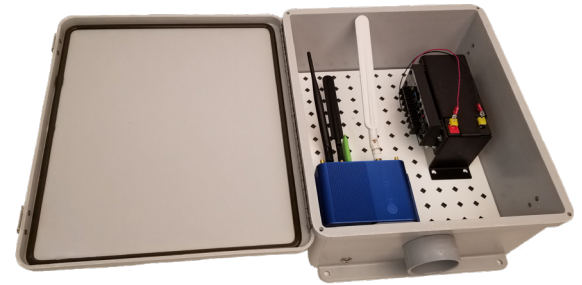


The **SlopeSense** gateway system supports your remote sensor applications in virtually any environment, and is ideal for structural or geotechnical monitoring applications:

- Strain in buried pipelines
- Pore pressure in a tailings dam
- Deformations of embankments and retaining walls
- Landslide areas above dams, highways, and railroads providing early warning of slope failure



## DESCRIPTION

The **SlopeSense** system consists of a number of remote data loggers reading vibrating wire sensors, connected to a central gateway via a LoRa® radio network. The data loggers transmit their readings to a centralized gateway, where the data is transmitted to an FTP server.

**SlopeSense** data loggers are powered by lithium batteries and the gateway is powered by either A/C power or by a 12V battery with a solar panel.

The **SlopeSense** gateway has a range up to 10 miles line-of-sight, or 2 to 3 miles with obstructions (e.g. within a structure) using the global sub-GHz ISM radio bands in North America, Europe and the APAC regions.

The **SlopeSense** gateway is a highly scalable, rugged certified solution specifically designed for outdoor LoRa network deployments and capable of resisting harsh environmental factors including; moisture, dust, wind, rain, snow and extreme heat.

The **SlopeSense** gateway is the industry's most configurable, manageable and scalable LoRa gateway system for geotechnical and structural applications.

The **SlopeSense** system is quick to deploy and data is easily accessible from all connected remote sensors.

## KEY FEATURES

- **Real Time Monitoring:**  
Ideal for continuous, unattended monitoring, delivering readings in near-real time.
- **Network Connectivity:**  
Choose your preferred data management platform and transfer data via approved 4G-LTE networks.
- **Flexible Configurations:**  
Multiple options for antenna configurations, including a GPS antenna, two LoRa radio antennas, and three cellular antennas.
- **Durable Components:**  
Rated and resistant to most environmental factors. Intuitive design offers enhanced thermal performance and simple external port access to the SIM and USB connectors, allowing the user to leave the case sealed at all times.

## CONFIGURATIONS:

A typical **SlopeSense** system consists of a number of remote data loggers and a **SlopeSense** gateway.

Subscribe to our Atlas Web-Based Monitoring system and view data from any device via your web browser. You can also setup Atlas to send SMS text or email alarms when thresholds are exceeded. Atlas can also be configured to send automated PDF reports, which are emailed to you and/or your team.

- **Gateway:** Choose the gateway based on your global region.
- **Antennas:** The gateway comes with 1 GPS, 1 LoRa, and 2 cellular antennas. Special order a gateway system with up to 2 LoRa antennas and 3 cellular antennas.
- **Mounting Kit:** Shipped with a pole mounting kit for poles up to 2 inches (50 mm).\*
- **Power:** Two options for the Gateway - indoor unit or outdoor unit. The indoor unit requires AC Mains input. The outdoor unit is an integrated 85W solar panel and 12V 100Ah battery.
- **Data Visualization:** Sensor readings retrieved from the remote data loggers are transmitted automatically from the gateway to an FTP server, such as DGSi's Atlas web-based monitoring system.\*\*

*\*Contact your local DGSi Sales Manager or distributor for alternate mounting schemes.*

*\*\*Subscription required*

## ORDER:

Gateway Americas_____	58871000
Gateway Europe_____	58871100
Gateway APAC_____	58871200
Indoor Power Kit_____	58870100
Outdoor Power Kit_____	58870200

## SPECIFICATIONS:

- **Cellular Performance**  
4G-LTE Category 4
- **Input Voltage**  
Indoor: 9VDC 1.7A input provided by 100/240 VAC 50/60 Hz external adaptor or direct wired DC power cable  
Outdoor: 100Ah lead-acid battery with 85W solar panel.  
Input power: 37-57 VDC
- **GPS/GNSS**  
GNSS for LoRa Packet Time Stamping
- **LoRa Specifications**  
Frequency Band: 868, 915 or 923 MHz.  
Channel Capacity: 8-channels (half-duplex)  
LoRa Power Output: 27 dBm maximum output power before antenna
- **Connectors**  
Ethernet: RJ45 ethernet jack  
USB Host: USB 2.0 Type A connector  
Antennas: Cellular, GPS, LoRa - female SMA  
LoRa: reverse polarity SMA
- **Environmental**  
Operating Temp: -40 to +70°C.  
Storage Temp: -40 to +85°C
- **Physial Description**  
Imperial: (LxWxH): 10.35" x 3.58" x 10.12"  
Metric: (LxWxH): 262mm x 91mm x 257mm  
Weight: 6.06 lbs (2.75 kg)  
Chassis: IP67 rated aluminum enclosure
- **Certifications**  
EMC Compliance: US (FCC Part 15 Class B) and Canada (ICES-003 Class B)  
Radio Compliance: US (FCC Part 22, 24, 27) and Canada (ISED)  
Safety: UL/cUL 60950-1 and UL/cUL 62368-1  
obile Network Approvals: PTCRB/AT&T/Verizon
- **Quality:** MIL-STD-810G: High temp, Low temp, Random Vibration  
SAEJ1455: Transit drop & handling drop, random vibration, swept-sine vibration  
IEC68-2-1: Cold temp  
IEC68-2-2: Dry heat