







Wireless datalogger for indoor temperature and relative humidity measurement equipped with an input for connecting a PT1000 sensor for surface or immersion temperature measurement. Free installation in any position. High radio range and autonomy.

Suitable to monitor:

- Indoor temperature
- Wall temperature
- Surface temperature
- Fluid temperature
- Environment relative humidity

Main features

- Can be installed in any position
- Rugged and impact resistant case
- IP30
- Up to 5 years of autonomy







General technical specifications

Power supply	2.4Ah - 3.6V type "AA" lithium internal battery (<i>BAT1</i>)
Battery life (*)	Up to 5 years
	(samples every 10 minutes and radio signal quality at least
	sufficient)
Measures acquired <i>(3 input channels)</i>	Indoor temperature
	Relative humidity
	PT1000 transducer input channel
Sampling interval (*)	Selectable from one minute to 24 hours (10 minutes default)
Datalogger capacity	64,000 samples (<i>for each channel</i>)
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 repeaters)
Sealing	IP30
Dimensions	80x80x25mm
Weight	100g
Case material	ABS
Mounting	Fix on 2/4 points
Connections	Wireless, USB
Cable external diameter	4.7mm maximum
Copper wire section	0.05 ÷ 2.5mm² / ÷ 14 AWG

Indoor temperature

Transducer type	ΝΤC10ΚΩ
Measure range	-10°C ÷ +60°C
Measure accuracy	± 0.2°C in whole range
Measure resolution	0.01°C

Relative humidity

Transducer type	CMOSens® Technology
Measure range	0 ÷ 100%
Measure accuracy	2.0% (typical) from 0 to 90%
Measure resolution	0.05%RH

PT1000 transducer input channel

Transducer type	Two and/or three wires PT1000
Measure range	-200°C ÷ 125 °C
Measure accuracy	± 0.3°C in the whole range
(for the datalogger only)***	
Measure resolution	0.1°C

* battery life may be influenced by fieldwork conditions, sampling/measuring interval and system configuration.

** radio coverage can be extended using up to 32 WR12 repeaters (maximum 16 for each path) between the device and the gateway.





The WSD02TH2-T1K wireless datalogger, provided with 3 input channels, is designed to acquire indoor temperature, environment relative humidity and surface/fluid temperature with a PT1000 transducer input channel, 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 (*up to 6 Km in line of sight*), 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.

Can be interfaced with:

- all the gateways of MWDG product line
- all the gateways 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 gateway.

The features shown may be subject to change without notice.

