

# HUMLOG 10

## Humidity / Temperature Data Logger

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 humidity/temperature sensing probe or to 2 temperature sensing probes. The sensing probes can be separated; maximum distance: 8.

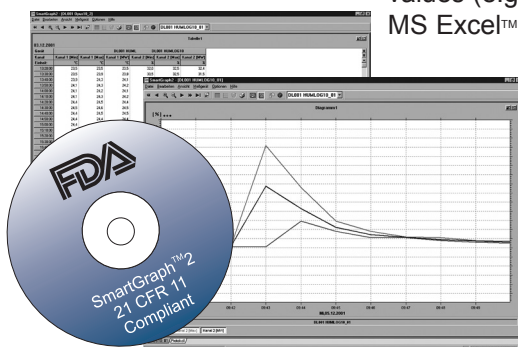
### HUMLOG 10THC

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™).



Utilizing the SmartGraph™2 “21 CFR 11” software allows the use in applications in the pharmaceutical and food industries.



## 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  
user friendly data evaluation via PC-software

## Technical Data

	HUMLOG 10TSE	HUMLOG 10 / HUMLOG 10THC
<b>Sensing probe</b>		
Model	external RH/T or T	internal RH/T
Dimensions	RH/T-probe: length 80mm (3.1"), Ø14mm (Ø0.6") T-probe: length 50mm (1.9"), Ø6mm (Ø0.2")	
Max. cable length	8m (26.2ft)	
<b>Measuring data</b>	<b>RH/T probe external</b>	<b>RH/T probe internal</b>
<b>Relative humidity</b>		
Sensor type	capacitive - HC1000	capacitive - HC103
Measuring range	0...95% RH	10...95% RH
Accuracy	±2% RH + 1 digit	±2% RH + 1 digit
Resolution	0.5% RH	0.5% RH
<b>Temperature</b>		
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) ±0.5°C (0.9°F) at -30...70°C (-22...158°F)	±0.3°C (0.54°F) at 0...40°C (32...104°F) ±0.5°C (0.9°F) at -20...50°C (-4...122°F)
Resolution	0.1°C (0.18°F)	0.1°C (0.18°F)
<b>Temperature</b>	<b>T probe external</b>	
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)	
<b>General</b>		
Supply voltage	3.6V lithium battery	
Battery lifetime	typical 2 years (with a sample rate of 1min)	
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; USB	
Working temperature range	housing: -20...50°C (-4...122°F)	
CE compatibility according	EN50081-2      EN50082-2 EN61000-4-2      EN61000-4-3	EN55011
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

## Ordering Guide

MODEL	EXTERNAL PROBE (for HUMLOG 10TSE)	ACCESSORIES
with internal sensors and display	(HUMLOG 10)	SmartGraph™2 Professional (HA030301)
for external probes, with display	(HUMLOG 10TSE)	SmartGraph™2 21 CFR 11 (HA030304)
with internal sensors, without display	(HUMLOG 10THC)	3.6V lithium battery (HA030102)
		sensing module f. Humlog 10 (HA030103)
		sensing module f. Humlog 10TSE (HA030105)
		theft-proof installation kit (HA030104)