Powered Asset Gateway

AG52 (AG52-EU) Datasheet

OVERVIEW

The AG52 Powered Asset Gateway is ideal for monitoring dry-van trailers, heavy equipment, and high-value mobile assets. It features a waterproof and ruggedized enclosure, a variety of wireless sensor accessories, and a robust backup battery.

The AG52 enables improved operating efficiency, asset theft recovery, and streamlined regulatory compliance. It is part of Samsara's Connected Operations Cloud, enabling you to capture data that helps you run your operations more efficiently, safely, and sustainably.

PRODUCT HIGHLIGHTS

- A flexible solution for powered trailers and assets

- Real-time GPS location and sensor data

- High-capacity lithium-ion battery for backup application

- Ruggedized, weatherproof enclosure with flexible data inputs

- Easy-to-use wireless accesory sensors

- Certified for hazardous or flammable environments (C1D2) when used with special bracket (ACC-AG-BHZB)

DESIGNED FOR RAPID RETURN ON INVESTMENT

· Monitor and increase asset utilization

· Optimize asset pool inventory and location

· Recover lost or stolen assets

· Reduce inventory management and yard-walk time

· Lower temperature-related loss claims

· Simplify regulatory compliance and minimize infractions

TYPICAL APPLICATIONS

	Trailers	Powered Assets
Asset Type	· Dry van and flatbed trailers · Thermo King Reefers (not available in the EU) · Specialty trailers for liquid and chemical transport · Agriculture trailers	· Generators · Light towers · Construction equipment (backhoes, bulldozers, cranes, etc.) · Forklifts

Technical Specifications

CELLULAR DATA CONNECTIVITY

Cellular Data	LTE Cat M1 and NB-IOT Operating area: United States, Canada, Mexico, UK, EU
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

GPS	Advanced positioning system simultaneously reads from multiple independent satellite systems including GPS. Internal antenna for discreet installation.
Real-time tracking	Powered deployments feature real-time location updates

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, intermittent external power, or battery backup applications (via internal lithium-ion battery)
External Power	9-31V 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

Technical Specifications (cont'd)

ENCLOSURE

Material	UV-stabilized polycarbonate
Dimensions	124 × 81 × 35 mm
Weight	192 g
Operating temperature	Operation: -40° to 60°C externally powered, -20° to 60°C discharging on battery, 0°C to 45°C 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 Geofence and real-time alerts (SMS, email) Find My Asset on battery operating mode for US only (see Battery section on more details on impact to battery life) Developer APIs

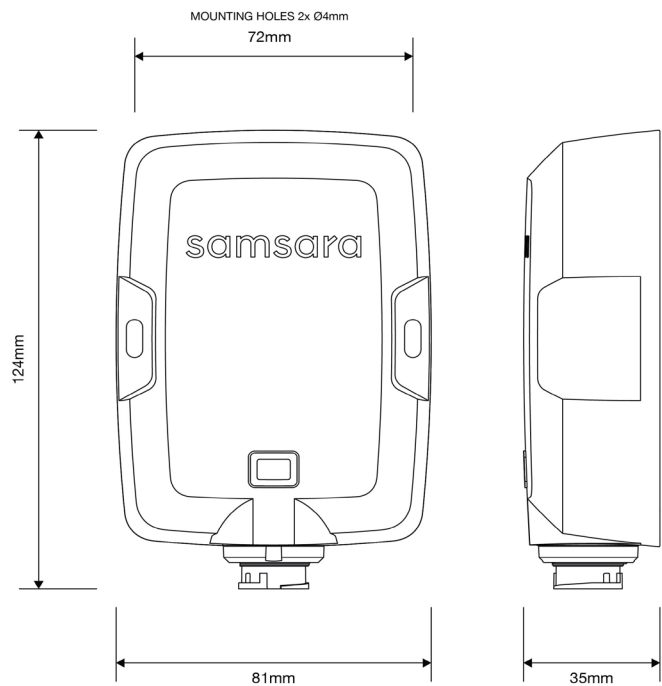# Cables & Accessories

CABLES (one per gateway required)

CBL-AG-BPWR	Powered cable for trailer 7-way connection and powered equipment with 1 digital input
CBL-AG-AEDP	European cable harness, dry van power only
CBL-AG-AEPC	European cable harness, dry van 7-way connector

ACCESSORIES

DM11	Wireless door sensor for swing and roll-up doors
CARGO	Wireless cargo sensor
EM21 (additional license required)	Wireless environmental monitor with temperature and humidity sensors

MOUNTING HOLES 2x Ø4mm
72mm
124mm
81mm
35mm

Regulations

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.

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 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.

Regulations (cont'd)

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:

- 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

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.