

# TEMPERATURE & HUMIDITY DATALOGGER

## HUMLOG 10

HUMLOG 10 series humidity/temperature data loggers permit the exact and professional recording of humidity and temperature values. Low power consumption and large memory size enable long-term data capture for a wide range of applications. The HUMLOG 10 can be configured very easily by means of the included software. Alarm thresholds for humidity and temperature, as well as the start time for recording, can be freely set by the user.

The 3 available HUMLOG 10 models allow optimum adaptation to any requirements.

### HUMLOG 10 / HUMLOG 10TSE

The elegant 2-part housing, which consists of a display module and a plug-in sensor module, enables easy installation and a fast exchange of the sensor unit when service is required.

The current measurement data on the large display is easy to read even from a distance of several metres. Relative humidity (% RH) and temperature (°C or °F) are constantly displayed. Clock time (format hh:mm) and date (format dd.mm) are displayed in an alternating sequence. Likewise, the display also indicates alarm conditions, recording, record stop, and programmed record start.

In the basic version of the HUMLOG 10, the sensors are integrated in the sensor module. The HUMLOG 10TSE version is equipped for the connection of sensing probes. According to requirements, the two channels can be selectively connected to a combination H/T sensing probe or 2 T sensing probes. The sensing probes can be separated; maximum distance: 8 m. The optional Professional Version of the Smartgraph™2 software enables the control of 2 combined H/T sensing probes.

### HUMLOG 10THC

The compact HUMLOG 10THC version does not have a display and is equipped with internal H/T sensors.

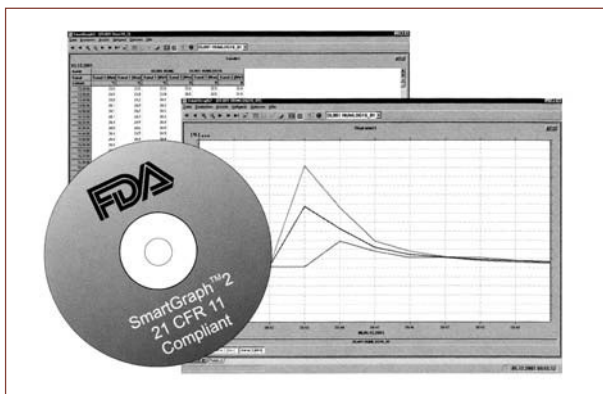
### Measurement Data - Evaluation & Configuration

Measurement data evaluation, instrument configuration and 1 point humidity and temperature calibration can be conveniently performed via the serial RS232 interface with a PC or notebook computer by means of the Smartgraph™2 software, which runs under MS Windows™.

Smartgraph™2 can display the recorded measurement data in graphical form or as a table. The layout of the display can be individually configured by the user.

The optional Professional Version of Smartgraph™2 also permits the display of dewpoint and absolute humidity, the export of measured values (e.g., for evaluation by means of MS Excel™), and the control of 2 combined H/T sensing probes.

Humidity / Temperature Data Logger



**NEW** Utilizing the SmartGraph™2 "21 CFR 11" software allows the use in applications in the pharmaceutical and food industries.

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## Typical Applications

- Museums and exhibition spaces
- Clean rooms
- Green houses
- Warehouses

## Features

- Data memory for 120,000 values
- Large format display
- Easy installation and service
- Users friendly data evaluation via PC-software

## Technical Data HUMLOG 10

### Sensing Probe

	HUMLOG 10TSE	HUMLOG 10 / HUMLOG 10THC
Model	external RH/T or T	internal RH/T
Dimensions	RH/T-probe: length 80mm (3.1") Ø 14mm (Ø0.6") T-probe: length 50mm (1.9") Ø 6mm (Ø0.2")	
Max. cable length	8m (26.2ft)	

### Measuring Data

Relative Humidity	RH/T Probe External	RH/T Probe Internal
Sensor type	capacitive - HC1000	capacitive - HC103
Measuring range	0...100% RH (non condensing)	10...95% RH
Accuracy	± 2% RH	± 3% RH
Resolution	0.5% RH	0.5% RH

### Temperature

	T Probe External	
Sensor type	NTC	NTC
Measuring range	-30...70°C (-22...158°F)	-20...50°C (-4...122°F)
Accuracy	± 0.2°C (0.36°F) at -20...50°C (-4...122°F) otherwise ± 0.5°C (0.9°F)	± 0.3°C (0.54°F) at 0...40°C (32...104°F) otherwise ± 0.5°C (0.9°F)
Resolution	0.1°C (0.18°F)	0.1°C (0.18°F)

### Temperature

	T Probe External
Sensor type	NTC
Measuring range	-40...100°C (-40...212°F)
Accuracy	± 0.2°C (-20...50°C) / ± 0.36°F (-4...122°F) ± 0.4°C (-40...70°C) / ± 0.72°F (-40...158°F) ± 1.0°C (>70°C) / ± 1.8°F (>158°F)
Resolution	0.1°C (0.18°F)

### General

Supply voltage	3.6V lithium battery	
Battery lifetime	typical 2 years (with a sample rate of 1 min)	
Internal memory size	60,000 measured values / channel (total 120,000 values)	
Sampling interval	1/10/30sec, 1/10/30min, 1/3/6/12/24h	
Logging interval	1/10/30min, 1/3/6/12/24h	
Serial Interface	RS232	
Working temperature range	housing:	-20...50°C (-4...122°F)
CE compatibility according	EN50081-2 EN61000-4-2	EN50082-2 EN55011 EN61000-4-3
Housing / protection class	ABS / IP40	
Dimensions (WxHxD)	120x110x30mm (4.7x4.3x1.2")	resp. HUMLOG 10THC: 120x50x30mm (4.7x1.6x1.2")
Weight	250g (0.55 lbs)	resp. HUMLOG 10THC: 90g (0.2 lbs)
Display	LC display, 65x40mm (2.6x1.6")	(only HUMLOG 10 / HUMLOG 10TSE)

### Scope of Supply

HUMLOG 10, RS232 interface cable, 3.6V lithium battery, operation manual SmartGraph™ 2 PC-Windows™-Software for set-up and data presentation
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### Ordering Guide HUMLOG 10

Model	External Probe (for HUMLOG 10TSE)	Accessories
with internal sensors and display (HUMLOG 10)	RH/T-PROBE with 2m (6.6ft) cable (HA030201)	SmartGraph™2 Professional (HA030301)
for external probes, with display (HUMLOG 10TSE)	T- probe with 2m (6.6ft) cable (HA030202)	SmartGraph™2 21 CFR 11 (HA030304)
with internal sensors, without display (HUMLOG 10THC)	Cable extension 2m (6.6ft) (HA030203)	3.6V lithium battery (HA030102)
		Sensing module f. Humlog 10 (HA030103)
		Sensing module f. Humlog 10TSE (HA030105)
		Theft-proof installation kit (HA030104)

