

ADCON TR2 Air Temperature & Relative Humidity Sensor

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. 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.

The sensor elements are protected from dust by a wire mesh screen cap. Other filter caps, such as sinter caps for corrosive environments and PTFE to protect against micro-particles are also available. The humidity sensor is encapsulated and covered by a protective coating to extend its life time and avoid erroneous readings due to build-up of dust or chemicals.

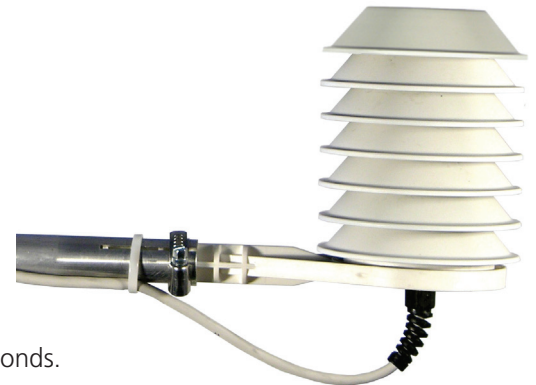
The new radiation shield with 7 elements made of durable thermoplast further reduces potential heat-build-up, caused by lateral radiation. Each element is coated black on the inside to avoid reflection of radiation towards the sensor. It is mounted to an aluminum arm, fitted with a mast mounting bracket and clamps. A 3m 7-pin Binder cable supports direct connection to an Adcon RTU.

Applications

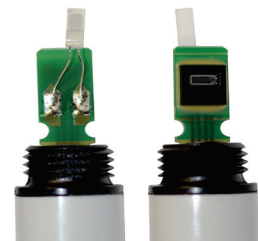
- ✓ Meteorological and hydrographical weather stations
- ✓ Livestock monitoring
- ✓ Industrial monitoring
- ✓ Storage and silo monitoring

Technical Data

Dimensions	L: 415 x H: 190 x \varnothing 102 mm Sensor only: 140mm x 12 mm \varnothing	Humidity sensor	HC101
Weight	615 g	Measuring range	0% ... 100%
Response Time	less than 2 sec.	Sensor accuracy at +20°C	\pm 1% from 0 ... 90% \pm 2% from 90 ... 100%
Storage Temperature	-40°C ... +80°C	Linearity, Hysteresis, Repeatability, calibration uncertainty	< \pm 1% @ +20°C
Power Consumption	5,5 ... 15VDC / ~ 1mA	Cable; Connector	3 meter; 7-pin M9 male Binder
Output Signal	SDI-12	Mast mounting	Brackets for poles with \varnothing of 35-40mm, clamps included
Temperature sensor	pt1000 (DIN A)	Ordering information:	
Measuring range	-40°C ... +80°C	200.733.032	Adcon TR2 Combisensor
Sensor accuracy	< \pm 0,05°C @ +20°C	800.000.410	Sinter filter cap
Linearity, Hysteresis, Repeatability, calibration uncertainty	< \pm 0,05°C @ +20°C		



TR2
Sensor



TR2 Sensor Elements