

High Precision Temperature Sensor type TS21

Epoxy coated interchangeable highly accurate chip thermistor

FEATURES:

- High Precision solid state temperature sensor, accuracy 0.1 °C, overall typ < 0.2 °C
- Interchangeability down to ± 0.1 °C
- Suitable for use over the range of -80°C to 150°C
- High sensitivity -4%/°C at 25°C
- Suitable for temperature measurement, control and compensation
- High reliability and stability over interchangeable range

Can be connected direct to Datalogger EKO21N or iBOX with accurate 16 Bits ADC precision temperature input with exact programming of temperature with high resolution (0.01 C) values. A very practical precision temperature measurement with only 2 wires and cable can be extended without loss of accuracy! Optional cable and waterproof cable connectors are available.

Example Calibration Values

(refer to non-linear calibration table):

Resistance (Ohm)	Temperature (C)
5000	41.57
10000	25.00
20000	9.91

OPTIONS:

Consult factory for availability of options:

- Other resistance values in the range of 100~ - 100k~
- Other tolerances or ranges
- Non standard R-vs -T curves
- Waterproof versions for in water/pipes
- Clamp-on versions for pipes
- Optional weather screen WS21



Optional weather Screen WS21

The Air Temperature sensor is built in weather screen WS21 for outdoor applications. Standard cable length 5 m (specify at order).

Can be combined with HUM21 humidity sensor Standard cable length 2 meter. **a low cost precision and compact Temperature/ Humidity sensor unit!**

THERMAL AND ELECTRICAL PROPERTIES:

Dissipation constant:	(still air)	1 mW/°C
	(stirred oil)	8 mW/°C
Thermal time constant:	(still air)	10 sec.
	(stirred oil)	1 sec.
Maximum power at 25°C		75mW
(derated from 100% at 25°C to 0% at 100°C)		