

## HUMIDITY AND TEMPERATURE DATA LOGGERS



### COMPACT, DEPENDABLE AND INEXPENSIVE.

- High measurement accuracy of  $\pm 3.0\%RH$  and  $\pm 0.3\text{ }^{\circ}C$
- Compact with high level of IP protection
- Large storage capacity: 32,000 data point memory
- MIN/MAX/AVG statistical function
- Includes HW4-lite programming / analysis PC software
- Clear LC display with visual alerts
- Very long battery life (3 years at logging interval of 5 min.)
- Conforms to FDA CFR 21 Part 11 / GAMP5



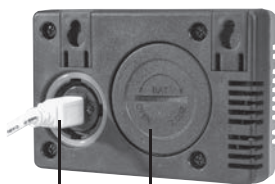
# TECHNICAL INFORMATION

## Dimensions / Ports

Type HL-1D

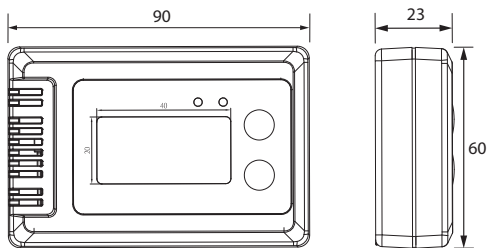


Type TL-1D



USB-Mini port  
(settings and data download)

Battery compartment



## Data Logging



The values stored in the HygroLog can be edownloaded using the HW4 software and displayed graphically. You determine the logging interval, the logging mode and much more.

General Specifications	
Parameters	Humidity and temperature
Temperature sensor	NTC
Humidity sensor	ROTRONIC IN-1
Accuracy at 23 °C ±5 °C	±3.0%RH / ±0.3 °C
Range of application	-20...70 °C / 0...100%RH
Protection	IP67
Weight	85 g
Dimensions	90 x 60 x 23 mm
Logging interval	30 s...24 h
Battery	1 x CR2
Battery life	3 years at a logging interval of 5 minutes
Battery charge indicator	Yes (HW4 software, display and LED indicator)
Storage capacity	HL-1D: 16,000 data point memory (RH & T) TL-1D: 32,000 data point memory (T)
Function	MIN/MAX/AVG statistical data
Display	LCD, 2 lines, resolution 1 decimal
LED indicator	2 LED's Right LED flashes green during data logging Left LED flashes red when limits breached or low battery
Communication	USB-Mini port
Adjustment	Humidity 1-point
FDA/GMP compatibility	Conforms to 21 CFR Part 11 and GAMP5
Accessory	
USB-Mini cable	AC0003

Included	
	- Battery, CR2
	- Short instruction manual
	- Function and calibration certificate
	- HW4-lite software key code

Subject to technical change without notice. Printing and other errors reserved.

You need more information (special applications etc.)?

You can find a complete, up-to-date overview of our data loggers on the Internet at [www.rotronic.com](http://www.rotronic.com).

**rotronic**  
MEASUREMENT SOLUTIONS

ROTRONIC AG, Grindelstrasse 6, CH - 8303 Bassersdorf, Tel. +41 44 838 11 44, Fax +41 44 838 14 87, [www.rotronic.ch](http://www.rotronic.ch)  
 ROTRONIC Instruments (UK) Ltd, Crompton Fields, Crompton Way, Crawley, West Sussex, RH10 9EE, UK, Phone +44 (0)1293 571000, Fax +44 (0)1293 571008, [www.rotronic.co.uk](http://www.rotronic.co.uk)  
 ROTRONIC Instrument Corp, 135 Engineers Road, Hauppauge, NY 11788, USA, Phone, +1 631 427-3898, Fax, +1 631 427-3902, [www.rotronic-usa.com](http://www.rotronic-usa.com)