



WSD12T-AV2_5

Capetti
ELETTRONICA

Wcap



Wireless Smart Datalogger

Wireless datalogger designed to measure temperature using NTC10K transducer, provided with two channels to acquire current values (4-20mA_{dc}) or voltage values (0-2.5V_{dc}) coming from external transducers.

Suitable to:

- Temperature measurement
- Transducer outputs acquiring

Main features

- Current (4-20mA_{dc}) and voltage (0-2.5V_{dc}) signal sampling
- Can be placed everywhere
- IP65 sealing
- Temperature sampling
- Up to 5 years of battery life



General technical specifications

Power supply	7.7Ah - 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 (3 input channels)	<ul style="list-style-type: none">• Temperature• Current• Voltage
Sampling interval (*)	Selectable from one minute to 24 hours (<i>10 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 6Km in line of sight (<i>can be extended using WR12 battery powered repeaters</i>)
Sealing	IP65
Dimensions	90x120x50mm
Weight	350g
Case material	ABS
Mounting	Fix on 2/4 points
Connections	Wireless, USB
Cable external diameter	4.7mm maximum
Copper wire section	0.05 ÷ 2.5mm ² / ÷ 14 AWG

Temperature

Transducer type	NTC10K
Measure range	-30°C ÷ +60°C
Measure accuracy	±0.2°C at 25°C
Measure resolution	0.01

Voltage

Measure range	0÷2.5Vdc
Measure accuracy	3mV
Measure resolution	1mV

Current

Measure range	4÷20mA
Measure accuracy	35µA
Measure resolution	7µA



The [WSD12T-AV2_5](#) wireless boros to acquire NTC10K temperature, current ($4-20mA_{dc}$) and voltage ($0-2.5V_{dc}$) with storage capability of acquired samples.

Main feature of the device is the capability to be interfaced with 0-2.5V or 4-20mA outputs transducers.

Easy and rapid to install everywhere, can be fixed using dowels or directly glued on the measure surface.

The datalogger acquires three measure channels: temperature, current ($4-20mA_{dc}$) and voltage ($0-2.5V_{dc}$).

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 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.