

# THB Ambient Conditions Sensors

Measurement of temperature, humidity, pressure, air density and vibrations.



THB-S



THB-W



THB P



Sensor connected to THBR Box

## Features

### THB S – Standard Ambient Conditions Sensor

The THB S sensor is a standard measuring instrument that can be integrated directly, or via THBR Box, with a computer or a weighing instrument. The THB S sensor enables measurement of temperature, pressure, humidity, air density and vibrations. Each sensor has its own identification number that is assigned to measurements saved to the database.

### THB P – Precise Ambient Conditions Sensor

The THB P sensor is a precise ambient conditions sensor. The sensor enables measurement of the same ambient conditions parameters as the THB S but with much greater accuracy..

### THB W – Liquid Temperature Sensor

The THB W sensor is intended for measuring temperature of liquid. Temperature readout using THB W sensor is possible upon connecting the sensor directly to a computer or to the THBR Box ambient conditions recorder. THB W can be used e.g. on pipettes calibration workstation, to measure water temperature in gravimetric method in order to determine Z' coefficient in accordance with ISO 8655.

## Compatible with

- UYA 4Y ultra-microbalances
- MYA 4Y, XA 4Y microbalances
- XA 4Y, AS 3Y analytical balances
- PS 3Y precision balances
- MU YA weighing modules
- AVK-1000, UMA, AK-4, AKM-2 automatic mass comparators
- UYA 4Y.KO, WAY.4Y.KO, APP.4Y.KO, HRP 4Y.KO, XA.4Y.A.KB, PS.4Y.KB, PM.4Y.KB, HRP, 4Y.KB manual mass comparators
- THBR 2.0 system

## Set Content

- THB sensor
- a holder
- USB cable

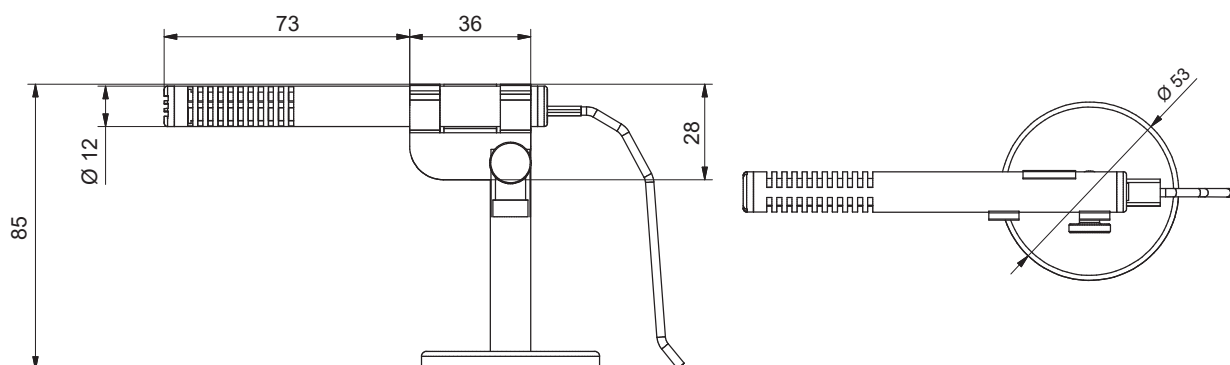
## Technical Specifications

	THB S	THB P	THB W
Measured temperature range	+5 ÷ +45°C	+5 ÷ +45°C	+5 ÷ +45°C
Temperature readability [d]	0.01°C	0.001°C	0.01°C
Temperature measurement accuracy	+/- 0.1°C	+/- 0.1°C	+/- 0.1°C
Measured pressure range	850 ÷ 1050 hPa	850 ÷ 1050 hPa	–
Pressure readability [d]	0.1 hPa	0.001 hPa	–
Pressure measurement accuracy	1 hPa	1 hPa	–
Measured humidity range	0 ÷ 100%	0 ÷ 100%	–
Humidity readability [d]	0.1%	0.01%	–
Humidity measurement accuracy	+/- 1.8% *	+/- 1.8% *	–
Air density measurement accuracy	0.001 kg/m <sup>3</sup>	0.001 kg/m <sup>3</sup>	–
Vibrations level range	0 ÷ 100 % **	0 ÷ 100 % **	–
Operating temperature	+5 ÷ +45°C	+5 ÷ +45°C	+5 ÷ +45°C
Housing	ABS	ABS	ABS
Power supply	5 V DC	5 V DC	5 V DC
Communication interface	USB 2.0	USB 2.0	USB 2.0
PC software	THB-R	THB-R	THB-R
Weight	336 g	336 g	336 g
Packaging dimensions	80 x 80 x 145 mm	80 x 80 x 145 mm	80 x 80 x 145 mm

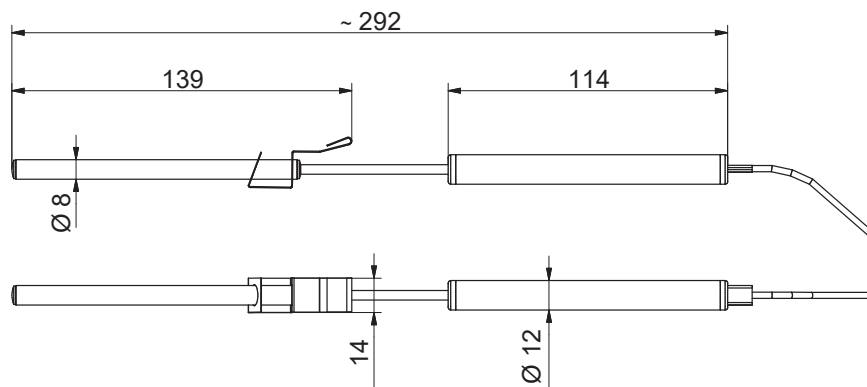
\* within 0 - 10 % and 90 - 100 % ranges the readability is 5 %

\*\* exceeding 100 % informs of the possibility of out-of-range permissible errors, or indications instability

## Dimensions



THB S / THB P sensor



THB W sensor