

COMFORT

Optimize occupant comfort and energy performance in a building.



Functions: **temperature, humidity, alert button, dry contact input**



MEASURE

- Monitor regularly:
 - Temperature
 - Humidity level
- Count the number of events on the alert button or the dry contact input



ALERT

AND/OR Trigger an alarm if:

- high and/or low threshold(s) exceeded
- press on alert button
- number of events reached on the dry contact input

Additional features:

- **Battery-operated:** over 15 years maintenance-free autonomy
- **Data logging:** up to 16 samples / frame
- **Accessibility of the data:** redundancy
- **Mode of data transmission:** periodic and/or on events
- **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)



Quickly detect drifts temperature and optimise energy performance.



To be alerted if humidity exceeds a threshold to prevent possible damage.



Check the ambient temperature to ensure correct operation of the equipment.

TECHNICAL SPECIFICATIONS



LoRaWAN ARF8275ARA | Sigfox ARF8275CA

Mechanical specifications

Weight	107g (battery included)
Dimensions	111 x 61 x 50 mm
Enclosure	IP20, Bayblend® FR3010 (PC/ABS) plastic, white
Mounting	Wall

Recommended operating conditions

Temperature	+5°C / +60°C
Humidity	0 to 85% RH (non-condensing)

Device Power Supply

Battery Type	1 connectorized battery pack (4000 mAh)
Expected Battery Life	For 1 frame every 2 hours (12 frames per day): - Sigfox: 5.4 years (scan every 20 minutes) - LoRaWAN SF12 or SF7: > 15 years (scan 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 update 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: LoRaWAN: Class A Sigfox: Class 0 Sigfox: Class 0
Supported LoRaWAN features	OTAA, ABP, ADR, adaptive channel setup
RF transmit power	14 dBm
Sensitivity	-130 dBm LoRaWAN @SF7 / 130 dBm Sigfox

Regulations and certifications

Standard	Directive 2014/53/UE (RED)
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SENSOR Temperature		SENSOR Humidity	
Sensor technology	CMOSens®	Sensor technology	CMOSens® sensor chip
Range	-40°C / +120°C	Extended range	0 to 100 RH%
Type resolution	0.1°C	Type resolution	1% RH
Accuracy	See figure 1	Accuracy at 25°C	See figure 2
		Typical tolerance of RH over T°	See figure 3

Figure 1 Temperature accuracy

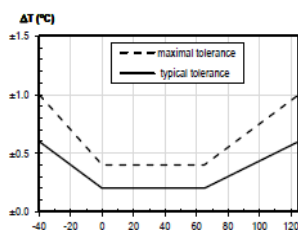


Figure 2 Tolérance of RH at 25°C

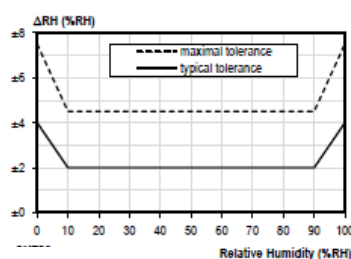


Figure 3 Typical tolerance of relative humidity over Temperature

