

Technical Information

Power supply	Double 5,8A/h - 3,6 V type "C" lithium internal battery
Battery life (*)	Up to 3 years (with 100mA charge on 12V power supply, samples every 60 minutes and radio signal quality at least sufficient)
Channels acquired (4 channels)	<ul style="list-style-type: none"> • CH1: Outdoor temperature • CH2: Absolute distance with 150m full-scale and 1cm resolution • CH3: Relative distance with $\pm 30m$ full-scale and 0.1mm resolution related to a previously set-up offset • CH4: Absolute distance with 6m full-scale and
Sampling interval (*)	Selectable from one minute to 24 hours (60 minutes default)
Datalogger capacity	64,000 samples (for each channel)
Working temperature	<ul style="list-style-type: none"> • Operative: $-30^{\circ}C \div +60^{\circ}C$ • Warehousing: $-40^{\circ}C \div +70^{\circ}C$
Radio frequency	ISM 868MHz
Radio coverage	Up to 6Km in line of sight (can be extended using WR12 battery powered routers)
Sealing	IP65
Dimensions	<ul style="list-style-type: none"> • Datalogger: 90 x 160 x 50mm • Transducer: 212 x 95 x 50 mm
Weight	<ul style="list-style-type: none"> • Datalogger: 450g • Transducer: 725g
Case material	<ul style="list-style-type: none"> • Datalogger: ABS • Transducer: Aluminium
Mounting	<ul style="list-style-type: none"> • Datalogger: fix on 4 points • Transducers: fix on 4 points
Connections	Wireless/USB/3m cable lenght for each transducer



Wireless Smart Datalogger.

The **WSD12T-DIST** is a **datalogger**, which coupled to a laser EDM returns the outdoor temperature and two distance measures: the first one with 150m full-scale and 1cm resolution, and the second one with 6m full-scale and 0.1mm resolution.

The radio module based on **WINECAP™** protocol provides an excellent radio range and a very low battery consumption.

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 **basestations** of [MWDG](#) product line
- all the **basestations** of [MWLI](#) product line

If necessary, radio coverage may be extended using up to 32 [WR12 routers](#) (maximum 16 for each path) between the **datalogger** and the **basestation**.

Outdoor temperature

Transducer type	NTC10KΩ
Measure range	$-30^{\circ}C \div +60^{\circ}C$
Measure accuracy	<ul style="list-style-type: none"> • $\pm 0.5^{\circ}C$ Range $-30^{\circ}C \div 0^{\circ}C$ • $\pm 0.2^{\circ}C$ Range $0^{\circ}C \div +60^{\circ}C$
Measure resolution	0.01°C

Laser distance measurer

Laser class	LS111FA Laser class 2 - 650nm - IEC825-1/EN60825
Laser power	<1mW
Divergence angle	0.6mrad
Spot diameter	<ul style="list-style-type: none"> • <6mm a 10m • <30mm a 50m • <60mm a 100m
Measurement range	<ul style="list-style-type: none"> • 0.1÷100m on bright surfaces • Up to 150m on reflective surfaces
Resolution	0.1mm
Absolute accuracy	<ul style="list-style-type: none"> • $\pm 2mm$ on white surface in 150m full-scale • $\pm 0.5mm$ in 6m full-scale
Repeatability	$\pm 0.5mm$
Working temperature	<ul style="list-style-type: none"> • Operative: $-10^{\circ}C \div +60^{\circ}C$ • Warehousing: $-20^{\circ}C \div +70^{\circ}C$
Sealing	IP65

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

The features shown may be subject to change without notice.

WB0406E Rev.0x