



Industrial IOT Gateway Family Datasheet

GW-Series



Overview

Samsara IoT gateways securely connect sensor data to the Samsara cloud. All models include WiFi and built-in cellular connectivity, storage, and flexible interfaces to connect to a variety of sensors.

Gateways are compatible with a wide variety of sensors, including environmental monitors, power monitors, and analog input modules.

HIGHLIGHTS

- Wirelessly streams sensor data to the Samsara Cloud in real time
- Cellular connectivity included: no extra SIM cards, no carrier contracts, and no data fees
- Secured with 256-bit AES encryption
- Zero configuration, automatically discovers nearby sensors and connects to the cloud

Simple, Scalable Industrial Monitoring

Simplicity and Cloud, Hardened for Industrial Environments

Samsara gateways leverage ubiquitous cellular and WiFi connectivity and scalable, hassle-free cloud infrastructure to provide an easy to use and affordable monitoring solution. Proprietary software algorithms provide security and reliability, enabling industrial customers to deploy a simple solution in demanding environments.

Powerful Cloud-Hosted Software

Samsara IoT Gateways stream sensor data to Samsara's powerful cloud-hosted software platform. Highly scalable, Samsara offers unlimited sensor data storage, powerful analytics and search, real-time visibility and alerts, and intuitive dashboards.

Zero-Configuration Cellular Connectivity

The Samsara Industrial IoT Gateway offers built-in cellular connectivity, provisioned to connect automatically to Samsara's cloud-hosted platform. Sensor data automatically streams to the cloud with no VPNs to configure, and no software to provision.

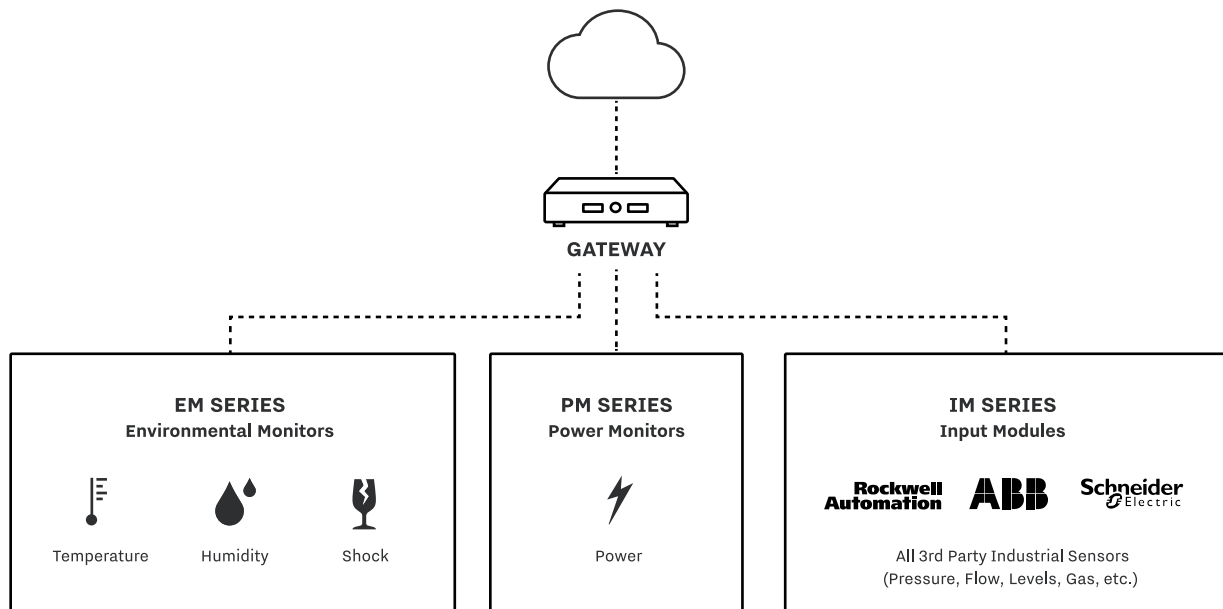
1/10th the Cost of Traditional Sensor Solutions

By offering a complete, fully-integrated hardware + software + networking solution, Samsara dramatically reduces the cost of capturing sensor data, eliminating up-front infrastructure investments, complex engineering and configuration, and ongoing maintenance. As a result, operators can capture new data that would be too costly and complex with traditional solutions.

Captures a Wide Range of Sensor Inputs

Samsara IoT gateways work with a variety of sensors and data sources to bring visibility to virtually any operation. Samsara wireless logging sensors are ideal for asset monitoring, supply chains, and food & drug safety; Power monitors capture fine-

grain electrical power usage to analyze consumption and measure efficiency; And flexible input modules capture data from 3rd party industrial sensors to measure anything from pressure to flow, tank levels, gas, and more.



Deployment Applications

Industrial Monitoring

Remotely monitor industrial sensors, from pressure to temperature, tank levels, flow, and gas levels. Samsara operates effectively as a stand-alone industrial monitoring solution, or in tandem with an existing SCADA system.

Refrigeration Monitoring

Monitor temperature of perishable goods, from produce to pharmaceuticals, with real-time alerts to prevent loss and automatic reports to simplify compliance.

Energy Monitoring

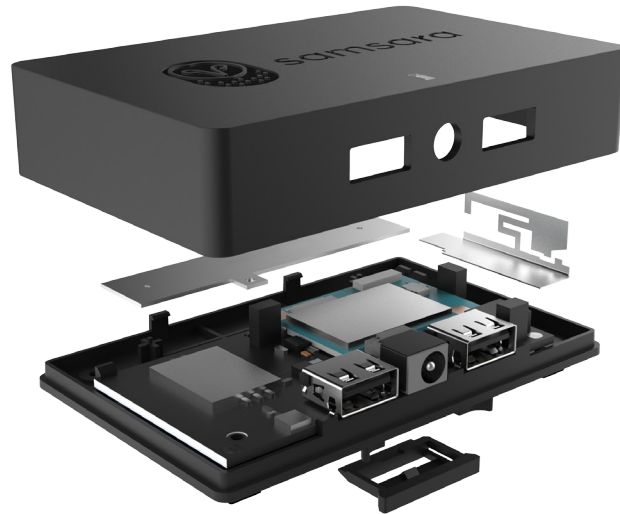
Samsara provides a complete picture of power consumption, equipment output, and efficiency, enabling operators to save cost by identifying and mitigating waste. Samsara is ideal of monitoring power of distributed equipment and operations, from lighting to pump motors.

Supply Chain & Asset Monitoring

Gain real-time visibility into distributed and mobile assets. Ensures that equipment is in the right place at the right time, analyze and optimize asset utilization, and monitor handling of high value goods.

A Powerful Platform

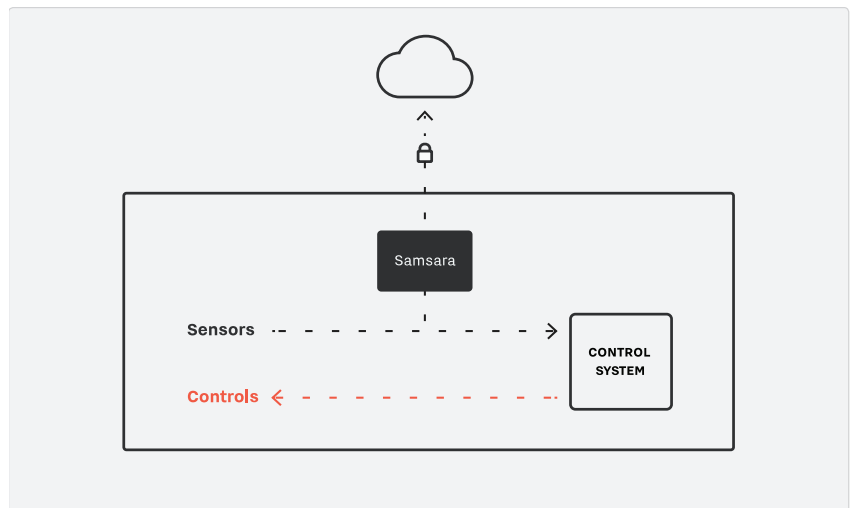
- Global cellular connectivity and dual band WiFi
- Flash memory stores millions of data points if gateway is disconnected
- Proprietary power-efficient wireless sensor connectivity
- Powerful CPU preforms encryption, compression, and automatic provisioning
- Energy-efficient design with 100mW low-power mode



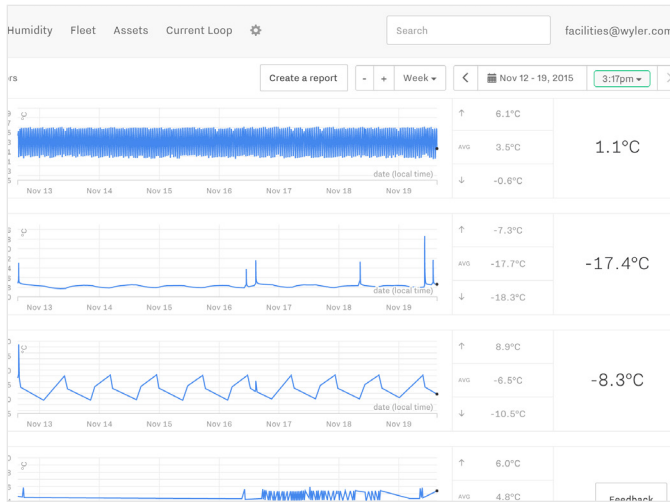
Read Only System Designed for Security

HIGHLIGHTS

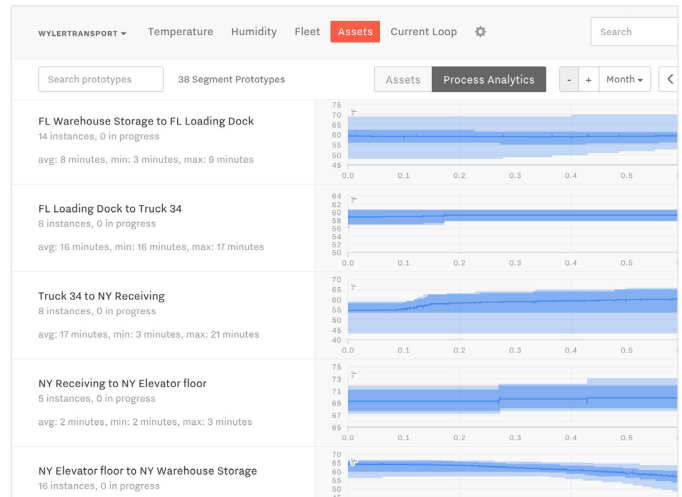
- Data transmission secured with SSL
- Security updates applied over-the-air
- Redundant hosted software service
- Audited by 3rd party security testing



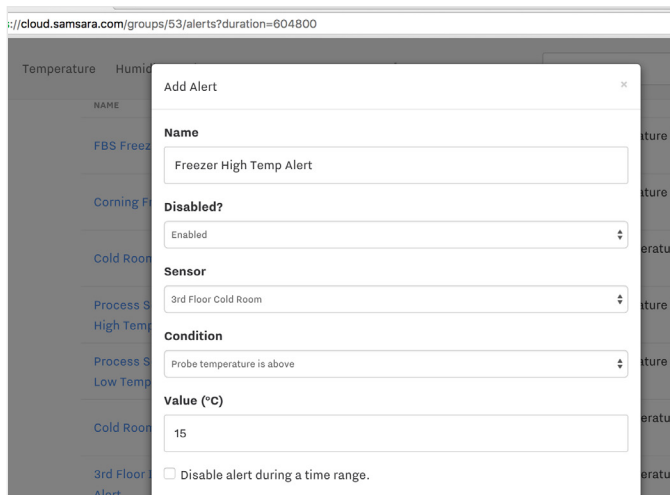
Part of Complete Solution



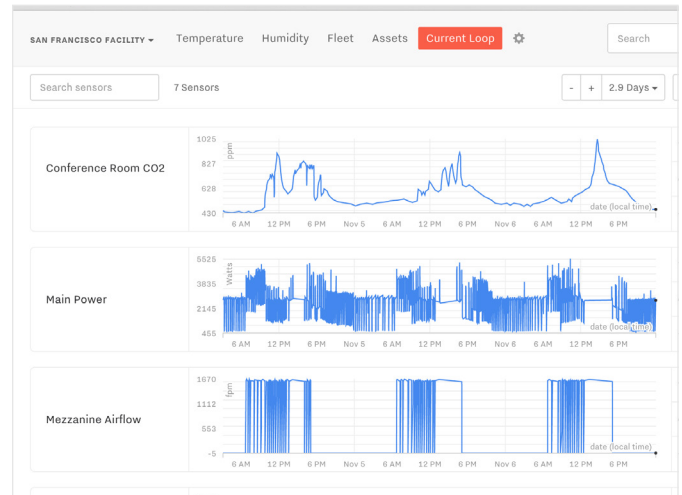
Real-time visibility of assets anywhere in the world from a single web-based dashboard



Analytics engine provides deep insight into your organization's operations



Receive real-time alerts by email or SMS of critical events in your environment



Flexible input modules allow for seamless visibility of 3rd-party sensors in the cloud

Technical Specifications

Data Inputs

Location	GPS Geolocation (approximates location if GPS is unavailable)
Wireless sensors and input modules	Samsara wireless sensors provide flexible zero-configuration monitoring (see EM-Series, IM-Series, and PM-Series datasheets)
Accessory ports	2 accessory ports for hard-wired Samsara input modules and future expansion

Wireless Sensors and Input Modules

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

Internet Connectivity

Cellular	Continuous 3G cellular connectivity Global coverage, works in over 150 countries
Cellular Bands	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
WiFi	802.11 b/g/n Wi-Fi (2.4GHz/5GHz) WPA2-PSK authentication
Data security	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

Real-time connectivity	Streams sensor data to the Samsara Cloud in real time
Built-in storage for offline logging	Sensor data stored in built-in flash memory when Internet connectivity is unavailable

Power

Power consumption	2W in continuous transmission mode, 100mW in low-power mode
Input power	12V-48V DC Direct wiring connector and 120V AC adapter (US) included

Enclosure

Dimensions	9.5 x 6 x 2 cm (3.7 x 2.3 x 0.8 inches)
Weight	72g
Operating Temperature	-5C to 60C
Ingress protection	IP 51

License and Accessories

Cloud License

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

Wireless Sensors and Inputs

Samsara EM Series Wireless Environmental Monitors	Monitor temperature, humidity, and shock
Samsara IM-Series Wireless Input Modules	Monitor 3rd party industrial sensors with Samsara Wireless Input Modules with 4-20mA analog input interface
Samsara PM-series power monitors	Monitor single and 3 phase electrical power consumption

Ordering information

GW Series IoT Gateway

HW-GW22	Samsara Cellular + Wireless gateway designed for industrial and commercial deployments
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License

LIC-GW-1YR	1-year license for GW-series gateways
LIC-GW-3YR	3-year license for GW-series gateways

Accessories

AC-GW-WW-1	AC adapter for GW-series gateways (XX = US, EU, UK, or AU)
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