

RO-1-VW-READ VIBRATING WIRE READOUT - VWREAD



Description

The VWread is a handheld readout that reads most commercially available geotechnical Vibrating Wire (VW) sensors and built-in thermistor temperature sensors.

With a wide sweeping range of 400 - 6000 Hz, the VWread is very versatile and easy to use.

Features

- Portable and rugged
- Compatible with nearly all VW sensors
- Realtime display of VW sensor readings in Hz, Hz²/1000 and period
- Reading and displaying parameters can be fully configured
- Long battery life; powered by a NiMH rechargeable battery
- User selectable display backlight; auto shutdown

Benefits

- Easy to carry and operate in all site conditions
- Readings are accurate, repeatable and interference free
- Taking readings is simple, fast and error free
- Selectable higher 15V excitation ensures quality readings for sensors with long cables



Comprehensive information about this product and our full range is available at www.soilinstruments.com If you would like to speak with someone directly please call +44 (0)1825 765044 or email sales@soilinstruments.com

Operation

The operation of VWread is driven by the onboard menu.

The main menu gives access to all VWread functions, including:

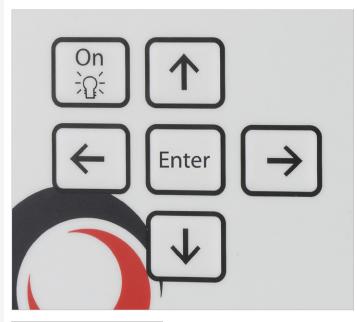
- READ take a reading of the VW sensor currently connected to VWread.
- SENSOR SETUP configure sensor reading parameters such as sweep range, frequency units, temperature units and excitation voltage.
- DEVICE SETUP configure display parameters, such as contrast, backlight and auto off.
- **DEVICE INFO** displays the info of the device, such as firmware version, battery voltage and board temperature.

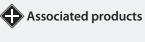
Applications

The VWread can be used to read Vibrating Wire sensors for geotechnical and structural monitoring.

Typical applications include:

- Pore pressure monitoring
- Water level monitoring
- Strain monitoring
- Displacement monitoring
- Crack monitoring
- Load monitoring
- Pressure cell monitoring





For details on:	Catalogue code:
VW Piezometers	W9
VW Strain Gauges	ST1 - ST5
VW Pressure Cells	P6 & P9
VW Crackmeters	J2
VW Jointmeters	J1 & J3
VW Load Cells	L2

View our full product range on www.soilinstruments.com



THE TECHNICAL RATING FOR THIS PRODUCT:

As the correct installation of any monitoring sensor or system is vital to maximise performance and accuracy, Soil Instruments makes the following recommendations, for the skill level of the installation contractor.

ADDITIONAL SUPPORT

We offer installation and monitoring services to support this system. For more information please email: sales@soilinstruments.com or call: +44 (0) 1825 765044







The installer is trained and experienced in the installation of this type of instrument or systems, and is ideally a specialist Instrumentation and Monitoring contractor.



ADVANCED



The installer already has previous experience and/or training in the installation of this instrument or system.

BASIC



As a minimum the installer has read and fully comprehends the manual, and if possible has observed these instruments or systems being installed by others.

Specifications Vibrating Wire Inputs Sweeping frequency range 400 - 6000 Hz Resolution 0.1Hz Accuracy 0.01% of full scale On-board excitation 5V and 15V square wave (user selectable) **Temperature Inputs** Temperature sensor NTC 3K Ω Measurement range -50 to +150°C Resolution 0.01°C Accuracy ±0.1°C Power Power supply nominal 6V DC, using a Nickel Metal Hydride (NiMH) rechargeable battery Low battery voltage warning Current consumption 55mA on standby, 200mA while reading sensor at 5V With backlight on additional 8mA Battery life 30 hours continuous without backlight, 15 hours with backlight Auto-off timer 6 minutes of inactivity Display Display 16 x 2 character LCD display with backlight Display units Hz, Hz²/1000 and period User interface 6 key membrane keypad **Physical Properties** L 190mm x W 140mm x D 40mm Size Weight 0.95kg including bag

-10 to +50°C

Operating temperature

Ordering Information	
VWread	
RO-1-VW-READ	VWread – Vibrating Wire Handheld Readout Reads VW instruments and thermistors and includes a manual, calibration certificate, Nickel Metal Hydride (NiMH) rechargeable battery, sensor flylead and carry case.
Flyleads	
RO-1-VW-2.7	Terminal box flylead VW and temperature readout to terminal box RO-T
RO-1-VW-2.8	Cable plug flylead VW and temperature logger to cable plug CA-4.6
VWread	
MAN-238	VWread - Vibrating Wire Readout



