COMFORT

adeunis
IOT PRODUCTS & SOLUTIONS

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 or low threshold(s) exceeded
    press on alert button
  · number of events reached on the dry
    contact input

+

Additionnal features:
  · **Autonomy optimization:** historization
  · **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 inconsistancy
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 ARF8275AA | Sigfox ARF8275CA

Mechanical specifications	
Weight	102g (battery included)
Dimensions	111 x 61 x 50 mm
Enclosure	IP20, Bayblend® FR3010 (PC/ABS) plastic, white
Mounting	Wall or Laid

Operating conditions	
Temperature	-20°C / +60°C
Humidity	0 to 85% RH (non-condensing)

Device Power Supply	
Battery Type	1 connectorized battery pack
Expected Battery Life	For 1 frame every 2 hours (12 frames per day): - Sigfox: 4.2 years (scan every 20 minutes) - LoRaWAN SF12 or SF7: > 10 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 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: LoRaWAN: Class A	Sigfox: Class 0	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)

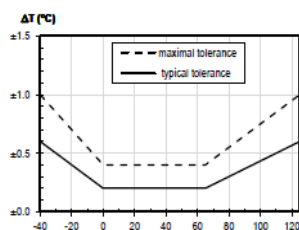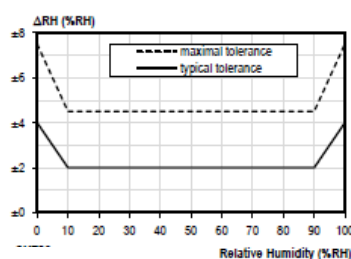| SENSOR Temperature		SENSOR Humidity	
Sensor technology	CMOSens®	Sensor technology	CMOSens® sensor chip
Range	-40°C / +125°C	Extended range	0 to 100 RH%
Type resolution	+/- 0.015°C	Type resolution	0.01 %RH
Accuracy	See figure 1	Accuracy at 25°C	See figure 2
		Typical tolerance of RH over T°	See figure 3

Figure 1 Temperature accurancy

Figure 2 Tolérance of RH at 25°C

Figure 3 Typical tolerance of relative humidity over Tempeature