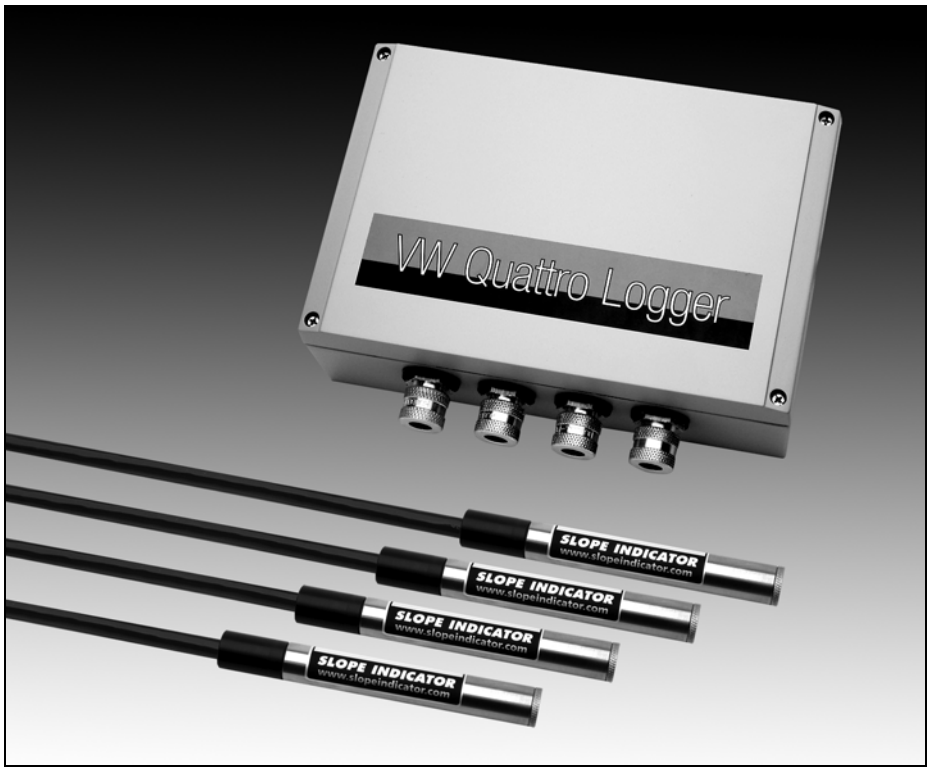
VW Quattro Logger



Applications

The VW Quattro Logger is a compact data logger designed to monitor four vibrating wire sensors. Typical applications include:

- Monitoring small projects, where only a few sensors are installed.
- Monitoring multilevel piezometers, multipoint rod extensometers, or crackmeters.
- Monitoring sensors that are too far away to connect to a centralized data acquisition system.
- Monitoring critical sensors during early phases of construction when the centralized data acquisition system is not ready.

Overview of Operation

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

Connect the logger to your computer and use the Manager software to specify a start time and reading interval for data logging.

On site, connect sensor signal cables to the logger. You can view readings in real time if you have a PC with you. Then close the logger and walk away. The logger's three D-cell batteries provide power for up to six months.

Return to the site to retrieve readings with your PC. Use the Manager software to store the readings in a ASCII file, ready for your spreadsheet.

Finally, import the ASCII file into your spreadsheet for processing and plotting.

Quattro Logger Advantages

Cost-Effective: Quattro Loggers are the right size for many projects. Two or three Quattro Loggers can be deployed for less than the cost of a single full size, centralized logger.

Simple to Use: Learn how to use the Quattro Logger in minutes, not hours. There are no programs to write and no switches to set.

Reliable: The Quattro Logger is rated for temperatures from -20 to +70°C, and its encapsulated electronics are impervious to humidity and condensation. Readings are stored in secure, non-volatile memory.

Spreadsheet Friendly: The Manager software retrieves readings and stores them in an ASCII file, ready to open with a spreadsheet program. The files contain two values for each reading, a value in Hz (the raw reading) and a value in user-selected engineering units. Thus data can be used immediately in the spreadsheet.

Atlas Compatible: The Manager software can store data in a format that is compatible with Atlas, DGSI's web-based monitoring service.

LOGGER SPECIFICATIONS

VW Quattro Logger 52614000
VW Quattro Logger, External USB . . . 52614020

Includes USB interface cable, three D-cell batteries, and a user manual. 5261400, not shown, has external USB connector. Manager software can be downloaded from www.slopeindicator.com.

Measurement Range: Reads VW sensors operating in the range of 450 to 6000 Hz. Reads thermistors or RTDs in the range of -20 to 120 °C.

Logger Resolution: 0.01% FS for vibrating wire sensors, 0.1 °C for temperature sensors.

Logger Accuracy: ±0.02 % of Hz reading for vibrating wire sensors, ± 1 °C for temperature sensors.

Data Storage: Stores 43,000 records for each sensor 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: Date, time, and memory mode. Memory mode determines if logging stops when memory is full or if logging continues by overwriting earliest readings.

Logging Schedule: Logger start time can be set to a specific date and time so that readings are synchronized with other loggers. Reading intervals can be specified by day, hour, minute, and second. Maximum interval is days. Minimum interval is 20 seconds.

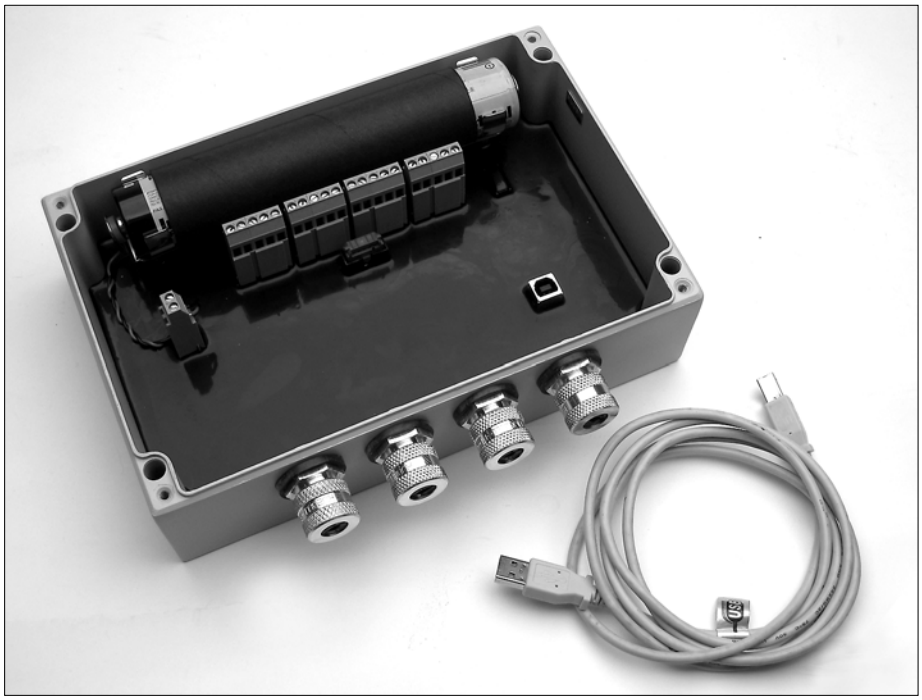
Sensor Settings: Sensor ID, serial number, calibration factors, and sweep range for each sensor. Choice of thermistor or RTD for temperature channels.

Power: Three D-cell batteries provide power for six months in moderate temperatures, assuming readings are taken every hour.

Weatherproofing: Quattro Logger electronics are encapsulated in waterproof resin and housed in an IPC66 metal box. Plugs are provided for unused cable ports.

Interface Cable: Male A/B USB 2.0 cable, the same cable commonly used for USB printers. 2m length (6 feet).

Dimensions: 240 x 160 x 81 mm (9.5 x 6.3 x 3.2 inches).



MANAGER SPECIFICATIONS

Quattro Logger Manager . . . . . Download

Quattro Logger Manager software is used to set up the logger and later to retrieve stored readings. Runs on Windows 2000, XP, and Vista. The software can be obtained from the download section of www.slopeindicator.com.

Features include:

Choice of output file formats: ASCII format ready for import into a spreadsheet or in format that is compatible with the CR1000 data logger.

Automatic Engineering Units: The Quattro Logger stores readings in Hz. It also stores calibration factors for each sensor. The Manager program retrieves the calibration factors along with the readings, then applies the calibration factors to generate a reading in engineering units (both raw and generated readings are stored in the file). Temperature readings are stored in degrees C only.

Real-Time View of Logging: The Manager program can provide a real-time view of readings when the PC is connected to the logger. This is useful to verify that sensors, connections, and loggers are working properly.

Clock Syncronization: The Manager program can synchronize the logger's clock to the clock in the PC.

Durham Geo Slope Indicator, 12123 Harbour Reach Drive, Mukilteo, WA, 98275 USA
Tel: 425-493-6200 Tel: 866-916-0541 Fax: 425-493-6250 Email: solutions@slope.com

DGSI
DURHAM GEO SLOPE INDICATOR