## HUMIDITY, TEMPERATURE, PRESSURE AND DEW POINT DATA LOGGERS



# COMPACT, PRECISE AND INEXPENSIVE

- 3 types available:
  - BL-1D: hPa, °Cdp, %RH, °C HL-1D: %RH, °C
  - TL-1D: °C
- High measurement accuracy of ±3.0 %RH, ±0.3 °C, ±3 hPa
- Compact with high level of IP protection
- High storage capacity: 32,000 lines
- Programmable start and stop times via HW4 software
- Free evaluation and configuration software HW4-lite
- FDA 21 CFR Part 11 / GAMP 5-compliant HW4 software
- EN 12830 certified (BL-1D)



Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, oss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

### For pricing or any further information, please contact Omni Instruments Ltd.



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## **TECHNICAL INFORMATION**

#### From Device Version V3.0

Logging Interval

**Delivery Package** 

30 sec.

5 min.

30 min.

45 min. 60 min.

	BL-1D	HL-1D	TL-1D
Humidity	х	х	
Temperature	х	х	х
Pressure	х		
Dew point	х		
Storage capacity (lines)	32,000		

Humidity Measurement			
Measurement method	ROTRONIC HygroMer ®IN-1		
Accuracy 23 °C ±5 °C	±3.0 %RH		
Resolution	0.1 %RH		
Measurement range	0100 %RH (non-condensing)		
Temperature			
Measurement method	NTC		
Accuracy 23 °C ±5 °C	±0.3 °C		
Resolution	0.1 °C		
Measurement range	-3070°C		
Pressure			
Measurement method	Bosch BMP280		
Accuracy 23 °C ±5 °C	±3 hPa		
Resolution	1 hPa		
Measurement range	3001100 hPa		
Dew Point			
Measurement method	Calculation (from %RH and °C)		
Calculation method	WMO standard		

**Storage Capacity Reached After** 

11 days 2 hours

111 days

General Specifications		
Logging interval	30 s24 h	
Storage capacity	32,000 lines	
Function	MIN / MAX / AVG	
Display	LCD, 2 lines	
Display refresh rate	5 sec. (standard) (in logging mode same as the logging interval)	
LED indicators	2 LED's Right LED flashes green when logging data, left LED flashes red when limits reached or low battery	
Communication	USB-Mini port	
Software	HW4 V3.4.1 or later (BL-1D: V3.9 or later) included	
Range of application	-3070°C 0100 %RH (non-condensing)	
Battery	1 x CR2	
Battery life	3 years (1 h logging interval, room tempe- rature)	
IP protection	IP67	
Weight	85 g	
Dimensions	90 x 60 x 23 mm	
FDA/GMP compatibility	FDA 21 CFR Part 11 / GAMP 5-compliant HW4 software	
Standards	EN 12830	
Accessories	Mini USB cable AC0003 (contained in xL-1D-SET)	

#### Dimensions

90

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