

# ALBA5 Sensors

## DESCRIPTION

The ALBA5 sensor family is designed to constantly monitor physical or environmental parameters. ALBA5 sensors can be used as a standalone sensor or configured as a group of sensors plus a base station.

The ALBA5 sensor can be configured to measure and record:

- Pressure
- Temperature
- Humidity
- Gas Levels (O<sub>2</sub> or CO, CO<sub>2</sub>, Volatile Gases)
- Flow

The ALBA5 sensor can also be configured to measure vibration, shaft rotations etc.

## FEATURES

- Sensor output – Traffic Light LED or LCD Numerical Readout
- Battery operated (min 12 months between charges (3-6 Months for Vibration, Shaft Rotation) or external power supply
- Configured using either LoRa, WiFi or Bluetooth
- Continuous data transmission option from sensor to base station

## SPECIFICATIONS

INPUT SUPPLY		
Internal Battery or External Power supply (9-25V), dependent on application		
SENSOR INPUTS		
Sensor	Setting from Base Station	LoRa or WiFi
	Independent Sensor Setting	QR Code Via Bluetooth
OUTPUTS		
Sensor	LED or LCD Numerical Display	Transmission to Base Station Via LoRa or WiFi (dependent on application and configuration).
	LED or LCD Numerical Display	Transmission to end device via QR Code & Bluetooth
Battery Condition		Monitoring By Base Station
		Replace Battery every 6 -12 months
Alarm Messages		Transmission to Base Station
		email or SMS to Mobile
Data Measurement		Measurement Frequency Set by User (1s to 1 Day Intervals)
		Constant Visual Indication
Data	CSV or XML suitable for External Databases	
BASE STATION (SMS Version)		
Display	10.1" Touch Display	
Number of Sensors	Up to 150	
External Connections	Industrial Signal Lights, WiFi, Ethernet etc	
Inputs	12-24V dc, 240V ac	
Outputs	SD Card, External dBase, SMS, email	
Environmental	0 to +55°C, IP65	



Please call or email us to discuss your specific requirements:

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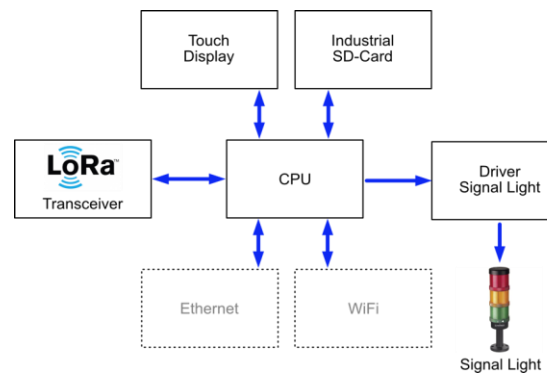


# ALBA5 Sensors

## ALBA5 - S



**ALBA5-S: Sensors and Base Station**



**ALBA5: Base Station Architecture**

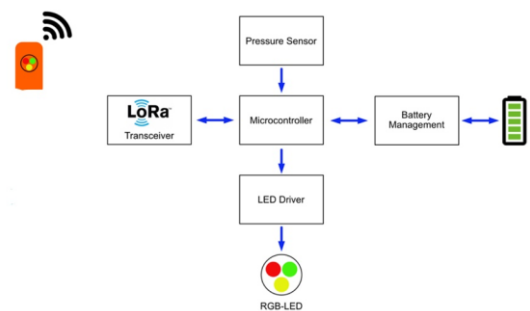
The ALBA5 system consists of a **Base Station** and up to **150 sensors**. A preset limit is constantly monitored by the microcontroller and clearly signaled on the sensor and the base station if it falls below some preset thresholds. The LoRa radio standard is used for transmission between the sensors and the base station.

Some applications such as vibration monitoring or shaft speed monitoring require continuous data transmission between the sensors and the base station. In these applications the system uses a secure WiFi network and as the battery life is reduced an external power supply can be used.

Environmental Specifications	
Operating Temperature	0 to 55°C
Storage Temperature	-40 to +85°C
Protection	IP65
Part No/ Ordering Information	
ALBA5-S	ALBA5-S-X-Y
ALBA5	ALBA5-X
Application Variant XX <sup>1,2</sup>	Pressure – P, Temperature – T, Humidity – H, Gas – G <sup>3</sup> , Flow – F, Vibration – V, Shaft Speed - S
Sensor Quantity Y	Quantity of individual sensors required per AMS system

Notes:

- 1: For other variants please contact for information
- 2: Please contact to discuss exact requirements of sensors and system
- 3: Please contact regarding type of gas to be monitored



**AML: Sensor Architecture**

The Albacom ALBA5 can be used as a standalone sensor which stores data directly on the device without the need for a base station. The Operator can read the data via smartphone. Settings and data can be accessed via a QR Code and Bluetooth.