

# COMFORT SERENITY



## Optimising comfort and ensuring the health of occupants Reduce your deployment, integration and operational costs



### DEPLOY MORE SIMPLY AND QUICKLY

- Worldwide cellular compatibility (NB-IoT, LTE-M).
- Multi-platform integration facilitated by LWM2M and MQTT standards.
- Automated provisioning on the IoT platform through bootstrapping (LwM2M).
- Mobile application for on-site application configuration in NFC.

### MEASURE AND ALERT ACCORDING TO YOUR NEEDS

- Monitor temperature, humidity, CO2 and TVOC concentrations, in a configurable measurement interval from 1 min to 7 days.
- Trigger an alarm in real time thanks to configurable high and/or low thresholds.
- Choose its transmission mode(s): periodic, event-based, with history, black out.

### OPERATE YOUR FLEET OVER THE LONG TERM WITH THE LWM2M

- Standardized and remote device management operations, individually or in batches: commands, configuration read/write, FOTA.



MADE IN  
FRANCE



- **Network:** excellent indoor coverage
- **Quick and easy application configuration,** with a smartphone or remotely
- **Intelligent air quality index**
- **Automatic calibration process** for accurate measurement
- **Multicolored LEDs:** real time knowledge of the Co2 concentration
- **Battery-operated product**
- **Historization and blackout:** optimized autonomy
- **Compact design,** easy to install
- **Designed and assembled in France**



Reduce  
energy  
consumption



Guarantee  
occupant  
satisfaction



Meet  
to regulatory  
obligations



Preserve  
the building  
against damage

# TECHNICAL SPECIFICATIONS



## NB-IOT ARF8394AB

### Mechanical specifications

Weight	146 g ((battery included)
Dimensions	111 x 61 x 40 mm
Enclosure	IP20, Bayblend® FR3010 (PC/ABS) plastic, white
Mounting	Wall or laid flat

### Operating conditions

Range of use recommended	5°C / +50°C
Operating temperature	-10°C / +70°C
Humidity	0 to 85% HR (non-condensing)

### Device Power Supply

Battery	Dual FANSO Li-SOCI2 ER18505H-2 battery pack or external power supply via 2-pin terminal block (power supply not supplied)
Expected Battery Life	Up to 10 years without maintenance (device configuration : 1 sampling every 60 mins, 1 transmission every 60 mins, LEDs enabled).

### Update

Applicative configuration	Setup via NFC, using the Adeunis mobile application: "IoT Configurator NB-IoT / LTE-M" on Android/iOS, or remotely.
Firmware	Application firmware and remote modem firmware upgrade (FOTA)

### Connectivity

SIM card	Nano SIM 4FF   Class C (1.8V)
Cellular standard	3GPP LTE Version 13
LPWAN networks	NB-IoT, LTE-Cat-M1
Protocols	LWM2M 1.1, MQTT (optional)

Features	NB-IoT	LTE-Cat-M1
Frequency bands	B1, B2, B3, B4, B5, B12, B13, B17, B19, B20, B25, B26, B28, B66	B1, B2, B3, B4, B5, B12, B13, B14, B18, B19, B20, B25, B26, B28, B66
RF transmitting power	+23 dBm	+23 dBm
Sensibility	> -108 dBm -113 dBm typ	> -103 dBm -107 dBm typ

### Regulations and certifications

Standard	Directive 2014/53/UE (RED)
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SENSORS	Technology	Measuring range	Accuracy
Environmental parameters			
Temperature	CMOSens®	0°C / +65°C	± 0.2°C typ. ± 1°C max.
Humidity	CMOSens®	10% to 90% HR	± 2% HR typ. ± 4.5% HR max
Air quality			
CO2	NDIR	400 à 5 000 ppm ; extended range up to 10 000 ppm	± 30 ppm +3% of the measurement on the beach 400 à 5000 ppm
COVT	NDIR	Scale of the COVT index from 1 to 500 points	< ± 15 index points or < ± 15% of the measured value