ARLt
Pavement temperature

DESCRIPTION

Autonomous sensor for continuous measurement of the temperature of the roadway's modules.

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

APPLICATIONS

Predictive maintenance of road behavior.

Temperature monitoring on several strata

SENSOR CHARACTERISTICS

DATA RECORDING

Local measurement interval	1 second (via Bluetooth application)
Data reporting interval	20 minutes (configurable)
Reported data	Pavement module temperature Battery voltage

TEMPERATURE PROBES

Measurement principle	Digital
Measuring range	-40 ... +125°C
Resolution	±0,0625°C
Repeatability	±0,25°C from -40°C to +125°C

LONG DISTANCE RADIO

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

Radio technology	Bluetooth Low Energy
Radio range	Up to40m
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)
	20 minutes	2 years(rechargeable) or 8 years(non rechargeable)

* Indicative duration, for use in the conditions of use

SENSOR

Operating temperature	-40 ... +70°C
Dimension	270 x 62 x 62 mm or 520 x 62 x 62 mm
Weight	1250g
Internal memory	1024 measurements
Case	PVC
	IP68

ORDER REFERENCES

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ARLt	temperature sensor, height 25cm
ARLt-50	temperature sensor, height 50cm

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.

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