



RXMOD-W1

RX3000 Water Level Sensor Module

The RX3000 Water Level Sensor Module (RXMOD-W1) offers users the ability to monitor water level, pressure, and temperature, as well as barometric pressure with the HOBO RX3000 Remote Monitoring Station. It is configured through HOBOLink, Onset's cloud-based software. For water level applications, a HOBO RX3000, CABLE-RWLMOD-XXX, and MX2001-0X-S or MX2001-0X-Ti-S are required.

Supported Measurements:

Barometric Pressure, Differential Pressure, Water Flow, Water Level and Water Temperature

Key Advantages:

- Integrated barometric pressure sensor
- Plug and play remote water level and flow monitoring



RXMOD-W1 Specifications

Pressure (Absolute) and Water Level Measurements MX2001-01-S and MX2001-01-Ti-S

Operation Range	0 to 207 kPa (0 to 30 psia); approximately 0 to 9 m (0 to 30 ft) of water depth at sea level, or 0 to 12 m (0 to 40 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	69 to 207 kPa (10 to 30 psia), 0 to 40C (32 to 104F)
Burst Pressure	310 kPa (45 psia) or 18 m (60 ft) depth
Water Level Accuracy*	Typical error: 0.05% FS, 0.5 cm (0.015 ft) water Maximum error: 0.1% FS, 1.0 cm (0.03 ft) water
Raw Pressure Accuracy**	0.3% FS, 0.62 kPa (0.09 psi) maximum error
Resolution	<0.02 kPa (0.003 psi), 0.21 cm (0.007 ft) water

Pressure Response Time (90%)*<1 second at a stable temperature

Pressure (Absolute) and Water Level Measurements MX2001-02-S

Operation Range	0 to 400 kPa (0 to 58 psia); approximately 0 to 30.6 m (0 to 100 ft) of water depth at sea level, or 0 to 33.6 m (0 to 111 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	69 to 400 kPa (10 to 58 psia), 0 to 40C (32 to 104F)
Burst Pressure	500 kPa (72.5 psia) or 40.8 m (134 ft) depth
Water Level Accuracy*	Typical error: 0.05% FS, 1.5 cm (0.05 ft) water Maximum error: 0.1% FS, 3.0 cm (0.1 ft) water
Raw Pressure Accuracy**	0.3% FS, 1.20 kPa (0.17 psi) maximum error
Resolution	<0.04 kPa (0.006 psi), 0.41 cm (0.013 ft) water

Pressure Response Time (90%)*<1 second at a stable temperature

Pressure (Absolute) and Water Level Measurements MX2001-03-S

Operation Range	0 to 850 kPa (0 to 123.3 psia); approximately 0 to 76.5 m (0 to 251 ft) of water depth at sea level, or 0 to 79.5 m (0 to 262 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	69 to 850 kPa (10 to 123.3 psia), 0 to 40C (32 to 104F)
Burst Pressure	1,200 kPa (174 psia) or 112 m (368 ft) depth
Water Level Accuracy*	Typical error: 0.05% FS, 3.8 cm (0.125 ft) water Maximum error: 0.1% FS, 7.6 cm (0.25 ft) water
Raw Pressure Accuracy**	0.3% FS, 2.55 kPa (0.37 psi) maximum error
Resolution	<0.085 kPa (0.012 psi), 0.87 cm (0.028 ft) water

Pressure Response Time (90%)*<1 second at a stable temperature

Pressure (Absolute) and Water Level Measurements MX2001-04-S and MX2001-04-Ti-S

Operation Range	0 to 145 kPa (0 to 21 psia); approximately 0 to 4 m (0 to 13 ft) of water depth at sea level, or 0 to 7 m (0 to 23 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	69 to 145 kPa (10 to 21 psia), 0 to 40C (32 to 104F)
Burst Pressure	310 kPa (45 psia) or 18 m (60 ft) depth
Water Level Accuracy*	Typical error: 0.075% FS, 0.3 cm (0.01 ft) water Maximum error: 0.15% FS, 0.6 cm (0.02 ft) water
Raw Pressure Accuracy**	0.3% FS, 0.43 kPa (0.063 psi) maximum error
Resolution	<0.014 kPa (0.002 psi), 0.14 cm (0.005 ft) water

Pressure Response Time (90%)*<1 second at a stable temperature

* Water Level Accuracy: With accurate reference water level measurement, known water density, and a stable temperature environment. System Water Level Accuracy equals the sum of the Barometric Water Level Accuracy plus the selected sensor Water Level Accuracy.

** Raw Pressure Accuracy: Absolute pressure sensor accuracy includes all sensor drift, temperature, and hysteresis-induced errors.

*** Changes in Temperature: Allow 20 minutes in water to achieve full temperature compensation of the pressure sensor. There can be up to 0.5% of additional error due to rapid temperature changes.

Measurement accuracy also depends on temperature response time.

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 8pm 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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