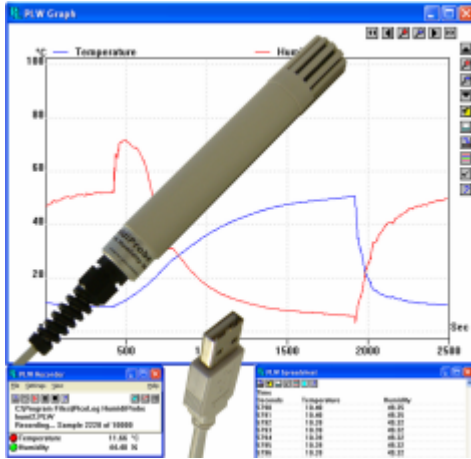


# 1 Introduction

## 1.1 About HumidiProbe



**HumidiProbe** is a complete, self-contained temperature and humidity measuring device. It is calibrated to give highly accurate readings, which it takes every two seconds from a dual-purpose humidity and temperature sensor. Its USB connector is compatible with standard PCs and laptops

The PicoLog data logging program will collect data supplied by the HumidiProbe, or you can use the HumidiProbe driver software to custom-build your own programs that take advantage of its features.

PicoLog and the driver support up to four HumidiProbe units.

## 1.2 Intended use

HumidiProbe is suitable for measuring temperature and relative humidity in benign environments, particularly indoors. You must not expose the unit to temperatures outside the maximum range (see [Specifications](#)).

The driver software, which runs under Microsoft Windows XP SP2, Vista or later, contains everything necessary to convert the sensor readings into temperature and relative humidity.

## 1.3 This document

This document describes the physical and electrical properties of HumidiProbe, and explains how to use the software drivers.

For more information about using HumidiProbe with PicoLog, please consult the following files:

- plw.en.chm (Windows help file)
- PLW044.pdf (printable PDF file)

## 2 Legal notices

### 2.1 CE notice

The HumidiProbe meets the intent of EMC directive **89/336/EEC** and meets the **EN61326-1 (1997) Class A Emissions and Immunity** standard.

The HumidiProbe also meets the intent of the **Low Voltage Directive** and meets the **BS EN 61010-1:2001 IEC 61010-1:2001** (safety requirements for electrical equipment, control, and laboratory use) standard.

### 2.2 FCC notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to **Part 15 of the FCC Rules**. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

For safety and maintenance information see the [safety warning](#).

### 2.3 Licence conditions

The material contained in this release is licensed, not sold. Pico Technology Limited grants a licence to the person who installs this software, subject to the conditions listed below.

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The licensee agrees to allow access to this software only to persons who have been informed of these conditions and agree to abide by them.

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#### **Fitness for purpose**

Because no two applications are the same, Pico Technology cannot guarantee that its equipment or software is suitable for a given application. It is your responsibility, therefore, to ensure that the product is suitable for your application.

#### **Mission-critical applications**

This software is intended for use on a computer that may be running other software products. For this reason, one of the conditions of the licence is that it excludes usage in mission-critical applications, for example life support systems.

## 2.4 Warranty

Pico Technology warrants upon delivery, and for a period of 24 months unless otherwise stated from the date of delivery, that the Goods will be free from defects in material and workmanship.

Pico Technology shall not be liable for a breach of the warranty if the defect has been caused by fair wear and tear, wilful damage, negligence, abnormal working conditions or failure to follow Pico Technology's spoken or written advice on the storage, installation, commissioning, use or maintenance of the Goods or (if no advice has been given) good trade practice; or if the Customer alters or repairs such Goods without the written consent of Pico Technology.

## 2.5 Repairs

The unit contains no user-serviceable parts. Repair or calibration of the unit requires specialised test equipment and must be performed by Pico Technology Limited or its authorised distributors.

## 2.6 Trademarks

**Borland, Delphi** and **Turbo Pascal** are trade marks or registered trade marks of Borland International, Inc.

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**Agilent VEE** is a registered trade mark of Agilent Technologies.

**Pico Technology Limited, PicoLog** and **HumidiProbe** are trademarks of Pico Technology Limited, registered in the United Kingdom and other countries.

## 3 Using HumidiProbe

### 3.1 Specifications

| <b>Humidity</b>        |   |
|------------------------|---|
| Range                  | 0% to 100% relative humidity (non-condensing)             |
| Accuracy               | ±2%   |
| Resolution             | 0.03%   |
| Response time          | 4 seconds   |
| <b>Temperature</b>     |   |
| Range                  | 0 to +70°C  |
| Accuracy               | ±0.5°C  |
| Resolution             | 0.01°C  |
| Response time          | 5 to 30 seconds   |
| <b>Conversion time</b> | 2 seconds (humidity and temperature)                      |
| <b>Interface</b>       | USB 1.1 (compatible with USB 2.0)                         |
| <b>Connector</b>       | Integrated USB cable and connector                        |
| <b>Enclosure</b>       |   |
| Dimensions             | Ø 22 mm, length 170 mm<br>(approx. 4.5 m including cable) |
| Material               | Grey ABS  |
| Protection             | NOT waterproof  |

### 3.2 Connecting HumidiProbe (quick guide)

**Important note:**  
Always install the PicoLog software **BEFORE**  
connecting your HumidiProbe to the computer for the first time.

Once the software is installed, connect the HumidiProbe to the USB port on your computer using the integrated cable and connector.

To set up the unit with PicoLog, do the following:

1. Open PicoLog Recorder.
2. Select **New settings** from the **File** menu.
3. In the **Recording** dialog box, click **OK**.
4. In the **Sampling Rate** dialog box, click **OK**.
5. In the **Converter details** dialog box, select **HumidiProbe** from the drop-down box and click **OK**.
6. In the **HumidiProbe Channels** dialog box, double-click on **Temp unused**.
7. In the **Edit HumidiProbe Channel** dialog box, click **OK** and PicoLog will activate the Temperature parameter.
8. In the **HumidiProbe Channels** dialog box, double-click on **Humidity unused**.
9. In the **Edit HumidiProbe Channel** dialog box, click **OK** and PicoLog will activate the Humidity parameter.
10. In the **HumidiProbe Channels** dialog box, click **OK**.
11. PicoLog Recorder should now display the temperature and humidity.

For a more detailed description of the procedure, see [Connecting HumidiProbe \(detailed guide\)](#).