COMFORT SERENITY

adeunis
IOT PRODUCTS & SOLUTIONS

NB-IoT LTE-M

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

CO₂ VOC

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

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· **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**

A B C

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

Device Power Supply	
Battery	Dual Battery Pack FANSO Li-SOCl2 ER18505H-2 or external power supply via USB-C port (not included)
Expected Battery Life	The product is powered by a replaceable battery pack and has been designed to work for up to10 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 NFC IoT Configurator mobile application on Android or remotely
Firmware	Application firmware and remote modem firmware upgrade (FOTA)

Conectivity	
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	RF 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)

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