

### Frequency and Temperature on Vibrating Wires



# **Technical Information**

reenmearingermation	
Power supply	8,5A/h - 3,6V type "C" lithium internal battery
Battery life (*)	Up to 4 years (samples every 60 minutes and radio signal quality at least sufficient)
Measures acquired (4 channels)	<ul><li>Frequency</li><li>Temperature</li></ul>
Sampling interval (*)	Selectable from one minute to 24 hours (60 minutes default)
Datalogger capacity	64,000 samples
Working temperature	<ul> <li>Operative: -30°C ÷ +60°C</li> <li>Warehousing: -40°C ÷ +70°C</li> </ul>
Radio frequency	ISM 868MHz
Radio coverage	Up to 6Km in line of sight (can be extended using <b>WR12</b> battery powered routers)
Sealing	IP65
Dimensions	90 x 120 x 50mm
Weight	350g
Case material	ABS
Mounting	Fix on 4 points
Connections	Wireless/USB
Cable external diameter	4.7mm maximum
Copper wire section	0.05 ÷ 2.5mm² / ÷ 14 AWG

## Frequency

Transducer type	Vibrating Wire
Measure range	500 ÷ 4000Hz
Measure accuracy	± 50ppm
Measure resolution	0.1μs / 0.1Hz

## **Temperature**

Transducer type	ΝΤC3ΚΩ
Measure range	-20°C ÷ +70°C
Measure accuracy	0.25°C at 25°C
Measure resolution	0.01°C



### Wireless Smart Datalogger.

The **WSD12-VW** is a **datalogger** with 4 input channels to acquire frequency and temperature on vibrating wires (*extensometers, piezometers, crack meters*), with storage functionality of samples acquired.

The radio module based on  $\mathbf{WINECAP^{rm}}$  protocol provides an excellent radio range and a very low battery consumption.

With a backup memory onboard may store the last 64,000 samples per channel even if the wireless link is down. Samples can be downloaded using a USB connection

Using the configuration software the sampling interval may be set and two thresholds per channel can be activated.

May be interfaced with:

- all the basestations of MWDG product line
- all the basestations of MWLI product line

If necessary, radio coverage may be extended using up to 32 **WR12** routers (maximum 16 for each path) between the datalogger and the basestation.

The features shown may be subject to change without notice.







 $<sup>^</sup>st$  battery life and sampling interval may be influenced by fieldwork conditions and system configuration - refer to User Manual.