apps for drivers and admins as part of Samsara's Connected Operations Platform

#### DESIGNED FOR RAPID ROL

- Track trailers in real-time
- Streamline maintenance and increase uptime
- Increase driver safety and ensure compliance
- Boost utilization, reduce fees, improve billing accuracy
- Safeguard cargo and prevent spoilage
- Simplify deployment

# **Technical Specifications**

#### **CELLULAR DATA CONNECTIVITY**

Cellular Data: LTE Cat M1 and NB-IOT

Operating area: United States, Canada, Mexico,

**Offline Storage:** Built-in flash memory to store data when Internet connectivity is unavailable. **Secure Communications:** All Internet connectivity secured via HTTPS with TLS encryption

#### **LOCATION TRACKING**

**Real-time tracking:** Multi-constellation GPS for high resolution, real-time geolocation with robust coverage in low signal environments and internal antenna for discreet installation.

## POWER \* Typical battery lifetimes provided. Actual battery life is affected by extreme cold, cellular signal strength, and accessory sensor utilization

**Sources**: Designed for use with external power and Smart Trailer ABS Cables, intermittent external power, or battery backup applications (via internal lithium-ion battery)

External Power: 9-60V DC

Power draw: 200 uW (sleep) to 5,000 mW (peak); normal operation at 200mW

Lithium-Ion Battery: 3 Ah internal battery capacity

Lasts over 12 months (2 check-ins per day) when fully charged

Enabling Find My Asset (US only) reduces battery life, approximately 40%, if activated at

installation and left on throughout the product life without recharge

For questions about the safe use of lithium-ion battery powered devices, please consult

your company's safety department

Charging: Average unit will require 10 hours of charge for full battery charge

#### **ENCLOSURE**

Material: UV-stabilized polycarbonate

Dimensions: 124 x 81 x 35 mm

Weight: 192 g

Operating temperature Operation: -40° to 60°C externally powered, -20° to 60°C discharging on battery, 0oC to

45oC charging

IP Rating: IP67 (weatherproof and water resistant up to 1m submerged) IP69k (highest grade resistance to high

pressure and high temperature washdown)

**Hazardous locations** Certified Class I Division 2 Group A-D T6 (C1D2) for hazardous locations when used with special bracket (ACC-AG-BHZB)

#### SAMSARA CLOUD SOFTWARE FEATURES

#### Features:

Map-based location tracking & Helicopter View

Live Share

Geofence and real-time alerts (SMS, email)

Find My Asset and Wake On Motion on battery operating mode for US only (see Battery section on more details on impact to battery life)

Out-of-box reporting (utilization, detention, dormancy, time-on-site, inventory, billing)

Developer AP

# **Technical Specifications (cont'd)**

## **CABLES** (one per gateway required)

CBL-AG-BPLC: Advanced ABS cable for undercarriage install providing detailed ABS diagnostics and alerting

CBL-AG-BABS: Basic ABS cable for undercarriage install providing ABS lamp status and alerting

CBL-AG-BRTK: Refrigerated trailer cable harness for AG53 with two-way Thermo King reefer control

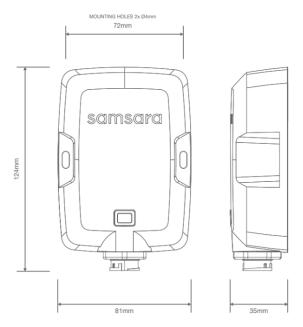
## **ACCESSORIES**

Door Monitor (DM11): Monitor swing and roll-up trailer doors

Cargo Monitor (CARGO): Detect the absence or presence of cargo

Environmental Monitor (EM31): Monitor temperature in real-time (additional license required)

Environmental Probe (ACC-EM-P): Detect additional temperature measurements (optional accessory with EM31)



[IMAGE SPECS]

# **Regulations**

### **IC REGULATIONS**

This device complies with Industry Canada's license-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.

This equipment complies with Innovation, Science and Economic Development Canada 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.

CAN ICES-3(B)/NMB-3(B)

#### **IC Radiation Exposure Statement:**

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

#### IC Déclaration d'exposition aux radiations:

Cet équipement est conforme Canada limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20cm entre le radiateur et votre corps.

#### FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

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 of the following measures:

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

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.