

The GS-VWR Vibration Wire Readout is a portable, high-performance handheld device designed for reliable field monitoring of vibrating wire sensors and associated instrumentation.

Featuring a full-colour high-resolution display, advanced 32-bit processing, extensive onboard storage, and support for multiple sensor types, the unit provides accurate and efficient data collection for geotechnical, structural, and environmental monitoring applications. Built for durability and ease of use in demanding site conditions, the GS-VWR offers flexible connectivity, automated data handling, and dependable long-term performance.



FEATURES

High-Resolution Color Display	2.8-inch high-resolution 320×240 pixel full-colour RGB screen with large, high-brightness fonts. Superior visual quality compared to 128×64 monochrome screens.
Array Keyboard	Mechanical large key design with long key lifespan. Clear and easily understandable icon and text labels, providing excellent tactile feedback and ease of operation.
Massive Storage	Built-in high-capacity FLASH memory capable of storing 250,000 data entries.
High-Speed MCU	High-performance 32-bit processor designed to industrial standards.
Multi-Type Sensor Support	Supports vibrating wire, NTC temperature, DS18B20, two-wire digital sensors (electronic tags), wireless passive sensors, voltage, and current sensors.
Precision Measurement	Includes an independent dedicated vibrating wire measurement module with various excitation methods available. High integration, accurate readings, and strong sensor compatibility.
Physical Interface	Uses DB9 or 10-pin aviation connectors. Equipped with anti-static and surge protection circuits for safe and reliable operation.
Versatile Data Export	Supports external USB drives with intelligent recognition and automatic synchronization.
Automation Features	Built-in RTC (Real-Time Clock) with automatic startup and shutdown circuits. Configurable parameters for automatic timed data collection, storage, and wireless transmission of sensor data.

SPECIFICATIONS

Model	GS-VWR	
Dimensions	165 × 82 × 31 mm ³	
Protection Level	IP53	
Power Supply	4 AA batteries (or lithium)	
Lithium Battery Capacity	2000 mAh	
Power Consumption @DC5V	Maximum Power	135 mA
	Without Sensor Connection	105 mA
	Backlight Off	70 mA
Working Time	Using 2000mAH Lithium Battery	15–24 hours
Temperature	Operating Temperature	-20~80 °C
	Storage Temperature	-60~120 °C
Screen Resolution	320 × 240 pix ²	
Internal Storage	Storage Capacity	8 MByte
	Maximum Data Entries Saved	25 × 10,000 entries
External Storage	U Disk	1~32 GByte
Range	Vibrating String Frequency	300~6000 Hz
	Vibrating String Temperature - NTC3k	-60~120 °C
Accuracy	Vibrating String Frequency	± 0.2 Hz
	Vibrating String Temperature	± 0.5 °C

APPLICATIONS

The GS-VWR Vibration Wire Readout is ideal for geotechnical, structural, and environmental monitoring applications. It is used to read vibrating wire sensors including piezometers, strain gauges, load cells, crack meters, and displacement sensors across infrastructure, mining, tunnelling, and civil engineering projects.

For more information about the GS-VWR Vibration Wire Readout or to discuss your project monitoring requirements, contact the team at CESCO Equipment. Our specialists can assist with product selection, technical advice, and tailored monitoring solutions for your application.