advarna
IOT SOLUTIONS

DISTANCIO

MEMS HIGH-PRECISION LASER DISTANCE METER AND INCLINOMETER

FEATURES

The **DISTANCIO** module, a component of the DISPLACEMENT series, **facilitates precise, non-contact measurements** across a distance of up to 150 m.

It features a **high-performance laser sensor**, engineered by a globally recognized manufacturer, ensuring millimeter accuracy even at extended ranges. Additionally, the **DISTANCIO** incorporates a dual-axis MEMS inclinometer, delivering supplementary tilt measurements for enhanced reliability and comprehensive applications.

It is compatible with **SIGFOX, LoRa** and **LoRaWAN** radio networks, providing both extensive range and superior signal penetration. Local configuration is conveniently executed via Bluetooth or NFC from a smartphone, tablet, or PC.

BENEFITS

- **Effortless and intuitive** implementation
- Product **produced in France**
- Durable equipment, **perfect for industrial settings**
- Integrated data logger: **redundancy and automatic data**
- Protection. 2-in-1 sensor: **high-precision sensor and MEMS inclinometer**
- **Sophisticated M2M radio protocol** : sampling rates of up to 10 Hz.
- **Local configuration and access**: user-friendly interface accessible via smartphone, tablet, or PC (Bluetooth/NFC)

M2M: Machine-to-Machine

Instrument Platform

The web application enables users to **access data from all modules** within the ADVARNA range, as well as:

- Establish **alert thresholds** to avert threshold exceedances.
- Export data in .CSV format.

PERFORMANCES

Distance gauge

Sensor :	Laser diode 620-690 nm (red, typically 655 nm) IEC 60825-1:2014 Class 2 Maximum radiant power: 1 mW
Measurement range on natural surfaces: 0.05 to 15 m. Measurement range on reflective targets: 40 to 150 m	
Precision:	± 1.0 mm (independent of surface distance). 0.1 mm
Resolution:	0.1 mm
Repeatability : ±0.3 mm	
Operating temperature range : -10°C to +50°C	

Inclinometer

Sensor :	2-axis MEMS accelerometer
Measurement :	± 90°
Range: Accuracy :	± 0.1°

GENERAL INFORMATION

Power supply :	Pile 3,6 Vtype C External power supply 4.8 to 32VDC
Battery longevity :	> 1 year with one measurement per hour
Acquisition rate :	Configurable based on requirements and network type
Internal memory :	100,000 data points.
Antenna :	Omnidirectional - 3 dBi gain.
Mass :	650 g

AVAILABLE RADIO PROTOCOLS

Reference	SIGFOX	Modulation	Operator
X6.ADVN8.SF	LoRaWAN	UNB	/
X6.ADVN8.LRW	network, LoRa	CSS	/
X6.ADVN8.P2P	P2P Long-	CSS	M2M
X6.ADVN8.LD	Range Low	GFSK	M2M
X6.ADVN8.LP	Power	GFSK	M2M

HOUSING

Protection rating :	IP65 (dustproof and resistant to powerful water jets)
Dimensions excluding antenna (L x W x H) : 170 x 111 x 61 mm	
Enclosure material : Aluminum	

CE In accordance with the stipulations of the CEM RED directive 2014/53/EU

Anticipate possible vulnerabilities in your structures with our technologically advanced monitoring systems.

Produced and crafted in France

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