

TEMP – IP68 TEMP2S – IP68

Measure and monitor temperature evolutions



Devices versions:

- 1 ambient + 1 remote probe
- 2 remote probes



ALERT

Alert on high / low temperature threshold overrun alarm



MEASURE

- Measure temperatures
- Identify temperature losses

Additional features:



- Periodic and/or event mode
- Autonomy optimization: historization
- Accessibility of the data: redundancy
- Alarm repetition in case of a persistent event
- Error or Default management: hardware error, configuration inconsistency and low battery alert
- Timestamp of the frame (LoRaWAN)
- Network Quality Test at start-up (LoRaWAN)



Monitor the temperature of the domestic hot water at the start and end of the circuit.



Check the temperature of a storage area for sensitive products.



Monitor the temperature of the road surface in order to optimise the triggering of winter services.

TECHNICAL SPECIFICATIONS



TEMP : LoRaWAN ARF8180BCA | Sigfox ARF8181BCA
TEMP2S : LoRaWAN ARF8180BCB | Sigfox ARF8181BCB

Mechanical specifications

Weight	TEMP: 148 g - 1 remote probe (battery included) TEMP2S: 185g - 2 remote probes (battery included)
Dimensions	132 x 62 x 34 mm
Enclosure	IP68, EMERGE™ PC 8731HH grey resin (casing), EMERGE™ PC 8430-15 transparent resin (sole)
Mounting	DIN Rail, Tube, Wall, Collar
Probe length	2 meters

Operating conditions

Temperature	-25°C / +70°C
Humidity	0 to 85% RH (non-condensing)

Device Power Supply

Battery Type	1 connectorized battery pack or External 5V Power supply
Expected Battery Life	For one frame every 2 hours (12 frames/day) : - Sigfox: 4.3 years (scan every 30 minutes) - LoRaWAN SF12 or SF7: > 10 years (polling every 10 minutes)

Device configuration

Local device configuration	IoT Configurator
Remote device configuration	Downlink via the network or via the KARE platform
Configuration and Firmware up-date over-the-air	KARE+ compatible
Security	PIN/PUK code protection

Radio/Wireless

Supported regions	LoRaWAN EU863-870 / Sigfox RC1
Wireless Security	AES-128 data encryption (LoRaWAN only)
Class	LoRaWAN: Class A and C Sigfox: Class 0
Supported LoRaWAN features	OTAA, ABP, ADR, adaptive channel setup
RF transmit power	14 dBm
Sensitivity	-136 dBm LoRaWAN @SF12 -122 dBm Sigfox

Regulations and certifications

Standard	Directive 2014/53/UE (RED)
----------	----------------------------

SENSOR Ambient temperature		SENSOR Remote Temperature	
Sensor technology	NTC	Sensor technology	NTC
Range	-25°C to +70°C	Range	-30°C to +105°C
Precision [0°C/+60°C]	+/-0.2°C	Precision [0°C/+60°C]	+/-0.2°C
Precision [-25°C/0°C]	+/-0.5°C	Precision [-30°C/0°C]	+/-0.5°C
		Precision [+60°C/+105°C]	+/-2°C

