

# ALL

## Laser distancemeter



### DESCRIPTION

Autonomous sensor with laser sensors that can measure small changes in distance.

Combined, they allow for very precise monitoring of monuments or tunnels.

Each sensor is autonomous; it doesn't need another box nor a sending station

### APPLICATIONS

Monitoring of buildings, bridges, monuments, engineering structures

## SENSOR CHARACTERISTICS

### DATA RECORDING

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Local measurement interval	1 second (via Bluetooth application)
Data reporting interval	30 minutes (configurable)
Reported data	Distance (1 to 6) Case temperature Battery voltage

### DISTANCE PROBE

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Measurement principle	Optics (laser)
Measuring range	0 ... 40m
Type	Visible red laser, class II, 655nm
Resolution	±0.1mm
Repeatability	±1mm
Operating temperature	-10 ... +55°C (-40°C in option)

### TEMPERATURE SENSOR INSIDE THE HOUSING

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Measuring principle	NTC
Measuring range	-55 ... +125°C
Resolution	0,6°C (-5 ... +50°C)

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## LONG DISTANCE RADIO

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Radio technology	LoRaWAN
Security	AES-128 data encryption
Supported features	LoRa private or operated, OTAA
Radio range	Up to 15 km
Transmitted power	Up to 20 dBm (adaptive)
Receiver sensitivity	-142 dBm
Frequency band	868 MHz (EU), 915MHz (US, AS, AU)
Antenna	Internal or external to the housing

## LOCAL RADIO

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Radio technology	Bluetooth Low Energy
Radio range	Up to 40m
Transmitted power	Up to 4 dBm
Receiver sensitivity	-96 dBm
Frequency band	2.4 GHz ISM
Antenna	Internal to the box

## POWER SUPPLY

Battery type	Lithium-Ion	
Power consumption	< 1mW	
Battery life *	Measurement period	Duration (up to)
	30 minutes	5 years
	1 hour	10 years

\* Indicative duration, for use in the conditions of use and depending on the number of connected sensors and their characteristics

## SENSOR

Operating temperature	-30 ... +80°C
Dimension	135 x 135 x 60 mm
Weight	350g
Internal memory	1024 measurements
Case	Polycarbonate (weather, UV and impact resistant)
	Decompressor against condensation
	IP65, IK07
	Fixing brackets

## ORDER REFERENCES

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ALL-01	distance meter with 1 laser (40m, cable length 2m)
ALL-02	distance meter with 2 lasers (40m, cable length 2m)
ALL-03	distance meter with 3 lasers (40m, cable length 2m)
ALL-04	distance meter with 4 lasers (40m, cable length 2m)
ALL-05	distance meter with 5 lasers (40m, cable length 2m)
ALL-06	distance meter with 6 lasers (40m, cable length 2m)
ALL-01-80	distance meter with 1 lasers (80m, cable length 2m)
ALL-02-80	distance meter with 2 lasers (80m, cable length 2m)
ALL-03-80	distance meter with 3 lasers (80m, cable length 2m)
ALL-04-80	distance meter with 4 lasers (80m, cable length 2m)
ALL-05-80	distance meter with 5 lasers (80m, cable length 2m)
ALL-06-80	distance meter with 6 lasers (80m, cable length 2m)

Other options: contact us

## **WARNINGS**

Specifications and information in this document are subject to change without notice.

A3IP products are not warranted or licensed for use as a critical component for medical or other life-saving or life-sustaining applications, or other applications where failure could reasonably be expected to cause serious injury, death, or damage to any structure, work or building.

In addition, devices are indications and decision aids and cannot be used in alarm or critical applications.

## **CONTACT**

<https://www.a3ip.com>

[contact@a3ip.com](mailto:contact@a3ip.com)

+33 (0)2 40 94 78 41

A3IP  
Bâtiment Placel  
Route de Vannes  
44880 SAUTRON  
France