

**SAS sensors** are ambient sensors that measure ambient temperature, humidity, dew point, atmospheric pressure and air quality. With these sensors, the values such as temperature, humidity, pressure in the environment can be transferred to the control systems via the RS485 (MODBUS RTU) interface. There are two different devices.

SAS TH: Temperature, Humidity, Dew Point SAS IAQ: Atmospheric Pressure, Air Quality, Dew Point, Humidity, Temperature

The device configured via MODBUS and user interface software activates its digital outputs depending on the limits assigned to the measured parameters. In this way, an alarm management system can be created. The dual supply and communication terminals on the device make it easy to connect the sensors in series. Thanks to the dip switches on the sensors, the parameters required for communication can be easily adjusted.

- User interface software
- Temperature, Humidity, Dew Point, Atmospheric Pressure and Air Quality
- Easy configuration with dip-switches

- Activates its digital outputs depending on the limits assigned to the measured parameters.
- RS485 (MODBUS RTU) interface
- Dual supply and communication terminals

#### Which actions are executed?

Temperature, humidity, dew point



Measured parameters can be transferred to the control systems over RS485

quality thanks to the internal sensors.

Measures temperature, humidity, dew point, atmospheric pressure and air

interface.

User interface software allows configuring the device much more quickly.

Digital outputs can be activated depending on the limit values of the measurement parameters set by the user.

Saves you time thanks to the dual supply and communication terminals

RS485 interface



User interface software



Digital outputs



Dual supply and communication terminals



# Which market are they used frequently?

## **Benefits and Advantages**

- Energy Efficiency Applications
- Air Quality Applications
- Cold Storage
- Local Control Applications

- Fast configuration with user interface software
- Measurement up to 5 different parameters without external sensor connection
- Easy connection with dual supply and communication terminals
- Creating alarm management with digital outputs
- 3750VRMS insulation
- Communication configuration with dip-switches



### **Energy Efficiency Applications**



SAS sensors are used in places where energy efficiency is needed, such as factories, buildings, warehouses, museums. Its internal sensors constantly monitor the ambient, providing data to central control systems for the more efficient operation of air conditioners.

#### **Air Quality Applications**



Ambient conditions should be constantly monitored for the health of people in production facilities. In addition to measuring temperature and humidity values in working environments such as offices, SAS-IAQ plays a big role in creating an ambient suitable for employees by constantly monitoring air quality.

#### **Cold Storage**



The temperature measurement is critical for the cold storages. SAS sensors constantly monitors storages in order to remain freshness of the foods.

## **Local Control Applications**



Thanks to the digital output on the device, it is used in areas required to take action according to the limit values assigned to the measured parameters.

## **TECHNICAL SPECIFICATIONS**

GENERAL	
Operating voltage	5 VDC ±10%
Storage temperature	-45°C 85°C
Connection type	Wall mount
Digital Output	530V DC, 50mA, (Insulation: 3750VRMS)
COMMUNICATION	
Interface	Modbus RTU (RS 485)
Slave ID	1 247
Baud rate	9600, 19200, 38400, 57600
Parity	None, Even
Stop bit	1,2
SAS-TH TEMPERATURE/HUMIDITY MODBUS TRANSMI	TTER
Temp. measurement range	-40°C 80°C
Temp. accuracy	±1°C
Dew point range	-40°C 80°C
Humidity measurement range	0%rH 100%rH
Humidity accuracy	±3.5 % (20%rH- 80%rH)
Response time	15 sec
SAS-IAQ INTERIOR AIR QUALITY MODBUS TRANSMIT	TER
Temp. measurement range	-40°C 80°C
Temp. accuracy	±0.5°C
Dew point range	-40°C 80°C
Humidity measurement range	0%rH 100%rH
Humidity accuracy	±3.5 % (20%rH- 80%rH)
Atm. pressure meas. range	300 hPa - 1100 hPa
Atm. pressure meas. accuracy	± 0,6hPa
Air quality level range	0500







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