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ELETTRONICA

Wcap IP9



Linear deformation and temperature

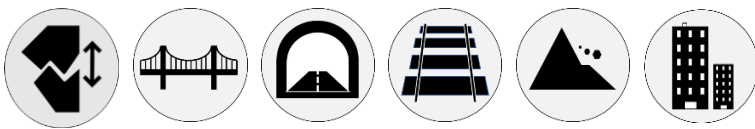
Wireless datalogger provided with 3 input channels to acquire linear deformation and temperature with storage functionality of samples acquired. Free installation in any position. Excellent radio coverage and autonomy.

Suitable to monitor:

- surface cracks on buildings, walls, bridges, viaducts, structural junctions, etc.
- landslide movements
- load tests

Main features

- Can be installed in any position
- Rugged and crash resistant case
- IP65
- Measure range 25/50/100/400mm
- Temperature measurement
- Up to 10 years of autonomy



General technical specifications

Power supply	8.5Ah - 3.6V type "C" lithium internal battery (BAT2)
Battery life (*)	Up to 10 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"> • Linear deformation • Temperature
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	330g
Case material	ABS
Mounting	Fix on 4 points
Connections	Wireless, USB
Cable external diameter	4.7mm maximum
Copper wire section	0.05 ÷ 2.5mm ² / ÷ 14 AWG



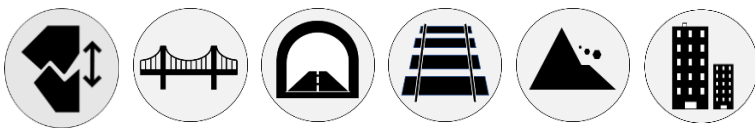
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Linear deformation

Measure range	25/50/100/400mm
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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



WSD12T-DD

The **WSD12T-DD** wireless datalogger is made to acquire linear deformations in structural monitoring fields. It's massively used in bridges, tunnels, buildings, and railroads 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 three measure channels: linear deformation and temperature.

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**.

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The features shown may be subject to change without notice.