



HOBO[®] MX1104 Data Logger

Analog/Temp/RH/Light

The HOBO MX1104 multi-channel data logger measures and transmits temperature, relative humidity, and light intensity data wirelessly. It also includes an external analog input to attach a variety of additional sensors.

This self-contained wireless data logger lets you use your mobile device or Windows computer and Onset's free HOBObconnect app to access data, at any time, over a 100-foot range via Bluetooth technology. You can configure the logger, read out data, view data in graphs, check the operational status of loggers, configure alarm notifications, and share data files - all with no dedicated equipment beyond a mobile device or laptop. And if used with the new MX Gateway, you can remotely access your data in Onset's cloud-based HOBOLink[®] software.

You can download the HOBObconnect app here:


Key Advantages:

- 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



HOBO MX1104 Data Logger 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
	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).



*Per RH sensor manufacturer data sheet

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

Technical Support (8am to 6pm 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

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