# 3B SCIENTIFIC® PHYSICS



# **Humidity sensor** 1000554

#### Instruction sheet

10/15 WH



# 1. Safety instructions

In order to avoid permanent damage to the built-in semiconductor sensor, strictly observe the following instructions:

- Never exceed the maximum operating temperature of +85°C.
- Do not allow the semiconductor sensor to come into contact with water. Do not expose the semiconductor sensor to direct sunlight.

The humidity sensor is not suited for safety applications.

# 2. Description

The humidity sensor is used for measuring relative humidity (RH) and is used in conjunction with the 3B NET $log^{\text{TM}}$  interface (U11300).

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

## 3. Scope of delivery

- 1 Humidity sensor
- 1 8-pin mini DIN connecting cable, length: 60 cm

#### 4. Technical data

Measuring range: 0 to 95%,

non-condensing

Sensor type: Capacitive semicon-

ductor sensor

Relation between

output value

and relative humidity: Linear

Accuracy: 3% of the relative hu-

midity (RH) and 1% in the range from 0% to

95%

5% of the relative humidity (RH) and 1% in the range from 0% to

5%

Resolution: 0.1% Response time: 15 s

Maximum operating

temperature: 85°C

# 5. Operation

- Use the mini DIN connection cable to connect the humidity sensor to the 3B NET/og™ unit.
- Place the humidity sensor in the test environment.
- After the relevant response time has elapsed, read the value for humidity indicated on the 3B NET/log<sup>TM</sup> display.

Note: slight air movement in the vicinity of the sensor may reduce the response time.

# 6. Applications

Meteorology

Monitoring greenhouses and terrariums

Refrigeration

Dehumidification

## 6.1 Required apparatus:

1 3B NET*log*™ @ 230 V 1000540

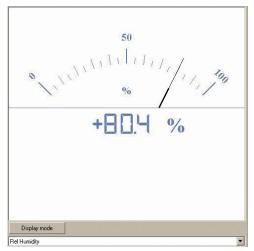
or

1 3B NET $log^{TM}$  @ 115 V 1000539 1 Humidity sensor 1000554

Additionally recommended for the recording and evaluation of readings on a computer:

1 3B NET/ab<sup>TM</sup> 1000544

# 6.2 Example:



Screen display of relative humidity