




# WSD12-THEE

Wireless Smart Datalogger

Outdoor Temperature and Relative Humidity



## Technical Information

Power supply	8.5Ah - 3.6V type "C" lithium internal battery
Battery life (*)	Up to 5 years <i>(samples every 10 minutes and radio signal quality at least sufficient)</i>
Measures acquired (2 input channels)	<ul style="list-style-type: none"> <li>Outdoor temperature</li> <li>Relative humidity</li> </ul>
Sampling interval (*)	Selectable from one minute to 24 hours (10 minutes default)
Datalogger capacity	128,000 samples (for each channel)
Working temperature	<ul style="list-style-type: none"> <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 <i>(can be extended using <a href="#">WR12</a> battery powered repeaters)</i>
Sealing	IP65
Dimensions	<ul style="list-style-type: none"> <li>Datalogger: 90x120x50mm</li> <li>Meteorological protection: 180x95x115mm</li> </ul>
Weight	<ul style="list-style-type: none"> <li>Datalogger: 350g</li> <li>Meteorological protection: 330g</li> </ul>
Case material	ABS
Mounting	Fix on 4 points
Connections	Wireless, USB
Cable external diameter	4.7mm maximum
Copper wire section	0.05 ÷ 2.5mm <sup>2</sup> / ÷ 14 AWG



### Wireless Smart Datalogger.

The **WSD12-THEE** is a datalogger with 2 input channels to acquire outdoor temperature and relative humidity, 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 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 repeaters](#) (battery powered repeaters with battery life up to 7 years) between the datalogger and the **basestation**.

## Outdoor temperature

Transducer type	PT1000
Measure range	-40°C ÷ +80°C
Measure accuracy	± 0.1°C at 20°C (growing up to ± 0.5°C at full-scale)
Measure resolution	0.01°C

## Relative humidity

Transducer type	CMOSens® Technology
Measure range	0 ÷ 100%
Measure accuracy	<ul style="list-style-type: none"> <li>±2.5% from 0 to 90%</li> <li>From 90 to 100% change from ±2.5% to ±3.5%</li> </ul> <i>(Accuracies are granted between 0°C ÷ 50°C range)</i>
Measure resolution	0.05%RH

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

\*\* Available with ACCREDIA calibration certificate or manufacturer certificate.

The features shown may be subject to change without notice.

WB0154E Rev.05  
V2.4



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