

# **HOBO MicroRX Cellular Web-enabled Monitoring Station (Wired Sensors)**

### **Product Images**

**Weather** Shop















#### **Short Description**

An easy-to-deploy, low-cost cellular field monitoring solution. With a compact size and rugged design, the MicroRX Station offers long-term, reliable environmental monitoring.

#### **Description**

The new web-enabled HOBO® MicroRX Station is a rugged, easy-to-deploy, low-cost cellular remote field monitoring solution. With a compact size and rugged design, the MicroRX Station offers long-term, reliable environmental monitoring. Configurable station-side alarms provide immediate notification of critical conditions, and Onset's cloud-based HOBOlink® platform makes it easy to view, access, and share your data.

#### **Key Features**

- Monitor multiple environmental parameters, with inputs for up to five plug-and-play smart sensors (see Measurements below)
- Powerful web-based access to your data with HOBOlink cloud-based software: view and manage your
  water level measurements, configure alarms, create custom dashboards, and view your data on any
  device with an internet connection.
- Station-side alarms triggered at time of measurement
- Real-time monitoring with up to 10-minute connection rates via 4G cellular data plans.
- Compact IP66/NEMA 4X enclosure
- Two power options:
  - Model RX2102 Integrated 1.7 W solar panel with rechargeable battery pack (for extra solar power, a 5W or 15W external solar panel can be added to the RX2102)
  - o Model RX2101 User-replaceable AA lithium batteries.

Note: If you need to monitor water level/flow, see MicroRX Station RX2100-WL.

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Battery life with daily connections:
• RX2101: 1 year with 1 minute logging

• RX2103: 1 year with 2 minute logging Battery life with hourly connections and 1 minute logging:

• RX2101: 3 months • RX2103: 2 months

Note: Deployments in areas with weak cellular strength could reduce battery life.

Memory

16 MB, 1 million measurements, continuous logging

Alarm

Notification Latency

Logging interval plus 2–4 minutes, typical

**Enclosure** Access

Hinged door secured by two latches with eyelets for use with user-supplied padlocks

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

Outer enclosure: Polycarbonate/PBT blend

with brass inserts; Interior:

Materials

Polycarbonate/PBT; Gasket: Silicone foam; Cable channel: Santoprene™ TPE; U-Bolts (not included): Steel with zinc dichromate

finish

**Dimensions** 

19.95 x 13.68 x 7.49 cm (7.85 x 5.39 x 2.95

in.)

Weight

678 g (23.9 oz)

Mounting

Optional U-bolts are compatible with masts up to 4.14 cm (1.63 in.) mast diameter; can also be mounted with zip ties or mounted to

a flat surface with screws

Environmental Rating

Weatherproof enclosure, NEMA 4X and IP66 (requires proper installation of cable

channel system)

GSM/GPRS/EDGE: Quad band 850/900/1800/1900 MHz UMTS/HSPA+: Seven band

**Wireless Radio** 

800/850/900/1800/1900/2100 MHz

LTE: Twelve Band

700/800/850/900/1800/1900/2100/2600

MHz

Antenna 4G LTE

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The CE Marking identifies this product as complying with all relevant directives in the

European Union (EU)

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FCC ID QIPPLS62-W, IC ID:7830A-PLS62W

Contents

HOBO RX2101/RX2102 MicroRX Station Grease packet

Cable ties

**Onset HOBO** 

Screws and washers

Six AA lithium batteries (RX2101 battery-powered station)

Battery pack (RX2102 solar-powered station)

Brand

Typical applications	Environmental (Outdoor), Field Research, Weather Monitoring
Measurements	4-20mA, Amp Hour (Ah), Barometric Pressure, Current AC, Differential Pressure, Humidity, kWh, Leaf Wetness, Light Intensity, PAR/Quantum Light, pH, Power Factor (PF), Pressure, Pulse, Rainfall, Soil Moisture, Temperature, Volt-Amp Reactive hour, Volt-Amps (VA), Voltage AC, Voltage DC, Watt Hours (Wh), Watts (W), Wind Direction, Wind Speed

## **Additional Options**

Select Station Model	MicroRX Station RX2101 - battery powered
	MicroRX Station RX2102 - built-in solar panel
Data Plan	Basic 4G Plan - 60 minutes interval - up to 22 sensors (SP-811)
	Standard 4G Plan - 10 minutes interval - up to 25 sensors (SP-813)
	Premium 4G Plan - 10 minutes interval - up to 65 sensors (SP-815)
Additional Power Options	15 Watt Solar Panel (SOLAR-15W)
	5 Watt Solar Panel (SOLAR-5W)
	Power Adapter (AC) (SKU: P-AC-1)
Optional Sensors (Hold down Ctrl to select multiple options)	12-bit Temperature/Relative Humidity Smart Sensor - 2m cable (S-THC-M002)
	Radiation Shield for Temp/RH Sensor (RS3-B)
	Davis Wind Speed and Direction Smart Sensor (S-WCF-M003)
	Full Crossarm for Wind Speed/Direction Sensors (M-CAA)
	Ultrasonic Wind Speed & Direction Smart Sensor (S-WCG-M003)
	Barometric Pressure Smart Sensor (S-BPB-CM50)
	Leaf Wetness Smart Sensor (S-LWA-M003)
	Solar Radiation (Silicon Pyranometer) Smart Sensor (S-LIB-M003)
	Solar Radiation Sensor Bracket (M-LBB)
Rainfall Sensors	Davis 0.2 mm Resolution Rain Gauge Smart Sensor (S-RGF-M002)
	0.2 mm Resolution Rain Gauge Smart Sensor (2m cable) (S-RGB-M002)
Soil Moisture Sensors	10HS Soil Moisture Smart Sensor (S-SMD-M005)
	EC-5 Soil Moisture Smart Sensor (S-SMC-M005)
Mounting Options	HOBO 2-Metre Tripod Kit (M-TPB-KIT)
	HOBO 3-Metre Tripod Kit (M-TPA-KIT)