3B SCIENTIFIC® PHYSICS

...going one step further

Pt100 temperature sensor   1000550

Instruction sheet

10/15 Hh

1. Safety instructions

- In order to avoid permanent damage to the built-in Pt100 sensor, never exceed the maximum temperature of 150°C.
- Never expose the PVC grip or the connecting cable to temperatures above 80°C.

2. Scope of delivery

1 Sensor box
1 Pt100 immersion sensor
1 8-pin mini DIN connecting cable, 60 cm

3. Description

The sensor box and the Pt100 immersion sensor are used for measuring temperatures ranging from -50°C to +150°C. They are used in conjunction with the 3B Net*log*™ interface.

Once connected, the sensor is automatically detected by the interface.

The shaft and the tip of the sensor are made of type 316 stainless steel. The sensor is perfectly suited for measuring temperatures of organic fluids, solutions of salts, acids or bases.

4. Technical data

Measuring range:	-50°C to +150°C
Sensor type:	Pt100 sensing resistor
Accuracy:	0.1% of the measured value +0.25°C
Resolution:	0.1°C
Delay:	30 s approx. if temperature changes from 0°C to 100°C
Sensor cable:	PVC-insulated, 1 m

5. Operation

- Connect the immersion sensor to the sensor box and bring it into contact with a test surface or immerse it into a test liquid.
- Wait for the temperature to even out before taking readings.

6. Applications

Temperature measurements in experiments

Observation of freezing and boiling points and heat of reaction

Environmental analysis and evaluation of the weather and soil or in terrariums

Chemical reaction rates

Biochemical and enzyme processes

Microbiological studies

6.1 Required apparatus

1 3B NET*log*™ @ 230 V	1000540
or	
1 3B NET*log*™ @ 115 V	1000539
1 Pt100 temperature sensor	1000550