



# Asset IoT Gateway

## AG46P Datasheet



### OVERVIEW

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The AG46P Asset IoT Gateway is ideal for basic monitoring of dry-van trailers, heavy equipment, and high-value mobile assets. It features a waterproof and ruggedized enclosure and a robust backup battery.

The AG46P enables improved operating efficiency, asset theft recovery, and streamlined regulatory compliance. It is part of Samsara's complete system that combines asset tracking, fleet management, safety, and compliance solutions in a single platform.

### DESIGNED FOR RAPID RETURN ON INVESTMENT

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- Monitor and increase asset utilization
- Optimize asset pool inventory and location
- Recover lost or stolen assets
- Reduce inventory management and yard-walk time

### TYPICAL APPLICATIONS

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#### Trailers

- Dry van trailers
- Specialty trailers for liquid and chemical transport
- Agriculture trailers

#### Powered Assets

- Construction equipment (backhoes, bulldozers, cranes, etc)
- Forklifts

### PRODUCT HIGHLIGHTS

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- A flexible solution for semi-trailers (including reefers), heavy equipment, and mobile assets
- Real-time GPS location and sensor data with live updates
- High-capacity lithium-ion battery for unpowered applications
- Ruggedized, weatherproof enclosure with flexible data inputs

# Technical Specifications

## CELLULAR DATA CONNECTIVITY

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|                       |  |
|-----------------------|--|
| Cellular Data         | 4G LTE cellular connectivity<br>LTE: quad band 2/4/5/12. 3G: dual band 2/5.<br>Operating area: United States, Canada, Mexico, United Kingdom, European Union |
| Offline Storage       | Built-in flash memory logs data when Internet connectivity is unavailable.   |
| Secure Communications | All Internet connectivity secured via SSL with 256-bit AES encryption (military-grade).  |

## CELLULAR DATA CONNECTIVITY

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|                    |  |
|--------------------|--|
| GPS                | Advanced positioning system simultaneously reads from multiple independent satellite systems including GPS and GLONASS global navigation satellite systems. Internal antenna for discreet installation. Industry leading -162 dBm sensitivity with 1 second time-to-fix (hot start). |
| Real-time tracking | Powered deployments feature real-time location updates (up-to-the-second, with live map view)  |

## POWER

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

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|---------------------|---|
| Sources             | Designed for use with external power, intermittent external power, or self-powered applications (via internal lithium-ion battery)  |
| External Power      | 12-30V DC<br>Power draw: 200 uW (sleep) to 13,000 mW (peak)   |
| Lithium-Ion Battery | 12.5 Ah internal battery capacity<br>12 months on full charge (2 check-ins/day) when fully charged<br>See Deployment Configurations section of this datasheet for application-specific battery life.<br>For questions about the safe use of lithium battery powered devices, please consult your company's safety department. |
| Charging            | Average unit will require 12 hours of charge for full battery charge  |

# Technical Specifications (cont'd)

## ENCLOSURE

|                       |   |
|-----------------------|---|
| Material              | Gateway: UV-stabilized polycarbonate<br>Mounting plate: Powder-coated and corrosion resistant stainless steel                                 |
| Dimensions            | 155 × 125 × 55.3mm (6.1 × 4.9 × 2.2 in)   |
| Weight                | 662 g   |
| Operating temperature | Operation: -40° to 85°C<br>Battery charge: 0° to 50°C   |
| IP rating             | IP67 (weatherproof and water resistant up to 1m submerged)<br>IP69k (highest grade resistance to high pressure and high temperature washdown) |

## SAFETY, HAZARDOUS LOCATIONS, & COMPLIANCE

|                     |   |
|---------------------|---|
| Hazardous locations | US (UL)<br>- Class I, Division 2, Groups A, B, C, D, Temperature Class T4 |
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## SAMSARA CLOUD SOFTWARE FEATURES

|                   |  |
|-------------------|--|
| Software Features | Map-based location tracking with live updates<br>Real-time alerts (SMS, email)<br>Operational reports: Utilization, inventory, dormancy, detention, billing, equipment, trip history, and time on site |
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# Deployment Configurations

| Power Cable   | 7-way trailer cable harness  | Powered asset cable harnesses  |
|---------------|--|--|
| Check-in Rate | Powered: Live<br>Unpowered: Every 12 hours<br>Unpowered check-in rate is user configurable | Powered: Live<br>Unpowered: Every 12 hours<br>Unpowered check-in rate is user configurable |
| Battery Life  | 12 months (2 check-ins a day) on full charge   | 12 months (2 check-ins a day) on full charge   |

# Cables & Accessories

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

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|             |  |
|-------------|--|
| CBL-AG-A7WY | Dry-van trailer cable harness for AG46P with 7-way power connection                |
| CBL-AG-APWR | Powered asset cable harness for AG46P with power and aux inputs (for engine hours) |
| CBL-AG-AEDP | European dry-van trailer standard cable harness for AG46P                          |
| CBL-AG-AEPC | European dry-van trailer Y-cable harness for AG46P with 7-way power connection     |

# Regulations

## IC REGULATIONS

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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

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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.