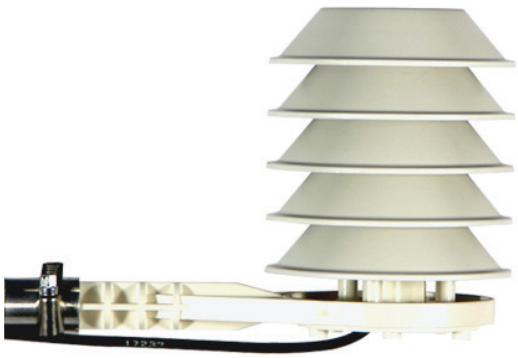
ADCON TELEMETRY

SMART WIRELESS SOLUTIONS

ADCON TR1 Temperature & Relative Humidity Sensor



TR1 Sensor

TR1 provides accurate and reliable measurement of temperature and relative humidity. The fully sealed sensor body contains a pt1000 sensor, a capacitance humidity element and a signal amplifier. Calibration data is stored inside the sensor's 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 filters, such as sinter caps for corrosive environments and PTFE to protect agains micro-particles are also available. In addition the humidity element is covered by a protective coating to extend its life and avoid erroneous readings due to build-up of dust or chemicals.

The sensor is mounted inside a 5-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.

TR1 Sensor Elements

Applications

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

Technical Data

Dimensions	L: 415 x H: 190 x ø 102 mm Sensor only: 100mm x 12 mm ø
Weight	615 g
Response Time	less than 2 sec.
Storage Temperature	-40°C ... +80°C
Power Consumption	4,5 ... 15VDC / ~ 1mA
Temperature sensor	pt1000 (DIN A)
Measuring range	-40°C ... +60°C
Sensor accuracy	< ± 0,1°C @ +20°C
Linearity, Hysteresis, Repeatability, calibration uncertainty	< ± 0,1°C @ +20°C
Output Signal	2 x 0 ... 2.5VDC

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
Cable; Connector	3 meter; 7-pin M9 male Binder
Mast mounting	Brackets for poles with ø of 35-40mm, clamps included
Ordering information:	
200.733.031	Adcon TR1 Combisensor
800.000.410	Sinter filter cap

aqualab scientific

t +61 2 9894 4511
e sales@aqualab.com.au
w www.aqualab.com.au