

## Sanitary VMC Sensor



The VMC SANITARY sensor measures and transmits the pressure measurements of the centralized ventilation boxes on the SIGFOX™ radio network, a secure, ultra narrow band, long range and low power consumption network.

### APPLICATIONS

- Supervision of heating, ventilation and air conditioning installations
- Energy optimization of buildings (residential tertiary)

### BENEFITS & FEATURES

- SIGFOX™
- Easy to install and use
- Differential data compression
- Autonomy > 8 years (data compression mode)
- Pressure measurement in the air flow VMC
  - Range: 0 / +10kPa; no precision
  - Resolution: 15Pa
- IP55

### CERTIFICATION

- RoHS, CE



*Photo not contractual*

The SIGFOX™ SANITARY VMC sensor is a battery-powered on-board system that monitors centralized ventilation boxes by periodically measuring the vacuum.

The data is transmitted periodically to the SIGFOX™ network for uploading:

- Vacuum in connection with the on/off switch of the chamber
- Battery voltage level

This Sensor is installed outdoors near the cabinet and connected on both sides of the ventilation.

It must be fixed under cover (in a Plexo box for example) so as to be protected from direct sunlight, rain, snow, etc.

Installation and commissioning is quick and easy (tubes and pipettes not included). The sensor is equipped with

- an NFC identification tag (product number, serial number, production batch)
- a magnetic switch for switching on and off

Powered by a 3.6V/3.6Ah battery, the autonomy of the sensor is more than 8 years for a configuration carrying out one measurement per hour and one transmission per day.

The Sensor is configured at the factory for selection:

- the measurement periodicity,
- the periodicity of data transmission,
- the periodicity of transmission of information frames

### THE LARGEST IOT PRODUCTS RANGE FOR YOUR PROJECT

nke WATTECO is a European leader in the design and manufacture of intelligent IoT devices to fit to all remote reading and data collection solutions.

nke WATTECO is a LoRa Alliance®.

## TECHNICAL CHARACTERISTICS

RADIO FREQUENCY	
Frequency (MHz)	EU: 868-870
Transmitted power(dBm)	+14
Sensitivity(dBm)	-126
FIRMWARE	
Protocol	SIGFOX™ 0U approval
Application layer	Proprietary; no encryption
Measurement frequency	from 1h to 48h in 1h steps
Frequency of data transmission	from 6h to 48h in steps of 1 hour
Alarms	On / Off
Data	Battery voltage level: 0.1V to 3.6V in steps of 0.1V Min and max air flow pressure vmc
PRESSURE GAUGE	
Range (kPa)	0 / +10; no precision announced
Resolution (Pa)	15
POWER SUPPLY	
Voltage	3.6V / 3600mAh - lithium battery
Autonomy in the range of +10°C to +25°C	> 8 years: 1 measurement per hour / 1 transmission per day
INTERFACE	
NFC Tag	Product number, serial number, batch number
Buzzer	Configuration and association on the network
magnetic switch	ON/OFF association to the network
ALARMS	
On / Off	Transmission
BOITIER	
Dimension (mm)	84x82x55
Waterproofing	IP55
ENVIRONMENT	
Operating temperature (°C)	-20 / +60
Storage temperature (°C; rH)	-10°C / +30°C; <75% RH
STANDARDS & REGULATIONS	
EN, 61000-4-2 EN 300-220-1 V2-4-1, EN 301 489 V1-6-1 CE, RoHS	  

## PRODUCT REFERENCES

REFERENCE	DESCRIPTION
50-09-034	SIGFOX™ SENSOR VENTILATION