VW MiniLogger

VW MiniLogger Applications

The VW MiniLogger is a reliable, low-cost data logger designed to monitor a single vibrating wire sensor, such as a VW piezometer or crackmeter. Typical applications include:

- Monitoring small projects, where only a few sensors are installed. Note that one MiniLogger is required for each sensor.
- Monitoring single sensors that are too far away to connect to a centralized data acquisition system.
- Monitoring single sensors in areas where heavy traffic or electrical noise prevents use of long cables.
- Monitoring single sensors during early phase of construction when centralized data acquisition system is not ready.

Overview of Operation

The MiniLogger is simple to use and takes only a few minutes to set up.

Connect the MiniLogger to your PC and run Logger Manager software to specify a start time and reading interval for data logging.

On site, connect the sensor signal cable to the MiniLogger and walk away. D-cell batteries provide power for up to six months in temperatures as low as -20° C.

Return to the site with your PC and run Logger Manager to retrieve the readings and save them in a file that is ready for your spreadsheet.

Finally, open the file with your spreadsheet for processing and plotting.

MiniLogger Advantages

Economical: It is possible to deploy four or five MiniLoggers for less than the cost of a full-size logger. Cable costs are also reduced, since the MiniLogger can be placed near each sensor.

Simple to Use: Learn how to use the MiniLogger in minutes, not hours. There are no programs to write, no switches to set, and only four wires to connect.

Reliable: The MiniLogger is rated for temperatures from -20 to +50°C. Its encapsulated electronics are impervious to humidity and condensation. Readings are stored in secure, non-volatile memory.

Spreadsheet Friendly: Logger Manager software retrieves readings and applies calibration factors, if present, to generate data files that contain both raw and processed readings. Thus data can be used immediately in the spreadsheet.

Wireless Option: The wireless option provides easy data retrieval when access to the logger is difficult or when frequent retrieval is required.

VW MINILOGGER

VW MiniLogger 52613310

VW MiniLogger includes interface cable and two D-cell batteries.

Sensor Compatibility: Reads VW sensors operating in the range of 450 to 6000 Hz. Also reads temperature sensors (RTD and thermistor).

Data Storage: Stores 8,000 records in secure, non-volatile memory. Each record includes a VW reading, a temperature reading, and the time and date. When memory is full, recording either stops or continues by overwriting the earliest readings, according to user preference.

Logger Settings: Assign a logger ID, specify whether to stop when memory is full or to overwrite earliest readings.

Sensor Settings: Assign a sensor ID, set sweep range for excitation, store calibration factors, and set temperature sensor to RTD or thermistor.

Reading Schedule Starts recording on power up or at specified date and time. Records readings at intervals from one reading every two seconds to one reading per week.

Logging Schedule: Set logger to start recording on power up or at a specific date and time (to synchronize readings with other MiniLoggers or data loggers). Set reading intervals to day, hour, minute, and second.

Power: Two D-cell batteries provide power for approximately six months at temperatures from -20 to +50°C, assuming readings are taken every half-hour.

Weatherproofing: MiniLogger electronics are completely encapsulated in waterproof resin. Polycarbonate box has O-ring seal and cable gland for signal cable.

Dimensions: 100 x 100 x 90 mm high (4 x 4 x 3.5").

Data Retrieval: Readings are retrieved via RS-232 serial connection or by wireless link to computer running Logger Manager.

VW MINILOGGER ACCESORIES

USB-RS232 Adapter. 50310959

The USB-RS232 Adapter is used with the included interface cable to allow communication between the VW Minilogger and a computer that does not have a serial port.

2.4 GHZ WIRELESS OPTION

Radio Lid, 2.4 Ghz 52613360
Radio Base Station, 2.4 Ghz. 52613455

Radio lid replaces standard lid of MiniLogger and includes spread-spectrum radio, interface cable, and half-wave antenna.

Base station works with PC and includes spread-spectrum radio, USB cable, half-wave antenna, and CD.

Frequency: 2.4 Ghz.

Radio Type: Spread Spectrum.

Transmission Power: 40 mW.

Range: Up to 0.6 km (0.4 miles) line of sight.

Power: Powered from MiniLogger's batteries. Average life is about 2 months, assuming 4-daily downloads. Base station is powered by computer's USB port.

WIRELESS ACCESSORIES

Advanced Programming Cable. . . 52613340

Optional cable allows user to change configuration of radio lid. Works with both 900 Mhz and 2.4Ghz radios.

LOGGER MANAGER SOFTWARE

Logger Manager Software . . . . . Download

Logger Manager is used to set MiniLogger's reading schedule and to retrieve recorded readings. Readings can be stored in a Campbell Scientific compatible format or in a spreadsheet-ready format.

www.slopeindicator.com
solutions@slope.com
DGSI East 2175 West Park Court, Stone Mountain, GA USA 30087 Tel: +1-770-465-7557
DGSI West 12123 Harbour Reach Drive, Mukilteo, WA, USA 98275 Tel: +1-425-493-6200