

# BAROMETRIC PRESSURE Sensor

*t011 TBAR-IVS*



Customizable measurement range

Accuracy and reliability of data

# Description

TBAR-IVS 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 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 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		400 ÷ 1100	
Accuracy (RS485-Modbus)		0.4	
Accuracy (I/V outputs)		0.9	
Resolution		0.1	
Long term stability		1 for one year	

### Operating conditions

Temperature	-40°C ÷ +60°C
Humidity	0% ÷ 100%

### Outputs

RS485-Modbus	Pressione [hPa]
Tension	0 ÷ 2 V ↔ 400 ÷ 1100 hPa
Current	4 ÷ 20 mA ↔ 400 ÷ 1100 hPa

### Power supply and consumption

Voltage supply	7 ÷ 30 Vdc		
Power consumption (mA)	Min	Typical	Max
RS485-Modbus / 0 ÷ 2 V	-	1	3
4 ÷ 20 mA	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

Current output, Tension output, RS485-Modbus serial output	t011d-TBAR-IVS
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\*Changes on technical performances can be applied upon request of specific calibration