

# Pennine Data Logger



### Basic Instrument

The Data Logger is Pennine's proprietary equipment for recording piling and ground engineering installations. The system comprises the main logger unit together with sensors and custom designed software. Collecting data on a real-time basis the unit records information including pressure, depth, rate of penetration, flow rates, load and inclination.

Data can be recorded almost indefinitely at a sample rate of 500ms and retrieval is through a range of techniques including FTP upload and copying to a USB storage device.

The basic instrument has been proven and used extensively throughout the UK and overseas.

### Recent developments

Pennine are always looking to improve the effectiveness of the technology, with recent improvements including an interface for engine management and hydraulic flow rates of the base machine or rig. This valuable addition

enables pre-emptive maintenance to be carried out, improving overall plant efficiency and avoiding costly plant breakdowns and programme delays.

The incorporation of a global positioning system (GPS) has also proven to be invaluable for marine vibro projects.

Using remote viewing software it is possible for the Pennine support team to view data from head office and recommend adjustments to rectify minor errors.

When connected to the internet all systems automatically search for software updates, ensuring that all new features are available quickly without the need to send updates via e-mail or post.

Another new development has been the inclusion of column pack profiles. These are set prior to installation and guide the operator to ensure the column is built to the correct compaction rates.

### Construction

The equipment is rugged and built to withstand rigorous environments. It is user friendly with touch screen operation and the familiar Windows XP operating system running the latest Visual Studio applications. The Data Logger's programmes can also be custom designed for individual client requirements and needs.

The Data Logger is typically run from a standard hard disk, however a solid state backup disk is available as a failsafe in case of hard disk error. This backup disk can also be used to re-install the software onsite until a replacement hard disk has been acquired, helping to minimise downtime.