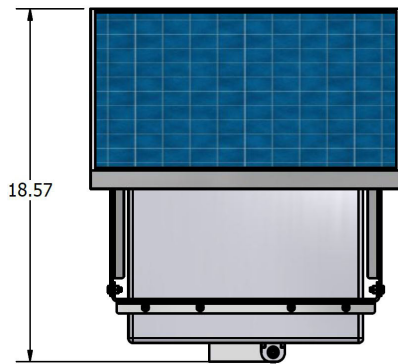
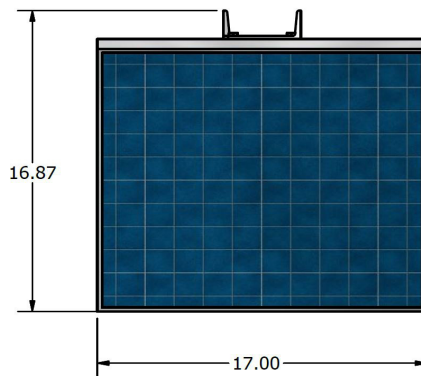




FMG-SP

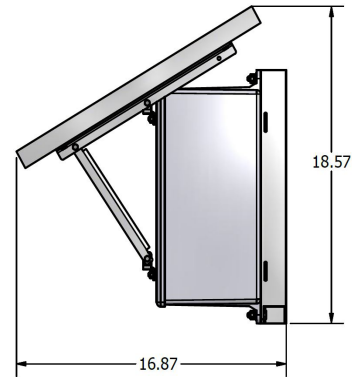


FRONT VIEW



TOP VIEW

• Units in inches



LEFT SIDE VIEW

FIXED MESH GATEWAY - SOLAR POWERED

mist®, NEXT GENERATION WIRELESS MESH TECHNOLOGY

Whether operating across the United States or shipping around the world, RSE Labs will ensure your valuable assets are safe and secure across the entire enterprise through continuous monitoring and near-real time reporting. Our Mesh Asset Tag (MAT) sensors constantly monitor the position, status and security of assets to provide logistics intelligence, intrusion detection, and situational awareness.

RSE Labs Fixed Mesh Gateway (FMG-SP) is the **mist**® mesh network's primary path to the Internet. It wirelessly communicates with our Mesh Asset Tags using RSE Labs mesh protocol and forwards secure data from those tags through the Internet to the Device Management Center (DMC), where the data is decrypted, stored and passed to authorized third parties.

The FMG-SP allows rapid, low cost deployment and operations. It contains a mesh radio and a cellular modem connection to the Internet. These allow the FMG-SP to receive data from Mesh Asset Tags and forward it to the Device Management Center, giving the end-user visibility of the state of the Mesh Tags and the assets they monitor. The FMG-SP is designed for unattended, autonomous operation; it requires no Ethernet connection or external power. The solar panel can be easily adjusted for optimum performance.



FMG-SP

mist® Fixed Mesh Gateway - Solar Panel

Key Features and Benefits

- Provides Cubic Global Tracking Solutions mist® mesh network authorization and security
- Integration into management systems providing on-route and business process information
- Portal for mist® mesh network configuration and management
- Bidirectional data interface between mist® mesh network and DMC
- Solar powered for remote autonomous installation
- Back haul via wireless cellular Internet

Physical

- Dimensions 16.87" x 17" x 18.57"
- Weight..... 31 lbs.
- Color Grey

Environmental

- Temperature 0 C to +50 C
- Humidity..... 100% @ 40 C
- Vibration..... SAE J1455 2006
6 G RMS all axis
- Shock (survival)..... 1 meter drop 6-sided*
*except solar panel
- Ingress Protection Rating..... IP67/NEMA 4

Mesh Radio

- Radio Standard 802.15.4 Phy only
- Transmit 2402 MHz – 2480 MHz
- Receive 2402 MHz – 2480 MHz
- EIRP (w/standard antenna)..... 10 mW
- Sensitivity..... -98 dBm
- Modulation DSSS
- DSSS Chip Rate..... 2 Mchips/sec
- Data Rate 250 kbps
- Channels..... 16
- Channel Bandwidth..... 3 MHz
- Range
Device-Device 200 m (90° to mount)
Device-Device 100 m (±70°)
Device-Device..... 20 m (long axis)

Interfaces (Physical)

- Ethernet..... 802.11n WiFi
- Serial Console..... Internal

Cellular Radio

- Type USB modem
- Default Verizon 4G LTE

Antenna

- Connector Internal
- Type 6 dBi center-fed dipole
- Polarization..... Vertical

Power (Solar)

- Internal Batteries
- Solar recharge

Sensors

- Temperature, on-chip -40 °C to +85 °C

Indicators

- LED Red/Green (internal)
- Buzzer..... 2.3 kHz

Functional

- mist® mesh network... Full routing node
- Tag population..... 1,000 to 10,000 tags
- Encryption..... AES-128/CCM
- Data Storage..... 4 Gbytes
- Reporting Timed, events
- Position Timed or event driven
- Upgrade..... Remotely via Ethernet
- Operating System Red Hat Linux v 5.3

Certifications

- FCC Part 15B and 15C ID: YVDFMG3
- HERO (test complete/pending report)
- HERF (test complete/pending report)
- HERP (test complete/pending report)