# **WSD15TIIDRO**

Wireless Smart Datalogger
Biaxial Horizontal Inclination and
Outdoor Temperature



# **Technical Information**

Power supply	8.5A/h - 3.6V type "C" lithium internal battery
Battery life (*)	Up to 5 years (samples every 60 minutes and radio signal quality at least sufficient)
Measures acquired (3 input channels)	<ul><li>Horizontal axis rotation, parallel to surface</li><li>Outdoor temperature</li></ul>
Sampling interval (*)	Selectable from one minute to 24 hours (60 minutes default)
Datalogger capacity	64,000 samples (for each channel)
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 WR12 battery powered routers)
Sealing	IP67
Dimensions	100x100x80mm
Weight	1,600g
Case material	Aluminium
Mounting	Surface mounting with ±2° gross correction
Connections	Wireless, USB

#### *Inclination*

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Transducer type	Biaxial - MEMS technology - 1°÷15° Dual Range Automatic Autoscale
Measure range	±1°÷ ±15°
Measure accuracy	± 0.5% of sample
Measure resolution	0.001° (±1° range) - 0.01° (±15° range)
Mechanical zero adjustment	± 2° gross setting (micrometric with optional kit <u>FIX-WSD150</u> )
Cross-axis sensitivity	4% maximum
Temperature variation sensibility	±0.013%/°C temperature balance using 3° polynomial
Shock resistance	20,000g
Linearity	±0.057° in measuring range
Over time stability	Excellent

## *Temperature*

Transducer type	ΝΤC10ΚΩ
Measure range	-30°C ÷ +60°C
Measure accuracy	<ul> <li>± 0.5°C - Range -30°C ÷ 0°C</li> <li>± 0.2°C - Range 0°C ÷ +60°C</li> </ul>
Measure resolution	0.01°C



The features shown may be subject to change without notice.





## Wireless Smart Datalogger.

The **WSD15TIIDRO** is a horizontal installation datalogger with 3 input channels to acquire inclination and temperature, with storage functionality of samples acquired.

The radio module High Reliability (unique 868MHz radio technology. implementing frequency hopping on 11 channels) based on WINECAP™ LuPo protocol (Long Range) provides an excellent radio range, low battery consumption and the certainty of data recovery in any situation (black out/ signal obstacles).

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 <u>MWDG</u> product line
- all the **basestations** of <u>MWLI</u> product line

If necessary, radio coverage may be extended up to 16 times using <u>WR12 routers</u> (battery powered repeaters with battery life up to 7 years) between the datalogger and the **basestation**.

