

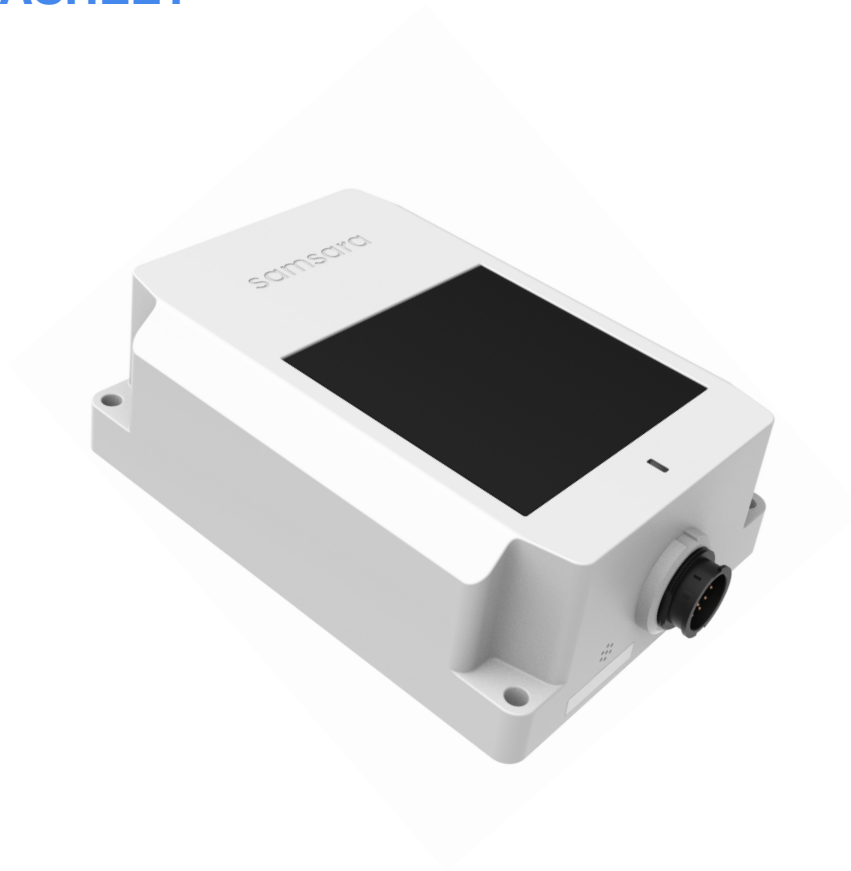


samsara

*goFleet*  
Connected Intelligence. Smarter Solutions.

# Asset IoT Gateway

## AG24 DATASHEET



## OVERVIEW

The AG24 Asset IoT Gateway is ideal for monitoring dry-van and refrigerated trailers, heavy equipment, and high-value mobile assets. It features a waterproof and ruggedized enclosure, a variety of sensor and interface accessories, and multiple built-in power options.

The AG24 enables improved operating efficiency, asset theft recovery, and streamlined regulatory compliance. It is part of Samsara's complete sensor system that combines asset tracking, fleet management, safety, and compliance solutions in a single platform.

## PRODUCT HIGHLIGHTS

- 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 battery with solar recharging for unpowered applications
- Ruggedized, weatherproof enclosure with flexible data inputs
- Easy-to-use wireless accessory sensors

## 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

## TYPICAL APPLICATIONS

	Trailers/Reefers	Powered Assets
Asset Type	<ul style="list-style-type: none"><li>• Dry van trailers</li><li>• Reefer trailers</li></ul>	<ul style="list-style-type: none"><li>• Construction equipment (backhoes, bulldozers, cranes, etc)</li><li>• Forklifts</li><li>• Remote generators</li></ul>

# Technical Specifications

## Cellular Data Connectivity

Cellular Data	4G LTE cellular connectivity, with 3G fallback where LTE coverage is unavailable.  LTE: quad band 2/4/5/12. 3G: dual band 2/5. Operating area: United States, Canada, Mexico, UK
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).

## Location Tracking

GPS	Advanced positioning system simultaneously reads from multiple independent satellite systems including GPS and GLONASS global navigation satellite systems. Internal antenna for discreet installation. Optional external antenna available for non-standard mounting configurations. 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.

Sources	Designed for use with external power, intermittent external power, or self-powered applications (via internal battery and built-in solar panel)
External Power	12-30V DC Power draw: 90 uW (sleep) to 900 mW (peak)
Battery	12.5 Ah internal battery capacity  From 5 years (2 check-ins/day, no accessory sensors) to 2 months (12 check-ins per day, with accessory sensors).  See Deployment Configurations section of this datasheet for application-specific battery life.
Solar Charging	Built-in solar panel extends battery charge with up to 12 check-ins per day (vertical or upward-facing mounting, outdoors, North America south of 57° latitude).

## Engine Diagnostics

Engine Information	Engine hours Engine RPM Battery Voltage Engine Status Coolant Temp	If available: DEF Level Seat Belt Usage Ambient Air Temp Engine Load Engine Check-light Fuel Level
Models Supported	Caterpillar Equipment with 9-pin ECM port  Caterpillar Equipment with 14-pin ECM port	

## Enclosure

Material	Gateway: UV-stabilized polycarbonate Mounting plate: Powder-coated and corrosion-resistant stainless steel
Dimensions	105 x 152 x 47.5 mm ( 4.1 x 6.0 x 1.9 inches)
Weight	510 g
Operating temperature	Operation: -40° to 80°C Battery charge: 0° to 50°C
IP rating	IP 67 (weatherproof and water resistant up to 1m submerged)

## Data Interfaces

Interfaces	CAN Bus (500kbps, 250 kbps) Digital inputs (2x). Maximum voltage 30V, Vil 1.2V, Vih 2V Digital output (1x)*  *Requires additional software, contact Samsara for availability information
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## Samsara Cloud Software Features

Software Features	Map-based location tracking with live updates Real-time alerts (SMS, email) Operational reports: Utilization, inventory, and time on site FSMA-compliant temperature reports Developer APIs
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# Deployment Configurations

Cable Type	Trailer cable harness	Powered asset cable harness
Check-in Rate	Powered: live Unhooked/off: every 2 hours	Powered/On: Live Unpowered/Off: every 2 hours
Battery Life	3 months	3 months

## Ordering Information

### Gateway

HW-AG24	Samsara Asset IoT Gateway (requires license and accessory harness)
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### Accessory Cables (one per gateway required)

#### Trailer Cables

CBL-AG-A7WY	Dry-van trailer cable harness for AG24 with 7-way power connection
CBL-AG-AEPC	European Dry-van trailer Y-cable harness for AG24 with 7-way power connector
CBL-AG-AEDP	European Dry-van trailer cable harness for AG24 with 7-way power connection

## Powered Asset Cables

CBL-AG-APWR	Powered asset cable harness for AG24 with power and ignition inputs (for engine hours)
CBL-AG-ACT9	Powered asset cable harness for AG24 with 9-Pin Caterpillar connection (currently US only)
CBL-AG-ACT14	Powered asset cable harness for AG24 with 14-Pin Caterpillar connection (currently US only)

## Gateway License (one per gateway required)

LIC-AG2-ENT	Enterprise license for AG24 gateway, includes hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support
LIC-AG2T-EXPRESS	Express subscription for trailers, includes AG24 gateway, trailer cable harness rental, hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support
LIC-AG2TY-EXPRESS	Express subscription for European trailers, includes AG24 gateway, trailer Y-cable harness rental, hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support
LIC-AG2P-EXPRESS	Express subscription for powered assets, includes AG24 gateway, power cable harness rental, hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support
LIC-AGC9-EXPRESS	Express subscription for powered assets, includes AG24 gateway, Caterpillar 9-Pin cable harness rental, hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support (currently US only)
LIC-AGC14-EXPRESS	Express subscription for powered assets, includes AG24 gateway, Caterpillar 14-Pin cable harness rental, hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support (currently US only)

## Accessories



EM21 Wireless  
Temperature & Humidity



ACC-DM11 Wireless  
Door Sensor



ACC-CARGO  
Wireless

ACC-DM11	Wireless door sensor for swing and roll-up doors.
ACC-CARGO	Wireless cargo sensor
HW-EM21	Wireless environmental monitor with temperature and humidity sensors (requires license)
HW-EM22	Wireless environmental monitor with external food-grade temperature probe