

Air quality sensor

Boré model

Technical data

Boré 2.0

ISTYA

Applications

Industry: Process, air extractor
Intelligent building: indoor air quality
Apparatus: air purifier, intelligent ventilation

Particularities

Multiple communication protocols
Compact, customizable design
Pollutant selection adapted to the environment

Description

The sensors available from Istya are tailor-made to meet the specific needs of each customer. They are simple, comprehensive and adaptable, providing an effective and cost-effective air quality monitoring solution.

Boré sensors are equipped with different probes, including particle and CO2 sensors, which collect the data necessary for air quality analysis. They are compact and robust, with high measurement accuracy, providing reliable and accurate measurements over a long period of time.

Additionally, Istya sensors are customizable based on the customer's environment and the specific pollutants to be measured, ensuring efficient use of resources and a resource-efficient approach.



Fonctions

Boré sensors can be equipped with different communication and power features to meet the specific needs of each application.

They can be equipped with Wi-Fi, GSM, Modbus or LoRaWAN connections to ensure efficient communication of measurement data in real time. The sensors can also be powered by USB-C, 230V/5V 2A AC/DC converters or PoE, providing great installation flexibility.

In terms of power consumption, Istya sensors have a standby consumption of 40 mA and an operating consumption of 600 mA. Battery life can reach up to 20 days depending on usage conditions.

When it comes to measurements, the sensors can be configured to take measurements at a frequency of 2 times per hour with a measurement duration of 5 minutes. It is also possible to modify the frequency and/or duration of measurements according to needs.

Compact Design

Les capteurs Boré ont été conçus avec un design moderne et élégant, leur permettant de s'adapter facilement à tout type d'environnement. De plus, les dimensions peuvent être personnalisées selon les besoins du client. Nous produisons sur demande afin de répondre aux exigences de chaque projet et garantir une qualité optimale

Application

Boré sensors are used in various industrial applications, smart buildings and devices. In industry, sensors are used in processes and air extractors to monitor air quality and ensure safe working conditions.

In smart buildings, Istya sensors are used to monitor indoor air quality and ensure a healthy working or living environment for occupants. Devices such as air purifiers and smart ventilations also use Istya sensors to monitor air quality and adjust ventilation accordingly.

Delivery details

- Bore Sensor
- Installation Guide

Specifications

Baseline + Temperature & Humidity

Settings	COVT	CO2	PM1	PM2.5	PM10	Temperature	Humidity
Targeted gas	COVT	CO2	Particles PM1	Particles PM2.5	Particles PM10	Temperature	Humidity
Measuring range	0-50 ppm	0-10'000 ppm	0-500 µg/m3	0-500 µg/m3	0-500 µg/m3	-40.0 to 176.00°F	0 à 100%
Lower detection limit	2 ppb	0,5 ppm	<0.1 µg/m3	<0.1 µg/m3	<0.1 µg/m3		
Resolution	1 ppb	1 ppm	<0.1 µg/m3	<0.1 µg/m3	<0.1 ppm	<0.1 ppm	0,024 ppm
Precision	< ± 3% of reading	< ± 50 ppm or± 5% of the reading (the greater of the two values)	0.1 µg/m3	0.3 µg/m3	0.5 µg/m3	< ± 0,3	< ± 2%
Response time	< 30s	< 60s	1s	10s	60s	T63 < 30s	T63 < 8s
Operating temperature	-50.000 to 122.00°F	-50.000 to 122.00°F	-50.000 to 122.00°F	-50.000 to 122.00°F	-50.000 to 122.00°F		
Certifications	RoHS / CE	RoHS / CE	RoHS / CE	RoHS / CE	RoHS / CE	RoHS / CE	RoHS / CE

Calibration

Recommended interval for recalibration

1 year

Means of communication

*Rechargeable battery optional
**Customizable

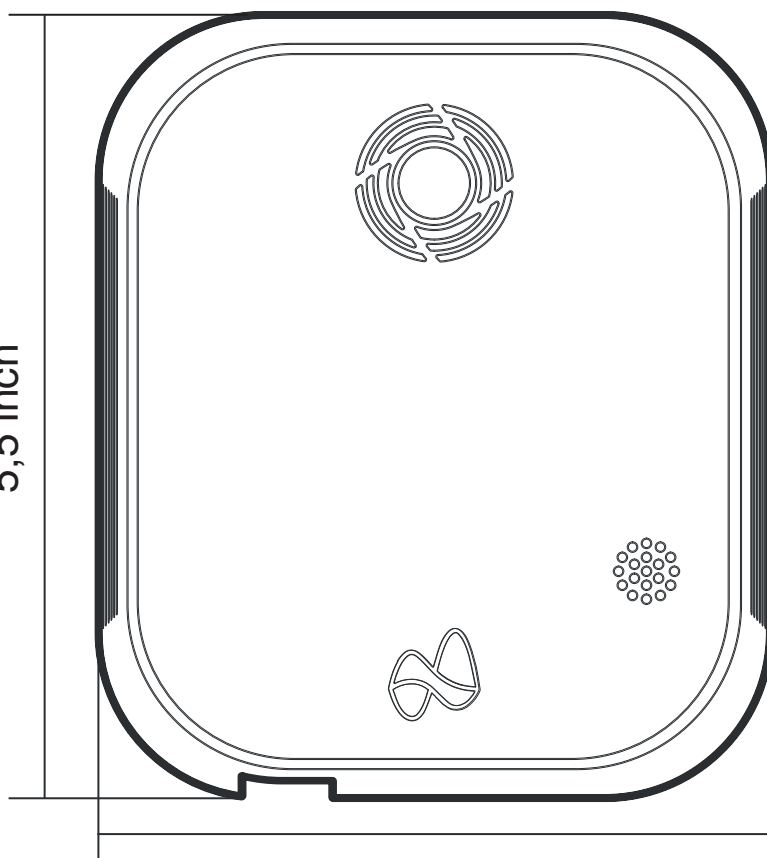
Communication	WIFI	GSM	Modbus	LoRaWAN <i>on request</i>
Type of communication	WIFI 802.11 b/g/n	4G LTE Cat 1	Modbus TCP/IP	LPWAN (868 MHz)
Power Supply	USB C connector - Convertisseurs AC/DC 230V/5V 2A - ou PoE*	USB C connector - Convertisseurs AC/DC 230V/5V 2A - ou PoE*	USB C connector - Convertisseurs AC/DC 230V/5V 2A - ou PoE*	USB C connector - Convertisseurs AC/DC 230V/5V 2A - ou PoE*
Standby / operating consumption	40 mA / 600 mA	80 mA / 200 mA	N/A / N/A	3.2 mA / 35 mA
Measures	Frequency: 2/hour, Duration: 5 minutes***	Frequency: 2/hour, Duration: 5 minutes***	Frequency: 2/hour, Duration: 5 minutes***	Frequency: 2/hour, Duration: 5 minutes***

Dimensions (in inch)

Boré sensors offer a customizable design that accommodates a variety of sensor configurations and power options. They can also be customized to meet each client's specific data management needs. Thanks to their modern and elegant design, Boré sensors fit harmoniously into any environment. Sensor dimensions can also be adapted to meet the requirements of each project.

We produce on demand to guarantee optimal quality and meet the specific needs of each customer.

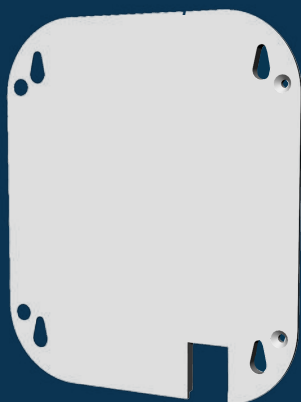
5,5 inch



4,7 inch

Example of the basic model

Boré 2.0



- 1- PM input
- 2- Power port
- 3- Air inlet
- 4- Air outlet