



HOBO[®] MX1104 Data Logger

Analog/Temp/RH/Light

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

This self-contained, Bluetooth-enabled, wireless data logger lets you use your mobile device or Windows computer and Onset's free HOBObconnect app to access data, at any time, when within 100 feet of the logger. Configure the logger, read out data, view data in graphs, check the operational status of loggers, configure alarm notifications, and share data files - with no dedicated equipment beyond a mobile device or laptop.

Add the MX Gateway for remote access to your data in our cloud-based HOBOLink software.




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/ft2) | | | | |
| 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 | | | | |

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| 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