

MX1104

HOBO Temp/RH/Light/Ext-Analog Data Logger

Bluetooth-enabled logger

Measures and transmits temperature, relative humidity, and light intensity data wirelessly. Includes an external analog input to attach a variety of additional sensors.

Important Information

Requires a compatible mobile device or Windows computer and the HOBObconnect app. System requirements can be found at the bottom of the HOBObconnect software page. Get cloud storage and access to the powerful tools of LI-COR Cloud™ IoT software! (formerly HOBOblink) Add an MX Data Plan!



Compatible with
HOBObconnect Monitoring App

Supported Measurements

4-20mA, AC Current, AC Voltage, Air Velocity, Compressed Air Flow, DC Current, DC Voltage, Dew Point, Differential Pressure, Gauge Pressure, Light Intensity, Relative Humidity, Temperature

Features

- Bluetooth communication for wireless data offload
- 16-bit resolution for highly-accurate measurements
- Stores 1.9 million measurements for longer deployments between offloads
- New Self-Describing sensors with automatic configuration for fast deployment
- Compatible with existing sensors for a wide range of indoor monitoring
- Audible and visual LCD-screen alarms notify you if sensor becomes unplugged or a reading exceeds set thresholds

Contact Us

Sales (8am to 5pm ET, Monday through Friday)

- Email sales@onsetcomp.com
- Call 1-508-759-9500
- In U.S. toll free 1-800-564-4377
- Fax 1-508-759-9100

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Technical Support (8am to 5pm ET, Monday through Friday)

- Contact Product Support www.onsetcomp.com/support/contact
- Call 1-508-759-9500
- In U.S. toll free 1-877-564-4377

HOBO Temp/RH/Light/Ext-Analog Data Logger (MX1104) Specifications

Temperature Sensor (MX1104)

Range	-20° to 70°C (-4° to 158°F)
Accuracy	±0.20°C from 0° to 50°C (±0.36°F from 32° to 122°F)
Resolution	0.002°C at 25°C (0.004°F at 77°F)
Drift	<0.1°C (0.18°F) per year

RH Sensor* (MX1104)

Range	0% to 100% at -20° to 70°C (-4° to 158°F); exposure to conditions above 95% may temporarily increase the maximum RH sensor error by an additional 1%
Accuracy	±2.5% from 10% to 90% (typical) to a maximum of ±3.5% including hysteresis at 25°C (77°F); below 10% and above 90% ±5% typical
Resolution	0.01%
Drift	<1% per year typical

Response Time (MX1104)

Temperature	11 minutes in air moving 1 m/s (2.2 mph)
RH	30 seconds to 90% in airflow of 1 m/s (2.2 mph)

Light Sensor (M1104)

Range	0 to 167,731 lux (15,582 lum/ft ²)					
Accuracy	±10% typical for direct sunlight (see Light Measurement on page 4 for more details)					
	Logger with Cable Type	SD-MA-420 or CABLE-4-20mA	SD-VOLT-2.5 or CABLE-2.5-STEREO	SD-VOLT-05 or CABLE-ADAP5	SD-VOLT-10 or CABLE-ADAP10	SD-VOLT-24 or CABLE-ADAP24
	Measurement Range	0 to 20.1 mA	0 to 2.5 V	0 to 5.0 V	0 to 10 V	0 to 24 V
	Accuracy	±0.001 mA ±0.2% of reading	±0.1 mV ±0.1% of reading	±0.2 mV ±0.3% of reading	±0.4 mV ±0.3% of reading	±1.0 mV ±0.3% of reading
	Resolution	0.3 µA	40 µV	80 µV	160 µV	384 µV

Logger

Operating Range	-20° to 70°C (-4° to 158°F)
Radio Power	1 mW (0 dBm)
Transmission Range	Approximately 30.5 m (100 ft) line-of-sight
Wireless Data Standard	Bluetooth Low Energy (Bluetooth Smart)
Logging Rate	1 second to 18 hours
Logging Modes	Fixed interval (normal, statistics) or burst
Memory Modes	Wrap when full or stop when full
Start Modes	Immediate, push button, date & time, or next interval
Stop Modes	When memory full, push button, date & time, or after a set logging period
Restart Mode	Push button
Time Accuracy	±1 minute per month at 25°C (77°F)
Battery Type	Two AAA 1.5 V alkaline batteries, user replaceable
Battery Life	1 year, typical with logging interval of 1 minute and Bluetooth Always On enabled; 2 years, typical with logging interval of 1 minute and Bluetooth Always On disabled; and temperatures between 0° and 50°C (32° and 122°F). Faster logging intervals and statistics sampling intervals, burst logging, remaining connected with the app, excessive downloads, and paging may impact battery life.
Memory	4 MB (1.9 million measurements, maximum)
Full Memory Download Time	Approximately 4 to 15 minutes depending on the mobile device; may take longer the further the device is from the logger
LCD	LCD is visible from 0° to 50°C (32° to 122°F); the LCD may react slowly or go blank in temperatures outside this range
Size	11.28 x 5.41 x 2.92 cm (4.44 x 2.13 x 1.15 in.)
Weight	123 g (4.34 oz)
Environmental Rating	IP54