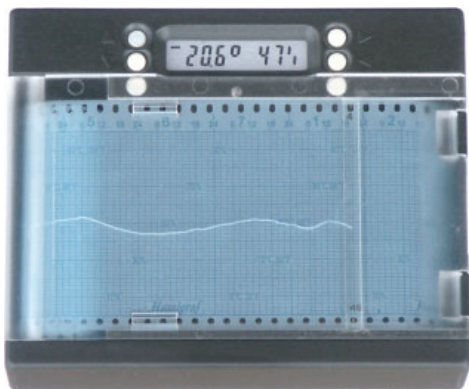


# Humigraf

**long-term Datataker for recording:  
Relative Humidity – Temperature –  
Dew point**



**This precision recording device runs using only a standard battery and a single paper roll for a full year!**

- **4-day display**
- **Rectilinear and ink-free graph**
- **Secondary digital display**
- **Minimum und Maximum values recorded**
- **Adjustable Alarm**
- **Self-contained, no external power required**
- **Small dimensions, light weight**
- **All contacts gold-plated**
- **Available with a PC-Interface**

## Description

The **Humigraf** measures the temperature and the humidity of the air around it. From this, the dew point can be calculated. The stylus presses against the waxed paper roll, leaving a permanent record of Relative Humidity, Temperature or Dew point. The record is immediately visible in the display as a clear, continuous trace – produced on a rectilinear axis without the use of ink or pens.

Because the stylus acts on the reverse side of the paper roll, this is as easy to load in the instrument as a roll of film in a camera.

A microcomputer controls all the functions of the Humigraf. The analogue sensor signals are amplified and digitalised in the Signal Processor and then input to the Microcomputer, which then calculates relative humidity and temperature. The compensation algorithm applied to the sensor guarantees an extremely high accuracy throughout the full operating (i.e. temperature) range. The application of modern electronics (no need for trim potentiometers!) ensures the long-term stability of the Humigraf

To conserve power, the microcomputer automatically switches to standby mode between readings. Only the LCD display, and other basic functions, operates continuously.

The paper feeder is controlled using a quartz precision servo motor. A second servo controls the movement of the stylus via a spindle.

## Digital display



In addition to the primary display (i.e. the paper roll) the Humigraf has a secondary LCD display, capable of showing Temperature and Relative Humidity, Dew point, or Data required during set-up

of the instrument. Minimum and Maximum Values Can be shown on the digital display at the touch of a button.

## Further details

An acoustic and visual alarm indicates that the limit levels set by the user (temperature and relative humidity) have been exceeded.

Battery voltage is regularly measured and shown on the LCD display. The battery can be changed without using tools. Battery life exceeds one year.

To guarantee optimum reliability, gold-plated contacts are used throughout the Humigraf. The battery connections use multiple contacts to ensure no open circuits

A special waxed paper is used for recording – one roll is sufficient for a whole year. The paper record will not degrade even after many years' storage and can therefore be used as formal evidence in, for example, legal liability or insurance assessment cases. (This is of course not possible with conventional electronic data logger data, as this can easily be manipulated by PC.)

## Accessories

- Luxurious wooden housings.
- Chrome steel carriage.
- High quality wooden casings with gold / silver fittings
- Installation panels



**Humigraf with Chrome steel carriage**



**Humigraf with wooden housing**  
to hang up or put on a desk.



**Humigraf with wooden casing with fitting**  
to hang up or put on a desk.



**Humigraf with Installation panel**

## PC-Interface

The Humigraf has an optional PC-Interface. Humidity and temperature data from the last 20 days is stored in a buffer memory. Data resolution is 0.1°C / 1%. Using the adapter cable supplied, this data may be loaded onto any PC for recording or processing. The system software is compatible with Windows 95, 98, NT, 2000 or XP. Using Excel, graphical display of the data recorded can be automatically generated – we have developed a Macro for this application, which we can supply as an option.)

The use of open software enables the user to manipulate the data recorded as he or she requires.

## Technical Data\*

### Relative Humidity:

Range..... 0% - 100%  
Accuracy..... ± 2% (between 10% to 90%)  
Resolution ..... 1%

### Temperature:

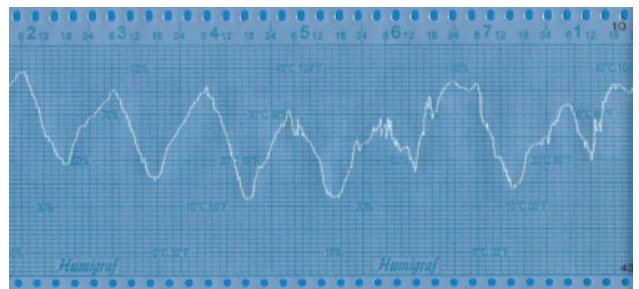
Range (Display, Memory).... - 20° to 60°C  
Recording Range ..... 5° to 45°C  
Accuracy..... ± 0.4° C (0° to 40° C)  
Resolution ..... 0.1°C

### Dew point:

Range (Display)..... - 20° to 60°C  
Recording Range ..... 5° to 45°C  
Accuracy..... ± 1°C (RH > 30% at 25°C)  
Resolution ..... 0.1°C

Index Rate ..... 1 mm/h = 24 mm/day  
Display (Main) ..... Shows recorded data from previous 4 days  
Recording Method ..... Rectilinear, Maintenance-free  
Paper Capacity ..... 1 Year  
Display (Secondary) ..... 8-digit, 7 mm  
Memory\* ..... 20 Days (Humidity and Temperature)  
PC-Interface\* ..... RS-232, Com1 or Com2  
Alarm ..... Sound and visual.  
Electricity Supply ..... 1 Alkali Manganese 1.5 V battery ( )  
Dimensions..... 146/ 120/36 mm, 5.75"x4.75"x1.4"  
Weight ..... 500 g (inc. battery and paper.)  
Typical values, \* only PC-Version, The manufacturer reserves the right to make changes to the unit specification

## Part of a recording\*



**Recording of ambient relative humidity**, of some days in June, subject to large variations



**RÄBER**, CH-6024 Hildisrieden  
Tel. ++41 (0)41 461 00 81, Fax.. 82,  
[www.barograph.ch](http://www.barograph.ch)  
[praeber@gmx.ch](mailto:praeber@gmx.ch)