

Data logger for humidity and temperature

HL-20D



Advantages

- Highest accuracy at 0.8 %rh and 0.3 °C and outstanding long-term stability
- 20'000 data point memory with date & time stamps
- Free evaluation and configuration software HW5

Applications

- Logistics
- Production & storage
- Display and test applications in buildings and museums



Technical Information

Humidity measurement	
Measurement method	ROTRONIC HYGROMER® IN-1
Measurement range	0...100 %rh (non-condensing)
Accuracy at 23 °C	±1.3 %rh @ 0...10 %rh ±0.8 %rh @ 10...60 %rh ±1.3 %rh @ 60...100 %rh
Repeatability	0.3 %rh
Response time	Typical 3 min. (Depends on air flow)
Long-term stability	< 1 %rh / year
Temperature	
Measurement method	PT100 RTD (IEC 751 Class A)
Measurement range	0...50 °C
Accuracy at 23 °C	±0.3 °C
Repeatability	0.05 °C
Response time	Typical 10 min. (depends on air flow)
Long-term stability	< 0.1 °C / year
Dew point	
Measurment method	<ul style="list-style-type: none">• Calculation (from %rh and °C)• Dew or frost point (user configurable range)
Logging function	
Logging modes	<ul style="list-style-type: none">• Start-Stop (recording stops when memory is full)• Loop: oldest data is dumped to make room for latest data
Logging interval	Min 5 sec. Up to 1 hour in 5 sec. increments
LED indicator	<ul style="list-style-type: none">• 5 sec. green flash when recording data• 5 sec. red flash for out-of-limit value or logger problem
General specifications	
Device Type	Humidity-temperature data logger with internal sensor(s)
Battery type	3 x AA (1.5 V) alkaline

Battery life time	Depends on log interval and other settings. <i>Examples based on a 30-minute log interval:</i> Models with LC display and display sleep function set to 1 minute: 13 months
Start-up time	1.9 s (typical)
Data refresh rate	1.7 s (typical)
Storage & recording specifications	
Recording capacity	20'000 value pairs
Recorded parameter(s)	Relative humidity and temperature
Record media	Internal EEPROM non volatile, not remove-able
Service & data interface specifications	
Interface type	UART (universal Asynchronous Receiver Transmitter)
Max. service cable length	5 m (16.4 ft)
Display & housing specifications	
Display	LC, 1 or 2 decimals resolution, backlight, alarm und low battery indication
Housing material	ABS
IP protection	IP 40
Dimensions	130 x 72 x 32 mm (5.1 x 2.8 x 1.3")
Weight	About 210 g (7.4 oz)
Order code	
HL-20D	HL-20D logger
HL-20D-SET1	HL-20D logger and service cable AC3006
Delivery package	
HL-20D	HL-20D Instruction Manual Factory certificate Screw with dowel for wall mounting 3 x AA Battery, packed with equipment and reverse polarity protected