



Customizable measurement range
Accuracy and reliability of data

Description

TBAR-IVS-K is a sensor for the measurement of atmospheric pressure which can be used for the most common meteorological applications, thanks to its good performance in terms of accuracy and sensitivity.

TBAR-IVS-K is equipped with a piezoresistive electronic transducer with linear output. An internal electronic system compensates automatically the variation in temperature, ensuring a high precision over the whole measurement range.

The transducer is based on a micro-processor chip that executes many functions. Mainly it performs assuring for instance the correct control functioning, or data pre-processing and electrical signal A/D conversion.

TBAR-IVS-K is housed into an IP-65 box that guarantees a proper functioning of the sensor in outdoor installations, even in harsh environmental conditions.

The sensor is supplied with power and signal cable (4m).



Main Features

- Customizable measurement range
- Accuracy and reliability of data
- Protection against overvoltages
- Low power consumption

Technical Specifications*

Measurement performance			
Atmospheric pressure [hPa]			
	Min	Typical	Max
Linearity		0.2	
Hysteresis	1	0.1	1
Calibration uncertainty at 20°C	0.06	0.1	0.11
Measurement range	600 ÷ 1100 hPa		
Accuracy (RS485-Modbus)	±0.25		
Accuracy (I/V outputs)	±0.9		
Resolution	0.1		
Long term stability	0.1 for one year		
Operating conditions			
Temperature	-40 ÷ +60 °C		
Humidity	0% ÷ 100%		
Outputs			
RS485-Modbus	Pressure [hPa]		
Tension	0 ÷ 2 V ↔ 600 ÷ 1100 hPa		
Current	4 ÷ 20 mA ↔ 600 ÷ 1100 hPa		
Power supply and consumption			
Voltage supply	7 ÷ 30 Vdc		
Power consumption (mA)			
RS485-Modbus / 0 ÷ 2 V	Min	Typical	Max
4 ÷ 20 mA	-	1	3
	5	-	25
Mechanical specifications			
Protective body	Plastic material IP-65 and stainless steel screws		
Weight	350 g		
Dimensions	119 x 123 x 61.5 mm		
Electrical connections	IP67 / 7 male poles		
Ordering codes			
Sensor with serial output RS485-Modbus	t011d-TBAR-IVS-K		

*Changes on technical performances can be applied upon request of specific calibration