

## Applications

Meteo Observation  
Climatology  
Research



## Air Temperature & Relative Humidity Sensor

**TR1 provides reliable measurements of air temperature and relative humidity**

**Ultra-accurate**

**The fully sealed sensor body contains a pt1000 sensor, a capacitance humidity element and a signal amplifier**

**Calibration data is stored inside the sensors electronics**

**Power consumption is extremely low, with a stabilizing time of less than 2 seconds**

**For simple integration the sensor provides an SDI-12 output**

### Developed for demanding applications

The TR2 with its SDI-12 interface and ultra-accurate temperature sensor with extended temperature range was built for extremely demanding applications, from research and professional meteorology to industry.

### 7-element radiation shield

The sensor is mounted inside a 7-element radiation shield, made of durable thermoplastic. The radiation shield is coated black on the inside to avoid heat buildup. It is fixed to an aluminum arm, fitted with a mast mounting bracket and clamps. A 3m 7-pin Binder cable supports direct connection to an Adcon RTU.

# Technical Specifications

TEMPERATURE MEASUREMENT	Temperature sensor	pt1000 (DIN A)
	Measuring range	-40°C ... +80°C
	Sensor accuracy	< ± 0,05°C @ +20°C
	Linearity, Hysteresis, Repeatability, calibration uncertainty	< ± 0,05°C @ +20°C
HUMIDITY MEASUREMENT	Humidity sensor	HC101
	Measuring range	0% ... 100%
	Sensor accuracy at +20°C	± 1% from 0 ... 90% ± 2% from 90 ... 100%
	Linearity, Hysteresis, Repeatability, calibration uncertainty	< ± 1% @ +20°C
ELECTRICAL DATA	Power Consumption	5,5 ... 15VDC / ~ 1mA
	Output Signal	SDI-12
GENERAL	Response Time	less than 2 sec.
DIMENSTIONS & WEIGHT	Dimensions	L: 415 x H: 190 x Ø 102 mm, Sensor only: 140mm x 12 mm Ø
	Weight	615 g
ENVIRONMENTAL CONDITIONS	Storage Temperature	-40°C ... +80°C
	Cable; Connector	3 meter; 7-pin M9 male Binder
	Mast mounting	Brackets for poles with Ø of 35-40mm, clamps included