

WLRD00THCOP

Capetti
ELETTRONICA

Wireless
LoRa®



Wireless datalogger

Wireless datalogger to measure indoor temperature, relative humidity, CO₂ concentration and atmospheric pressure, with high stability and precision. Suitable to be installed in any position. High radio range and autonomy.

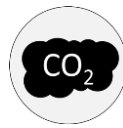
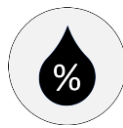
Suitable to monitor:

- Building environment parameters
- Air quality check
- "Comfort index" control

Main features

- Visual and acoustic alarm in case of threshold passing
- Can be placed in any position
- IP30
- Indoor temperature measure
- Relative humidity measure
- CO₂ concentration measure
- Atmospheric pressure measure
- Up to 4 years of battery life

Capetti
ELETTRONICA



General technical specifications

Power supply	8.5Ah - 3.6V type "C" lithium internal battery (BAT2)
Battery life (*)	Up to 4 years (<i>samples every 60 minutes and radio signal quality at least sufficient</i>)
Measures acquired (<i>4 input channels</i>)	<ul style="list-style-type: none"> Indoor temperature Relative humidity CO₂ concentration Atmospheric pressure
Sampling interval (*)	Selectable from one minute to 24 hours (<i>60 minutes default</i>)
Datalogger capacity	64,000 samples (<i>for each channel</i>)
Working temperature	<ul style="list-style-type: none"> Operative: -30°C ÷ +60°C Warehousing: -40°C ÷ +70°C
Radio frequency	ISM 868MHz
Radio coverage	Up to 15Km in line of sight (<i>can be extended using WLRE battery powered repeaters</i>)
Sealing	IP30
Dimensions	90x120x50mm
Weight	155g
Case material	ABS
Mounting	Fix on 2 points (<i>Lid on the rear side, openable, for surface mounting</i>)
Connections	Wireless, USB

Indoor temperature

Transducer type	NTC10KΩ
Measure range	-10°C ÷ +60°C
Measure accuracy	±0.2°C in whole range
Measure resolution	0.01°C

Relative humidity

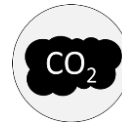
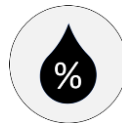
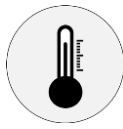
Transducer type	CMOSens™ technology
Measure range	0% ÷ 100%
Measure accuracy	±2.0% (<i>typical</i>) from 0 to 100%
Measure resolution	0.05%RH

CO₂ concentration

Measure range	0 ÷ 5,000ppm
Measure resolution	1ppm
Measure accuracy	0 ÷ 5,000ppm: < ±50ppm (<i>+3% of the measured value</i>)

Atmospheric pressure

Measure range	700 ÷ 1,100mbar
Accuracy at 25°C	Typical: ±2mbar (<i>20 ÷ 80 % RH</i>)
Temperature dependence	±0.015mbar/K



WLRD00THCOP

The **WLRD00THCOP** wireless datalogger is made to acquire building's environment parameters. It's massively used in offices, hospitals, schools, and museums monitoring.

Device's main feature is the possibility to be installed **easily and rapidly in any position**. Can be fixed using dowels or directly glued on a surface.

The datalogger acquires four measure channels: environment temperature, relative humidity, CO₂ concentration and atmospheric pressure.

The radio module High Reliability (*unique 868MHz radio technology. implementing frequency hopping on 11 channels*) based on **WINECAP™ LoRa®** protocol (**Long Range**) provides an excellent radio range (**up to 15km on 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 **WLRG** product line.

If necessary, radio coverage may be extended up to 16 times using **WLRE enhancers** (*battery powered repeaters with battery life up to 7 years*) between the datalogger and the **gateway**.

capetti
ELETTRONICA

The features shown may be subject to change without notice.