# V Scientech

### MicroRX Station HOBO RX2100

## Easy to Deploy, Affordable Web-based Monitoring



The new web-enabled HOBO MicroRX station is 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. 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 Advantages:

- Optional integrated solar panel for easy deployment
- Battery-powered option for covered or shaded deployment locations
- Wide range of research-grade plug-and-play sensors
- Optional water level sensor input, and water flow conversion
- Station-side alarms include new accumulated rainfall alarm
- Real-time monitoring with up to 10-minute connection rates via 4G cellular

#### **Supported Measurements:**

- Temperature
- Relative Humidity
- Dew Point
- Solar Radiation
- PAR
- Rainfall
- Water Level
- Flow
- Wind Speed

- Wind Direction
- Soil Moisture
- Barometric
- Pressure
- Leaf Wetness
- 4-20mA
- Voltage Input
- Pulse Input

#### Minimum System Requirements:



HOBOlink Sensor

- iOS 10.X, 11.X, 12.X and 13
- Android 6.0.1, 7, 8, and 9
- Bluetooth 4.X and up







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#### **Technical Specifications:**

Part number	RX2101	RX2102					
Operating Range	-40° to 60°C (-40° to 140°F)	-20° to 60°C (-4° to 140°F)					
Smart Sensor Connectors	5						
Smart Sensor Network Cable Length	100 m (328 ft) maximum						
Logging Rate	1 minute to 18 hours						
Alarm Notification Latency	Logging interval plus 2-4 minutes, typical						
Wireless Radio	GSM/GPRS/EDGE: Quad band 850/900/1800/1900 MHz UMTS/HSPA+: Seven band 800/850/900/1800/1900/2100 MHz LTE: Twelve Band 700/800/850/900/1800/1900/2100/2600 MHz						
Memory	16 MB, 1 million measurements, continuous logging						
Battery Type	6 AA 1.5 V lithium batteries or optional AC power adapter (P-AC-1)	Integrated 1.7 watt solar panel and NiMH rechargeable battery pack					
Battery Life	Daily connections: 1 year with 1 minute logging Hourly connections and 1 minute logging: 3 months	Typical 3–5 years when operated in the terr perature range -20° to 40°C (-4° to 104°F)					
Smart Sensor Data Channels	Maximum of 15						
Enclosure Access	Hinged door secured by two latches with eyelets for use with user-supplied padlocks						
Materials	Outer enclosure: Polycarbonate/PBT blend with brass inserts; Interior: Polycarbonate/PBT; Gasket: Silicone foam. Cable channel: Santoprene™ TPE						
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)						
Environmental Rating	Weatherproof enclosure, NEMA 4X and IP66						
CE Compliant	Yes						

#### **Choose Your Solution**

	Data Loggers		RX Series Sensors							
	МХ	RX3000	RX2100	Temp/RH	Soil Moisture	Solar Radiation	Leaf Wetness	Rainfall	Water Level/Flow	Wind
For irrigation planning efficiency		~	~		R			0		
Evapotranspiration <sup>1</sup>		~	~	R		R				R
Integrated Pest Management		~	~	R		0	0	0		0
Pesticide application compliance		~	~	R			0			R
Crop planning	~	~	~	R		0		0		
Water level tracking (well/tank)	~	~	~						<b>R</b> <sup>2</sup>	
Water runoff	~	~	~							
Remote monitoring of conditions		~	~	0	0	0	0	0	0	0
Real time alerts of critical points		~	~	0	0	0	0	0	0	0

1. Evapotranspiration calculation included with HOBOlink. Wind, solar radiation and temp/RH sensors must be installed together on same location. Solar radiation shield required.

R = Required O = Optional/Nice to have

2. To measure flow in irrigation channels or drainpipes, a 3rd party flume or weir is required.

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#### **HOBOmobile**<sup>®</sup>

Easy logger setup and data management software for HOBO MX Series loggers

Onset's HOBOmobile app, a free download from the iTunes or Google Play app store, makes it a snap to configure MX Series data loggers and manage the collected data. Right from a mobile phone or tablet, users can view data in graphs, check the operational status of loggers, share data files and graph images for analysis in Excel, Numbers, and other applications, and store data in the cloud. HOBOmobile also makes it fast and easy to set up audible alarm notifications so users are immediately notified of problems.



#### Key Advantages:

- Communicate to HOBO MX data loggers using Bluetooth Low Energy technology
- No internet connection required
- Set data logger's name, password, logging rate, alarm threshold, start & stop time
- Automatically upload data to Onset's HOBOlink service for storing and merging data files.
- Configure and clear audible alarms
- Page the data logger
- Download and view data
- Export and share data as CSV, TXT, XLSX, or HOBO files