

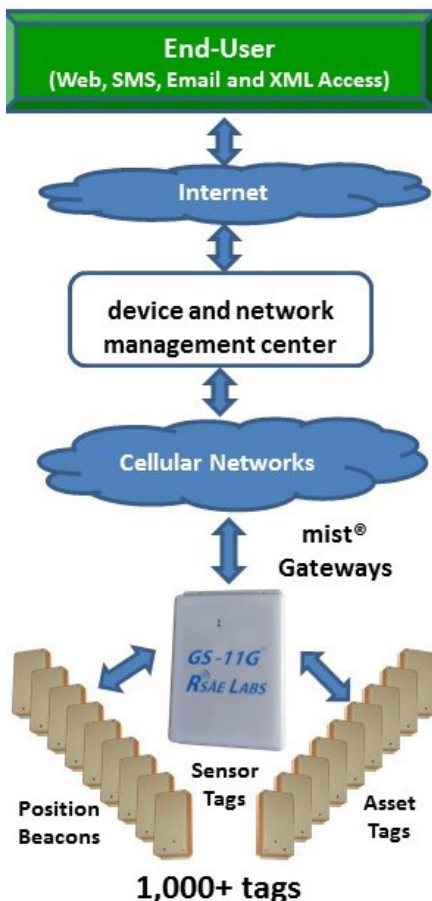


Actionable Information from the GS-11G and Networked mist® Mesh Devices to Better Manage Your Assets and Operations

GLOBAL SENTINEL® GS-11G™ MOBILE MESH GATEWAY

ASSET MONITORING YOU CAN TRUST

If Asset Visibility and Monitoring is critical to your organization, the RSAE Labs' Global Sentinel-11G is essential to your enterprise. The GS-11G is a flexible device that provides worldwide infrastructure-free tracking, monitoring and security for any asset. It also serves as mist® mesh gateway for 1,000s of mist® asset and sensor devices. The GS-11G device mounted on an asset reliably reports anomalies from any region in the world securely and timely, providing you the ability to respond to an unplanned situation. The device communicates using the latest cellular technology, providing two-way, encrypted (AES 128), redundant wireless communications. Cell tower and mesh beaconing supplements positioning in GPS-denied environments. Sensors include mount-demotion, Gs, motion, tilt and temperature. This allows for continuous global monitoring, positioning, status reporting, event alerting and remote configuration. When your organization must stay informed of the security status of your valuable assets, trust the advanced engineering of RSAE Labs' GS-11G. The GS-11G is designed with replaceable commodity batteries providing 1,000s of reports. Most importantly, if asset damage occurs, the device issues an immediate alert and the customer is notified by their preferred mode of communication (by web, text, SMS or e-mail) within as little as 2 minutes from anywhere on earth.



GS -11GTM

Key Features and Benefits

- Global coverage through cellular communications
- Immediate reporting for event notification
- Data encryption delivering secure reporting
- Data storage for asset sensor log history
- Customized reporting based on time or sensor over-threshold event
- Position status updates at timed intervals or driven by an event
- Remote reconfiguration for re-routing, cargo profile changes and firmware updates
- Requires no fixed infrastructure
- Self-sufficient device minimizes man-power costs

Physical Characteristics

- Dimensions 9" x 6" x 1.5"
- Color white
- Weight..... 2.5 lbs. (1.15 kg)

Environmental

- Temperature -40 C to +85 C
- Humidity..... 100% @ 40 C
- Vibration..... SAE J1455 2006
- Shock (survival)..... 1 meter drop 6-sided
- Ingress Protection Rating..... IP-67/NEMA-4

GPS

- Receive..... 1575.42 MHz
- Channels..... 50
- Sensitivity..... -138 dBm (cold start)
- Time to First Fix (typical)
 - Cold Start 36 sec
 - Warm Start 36 sec
 - Aided Start..... 4 sec
- Accuracy (SA Off)
 - Position (CEP, 2D) <8.0 m (unobstructed)

Power (Internal Battery Only)

- Sleep/Operating 250 uA/500 uA
- Battery Type Lithium-thionyl Chloride
LS-17500 or equivalent
- Battery Quantity..... 10 ea
- Battery Life..... 2,500 reports

Sensors

- Mount/Demount..... Reed Relay
- Shock/Motion 0.12 – 16 G threshold
- Temperature, ambient air -40 C - +85 C ±2.5 C*

Certifications

- FCC Part 15B and 15C ID: Pending
- IC: Pending
- CE : ETSI EN 300 328 (Emissions),
ETSI EN 301 489-1 (Immunity)
- SAE J1455 2006, IP-67/NEMA-4
- US DOD: HERO, HERF, HERP (pending)

Indicators

- GSM LED.....Blue (xmitting), Yellow (powered)
- mist[®] mesh LED (On/Off network).....Green/Red

Functional

- Global Coverage.....cellular
- Low Latency Reporting <2 minutes
- Encryption..... AES-128/CCM
- Data Storage..... 1 Mbyte
- Reporting Timed, event driven,
- Position Timed or event driven
- Configuration & Upgrade..... Remote via comm.

Global Cellular Radio

- GSM/GPRS SIM5320A
 - Dual-Band UMTS/HSDPA 850/1900MHz
 - Transmit power..... .25W peak
 - Transmit Duty Cycle 12.5%

- Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz
 - Transmit power..... 1W peak
 - Transmit Duty Cycle 12.5%

Mesh Radio

- Radio Type TI CC2538
- Radio Standard 802.15.4 Phy only
- Transmit..... 2402 MHz – 2480 MHz
- Receive..... 2402 MHz – 2480 MHz
- ERP -3.3 dBm
- Modulation DSSS
- DSSS Chip Rate..... 2 Mchips/sec
- Data Rate 250 kbps
- Channels 16
- Channel Bandwidth..... 3 MHz

