

# ThermoAir3

## Thermoelectric Anemometer

The ThermoAir3 is our specialist instrument for measuring very small air flow rates and determining degree of turbulence, as well as for humidity measurements.

- Flow from 0,01 m/s
- Multi-sensor anemometer for thermoelectric flow sensors and humidity measurements
- Automatic temperature compensation
- 100% guaranteed measuring tolerance

Types:

- **Indication unit ThermoAir3**
- **Probe TA3 Directional**  
Probe 0,01 - 1 m/s  
Probe 0,01 - 5 m/s
- **Probe TA3 Omnidirectional**  
Probe 0,01 - 1 m/s  
Probe 0,01 - 5 m/s
- **Humidity probe TA3** 0 - 99% rF



SCS Schweizerischer Kalibrierdienst  
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Swiss Calibration Service

SCS 046



The ThermoAir3 is our specialist instrument for measuring very small air flow and determining degree of turbulence. Relative humidity can also be measured with the separate humidity sensor. The automatic temperature compensation, barometric pressure correction for local altitude, simple zero adjustment, individually adapted measuring sensors and our SCS wind tunnel guarantee high precision measurement and simple handling.

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## Thermoelectric Anemometer

Typical applications for this instrument are very small flow rate measurements in the lab., in clean rooms, air conditioning, drying and refrigeration installations, plus workplace comfort and well-being measurements.

| Thermoelectric Air Probe  | Version  | Measuring Range   | Operating Temperature |
|---|--|---|-----------------------|
| ThermoAir3  | directional / omnidir.   | 0,01 - 1 m/s  | 0 to +40°C            |
| ThermoAir3  | directional / omnidir.   | 0,01 - 5 m/s  | 0 to +40°C            |
| ThermoAir3  | directional / omnidir.   | 0,01 - 1 m/s  | -30 to +60°C          |
| ThermoAir3  | directional / omnidir.   | 0,01 - 5 m/s  | -30 to +60°C          |
| Accuracy of<br>- Flow at 22°C:<br>- Temperature:<br><br>Temp.compensation<br>Value<br>Zero point  | 1 m/s ±1,0% fs and ±1,5% rdg.<br>5 m/s ±0,2% fs and ±1,5% rdg.<br>1 m/s ±1,0% fs. and ±2,0% rdg./10°C<br>5 m/s ±0,2% fs. and ±2,0% rdg./10°C<br>dependent on used probe 0 to +40°C or -30 to +60°C<br>±2% rdg. / 10°C<br>±1% fs / 10°C   |   |                       |
| <b>Probe</b>  | <b>Probe Directional</b>   | <b>Probe Omnidirectional with protection basket <math>\varnothing</math> 110 mm</b> |                       |
| Head dim.   | $\varnothing$ 8 mm   | $\varnothing$ 8 mm  |                       |
| Shaft dim.  | $\varnothing$ 15 mm  | $\varnothing$ 15 mm   |                       |
| Angle of approach   | +/- 30°  | +/- 180°  |                       |
| Length of probe   | 300 mm   | 310 mm  |                       |
| Length of cable   | 1,5 m  | 1,5 m   |                       |
| Storage temp.   | -65 to +150°C  | -65 to +150°C   |                       |
| <b>Humidity Probe</b>   | <b>Measuring range</b>   | <b>Resolution</b>   | <b>Accuracy</b>       |
| Humidity  | 0 - 99% rh   | 0,1% rh   | +/- 3% rh             |
| Temperature   | - 20 to 60°C   | 0,1 °C  | +/- 0,5 °C            |
| Media<br>Measuring range<br><br>Indication<br>Measuring rate<br>Supply / Battery<br>Current consumption<br>Lifetime of battery<br>Output<br><br>Case dimension<br>Case protection type<br>Weight<br>Using / Storage temp.<br>Air humidity<br>Working standard | Dry instrument air or inert gases<br><b>Flow:</b> m/s or <b>Humidity</b> % rh<br><b>Temperature</b> °C<br>LCD 4 Digits<br>2 measurings / sec.<br>Battery (1 x 9 V. Leclanché LR22-9 V) or external mains adapter approx. 40 mA<br>approx. 4,5 hours.<br><b>Flow</b> or <b>Humidity</b> 0 to 1 Volt<br><b>Temperature</b> 10 mV/°C 0 V = -30°C<br>Output for <b>Mini2Logger</b> (interval 0,5 s)<br>80 x 145 x 39 mm<br>IP 40<br>Approx. 300 gram<br>0 to 50°C / -30 to 80°C<br>0 to 90% rh, non-condensing<br>Laser controlled wind tunnel (cert. in accord. with SN EN 45001) |   |                       |

Customer special version on demand.

Specification subject to change without notice