

Durham Geo Slope Indicator offers complete monitoring solutions that include:

- **SlopeSense V1 VW Loggers:** DGSi's cost-effective, easy-to-install data logger system.
- **SlopeSense Gateway:** A network of data loggers connected to a central gateway via a LoRa® radio network.
- **Atlas Web-Based Software:** Monitoring alarm conditions in near-real-time, you can capture data immediately after the readings are obtained.



## OPERATION

The **SlopeSense** system consists of a number of remote data loggers each reading one vibrating wire sensor. **SlopeSense** 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** V1 VW Logger is simple to use and easy to set-up. After configuring your gateway, connect the logger to your computer and use the provided software to join the V1 VW Logger to the network and to specify the reading frequency.

**SlopeSense** on-site set-up is simple; connect the sensor signal cables to the logger then close the logger and walk away.

Readings are transmitted from the logger to the **SlopeSense** gateway, from there to an ftp server (Atlas Web Monitoring\*).

The **SlopeSense** system supports your remote sensor applications in virtually any environment.

*\*Subscription required*

## KEY FEATURES

- **Simple to Use:** Learn how to use your V-Logger in minutes, not hours.
- **Increased Accuracy:** The **SlopeSense** V1 VW Logger continues the V-Logger's "Best in industry for VW logging accuracy" due to a revolutionary measuring technique.
- **Reliable:** Rated for temperatures from -40° to 85°C. This product is IP 65 Rated.
- **Improved Noise Reduction:** The proprietary reading method reduces outside interference from telecom or electrical sources, providing cleaner, more reliable data for your project.
- **Extended Battery Life:** The VW logger uses a unique algorithm for maximizing the battery life of the lithium

The **SlopeSense** system 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 to provide early warning of slope failure.

## CONFIGURATIONS:

The **SlopeSense** V1 VW Logger data logger requires a 3.6V Lithium D-cell battery. These batteries must ship via Ground Service, but can be sourced locally if the logger is to be shipped via air.

Data is transmitted after each reading in a CSV format to an FTP server. This data can be used immediately in your spreadsheet software.

Subscribe to our Atlas Web-Based Monitoring system and view data from any device via your web browser, and 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.\*

## ORDER:

V1 VW Logger \_\_\_\_\_ 58872000  
Lithium D-Cell (3.6V, 19Ah) \_\_\_\_\_ 52615122



\*Subscription required

## SPECIFICATIONS:

### • Measurement Range

Reads vibrating wire sensors operating in the range of 450-6000 Hz.  
Reads thermistors or RTDs in the range of -20 to 120°C.

### • Logger Resolution

±0.001 Hz for vibrating wire sensors.  
±0.01°C for temperature sensor.

### Logger Accuracy

±0.05 Hz for vibrating wire sensors.  
±0.05°C for temperature sensor.

### • LoRa Specifications

Frequency Band: 868, 915 or 923 MHz.  
LoRa Power Output: 19 dBm maximum output power before antenna.

### • Environmental

Operating Temp: -40 to +85°C.  
Storage Temp: -40 to +85°C.

### • Physical Description

Imperial: (LxWxH): 6.85" x 6.30" x 2.95".  
Metric: (LxWxH): 174mm x 160mm x 75mm.  
Weight: 1.07 lbs (486 g).  
Chassis: IP65 rated polycarbonate 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) .

### • Logger Schedule

Reading intervals specified by day, hour, minute and second.  
Maximum interval is 1 year. Minimum interval is 15 seconds.

### • Power

One lithium D-cell battery provides power for more than 10 years in moderate temperatures, assuming readings taken every hour.