ONSET

HOBO® MX1104-TEMP-06

Temp/RH/Light/Ext-Temp Kit

The HOBO MX Temp/RH/Light/Ex-Temp Kit makes it easy to monitor four measurements with one versatile logger. The kit includes the HOBO MX1104 logger with integrated sensors for temperature, humidity, and light, plus an external temperature sensor with a 6' cable. This is a great addition to your toolbox for troubleshooting, equipment scheduling, building commissioning, HVAC performance monitoring, and more! The external input provides the flexibility to connect a wide range of sensors, expanding monitoring capabilities.

This self-contained 4-channel logger leverages Bluetooth technology for easy wireless configuration and data offload using Onset's free HOBOconnect app for mobile devices and Windows computers. The 100' wireless range is especially handy when deploying these loggers in hard-to-access locations. And, if used with the MX Gateway, you can access data in Onset's cloud-based HOBOlink software - from anywhere!

You can download the HOBOconnect app here:

Key Advantages:

- Bluetooth communication for wireless data offload
- HOBOconnect for logger configuration, data readout, viewing data in graphs, viewing logger status, configuring alarms, and sharing data files
- IP54 splashproof rating for use in harsh industrial environments
- LCD display for convenient viewing of current conditions and alarm notifications
- High accuracy measurements with 16-bit resolution
- External input for use with sensors with analog outputs or Onset's Self-Describing sensors for easy configuration

HOBO MX1104-TEMP-06 Specifications

Air/Water/Soil Temperature Probe (SD-TEMP-xx)

Measurement Range	-40° to 50°C (-40° to 122°F) in water; -40° to 100°C (-40° to 212°F) in air
Accuracy	±0.15°C from 0° to 50°C ; see Plot A (0.9 inches) minimum ; see Plot A)
Resolution	0.002° at 25°C (0.003° at 77°F)
Drift	<0.1°C per year (<0.2°F per year)
Response Time in Air	2 minutes typical to 90% in air moving 1 m/s (2.2 mph)
Response Time in Stirred Water	30 seconds typical to 90%
Operating Range	Sensor tip and cable immersion in fresh water up to 50°C (122°F) for 1 year
Probe Housing	Copper-plated sensor tip
Probe Dimensions	5.1 x 33 mm (0.2 x 1.3 inches)
Cable Length	1.8 m (6 ft)

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 per year (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 (MX1104)

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
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
Compliance Marks	CE FC ⚠ ⊜ Ⓚ

*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

Onset Computer Corporation
470 MacArthur Boulevard
Bourne, MA 02532