WSD15TIDR(A)

Wireless Smart Datalogger
Uniaxial inclination, Outdoor temperature.

Technical Information

Power supply	8.5A/h - 3.6V type "C" lithium internal battery
Battery life (*)	Up to 5years *(samples every 60 minutes and radio signal quality at least sufficient)*
Measures acquired *(2 input channels)*	• Rotation around the horizontal axis, parallel to the support face (**WSD15TIDR**) • Rotation around the orthogonal axis to the support face (**WSD15TIDRA**) • Outdoor temperature
Sampling interval *(*)*	Selectable from one minute to 24 hours *(60 minutes default)*
Datalogger capacity	128,000 samples (*for each channel*)
Working temperature	• Operative: -30°C ÷ +60°C • Warehousing: -40°C ÷ +70°C
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	Wall mounting with ±2° gross setting
Connections	Wireless, USB

Inclination

Transducer type	Uniaxial - 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	±4°
Cross-axis sensitivity	4% maximum
Temperature variation sensibility	±0.013%/°C Temperature balance
Shock resistance	20,000g
Linearity	±0.057° in measuring range
Over time stability	Excellent

Outdoor temperature

Transducer type	NTC10KΩ
Measure range	-30°C ÷ +60°C
Measure accuracy	• ± 0.5°C Range -30°C ÷ 0°C • ± 0.2°C Range 0°C ÷ +60°C
Measure resolution	0.01°C

Wireless Smart Datalogger

The **WSD15TIDR** is a vertical installation **datalogger** with 2 input channels to acquire inclination and temperature, with storage functionality of samples acquired.

The **WSD15TIDR** measures rotation degrees around the horizontal axis, parallel to the support face (*ex. Walls inclination*).

The **WSD15TIDRA** measures rotation degrees around the orthogonal axis of the support face. (*ex. clinometric bars*).

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 128,000 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 up to 16 times using **WR12 routers** (*battery powered repeaters with battery life up to 7 years*) between the datalogger and the **basestation**.

* battery life may be influenced by fieldwork conditions, sampling interval and system configuration. - refer to User Manual.

The features shown may be subject to change without notice.