

RX2101 • RX2102 • RX2103 • RX2104 • RX2105-900 • RX2105-868 • RX2105-922 •  
RX2105-921 • RX2106-900 • RX2106-868 • RX2106-922 • RX2106-921

## MicroRX Station



### Supported Measurements

4-20mA, Absolute Pressure, AC Current, AC Voltage, Amp Hour (Ah), Barometric Pressure, DC Voltage, Dew Point, Evapotranspiration, Kilowatt Hours (kWh), Leaf Wetness, Light Intensity, PAR, Power Factor (PF), Pulse Input, Rainfall, Relative Humidity, Soil Moisture, Solar Radiation, Temperature, Volt-Amp Reactive hour, Watt Hours (Wh), Watts (W), Wind

### Features

- Compact size for easy deployment
- Robust, weatherproof IP66/NEMA 4X enclosure
- Two power options:
  - Integrated 1.7 W solar panel with rechargeable battery pack
    - 5 W and 15 W external solar panels can be added to MicroRX Station (RX2102), MicroRX Water Level Station (RX2104) or MicroRX Station for HOBOnet (RX2106)
  - User-replaceable AA lithium batteries
- Inputs for five plug-and-play sensors
- Option for wireless sensors using HOBOnet (RX2106 only)
- Optional water level sensor input included in MicroRX Water Level Station, battery-powered (RX2103) and MicroRX Water Level Station, solar-powered (RX2104)
- Built-in LCD confirms proper setup and operation
- Integrated mounting tabs for use with screws, zip ties, or U-bolts
- Station-side alarms, including water flow and accumulated rainfall
- Up to 10-minute connection rates via 4G cellular data plans
- Cloud-based monitoring and data access through LI-COR Cloud

### What's in the box

- HOBOR RX2100 MicroRX Station
- Grease packet
- Cable ties
- Screws and washers

- Six AA lithium batteries (RX2101 and RX2103 battery-powered stations)
- Battery pack (RX2102 and RX2104 solar-powered stations)

## Contact Us

Sales (8am to 5pm ET, Monday through Friday)

- Email [sales@onsetcomp.com](mailto: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 5pm ET, Monday through Friday)

- Contact Product Support [www.onsetcomp.com/support/contact](http://www.onsetcomp.com/support/contact)
- Call 1-508-759-9500
- In U.S. toll free 1-877-564-4377

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# MicroRX Station (RX2100) Specifications

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|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Range                   | MicroRX Station, battery-powered (RX2101 and RX2105) and Micro RX Water Level Station, battery-powered (RX2103): -40° to 60°C (-40° to 140°F)<br>MicroRX Station, solar-powered (RX2102), MicroRX Water Level Station, solar-powered (RX2104) and MicroRX Station for HOBOnet, solar-powered (RX2106): -20° to 60°C (-4° to 140°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Smart Sensor Connectors           | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Smart Sensor Network Cable Length | 100 m (328 ft) maximum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Smart Sensor Data Channels        | Maximum of 15 (some smart sensors use more than one data channel; see sensor manual for details)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Logging Rate                      | 1 minute to 18 hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Time Accuracy                     | ±8 seconds per month in 0° to 40°C (32°F to 104°F) range;<br>±30 seconds per month in -40° to 60°C (-40° to 140°F) range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Battery Type/Power Source         | RX2102, RX2104 and RX2106: Integrated 1.7 watt solar panel and NiMH rechargeable battery pack; optional AC power adapter (P-AC-1) or external solar panel (SOLAR-xW) can be used in place of integrated solar panel<br>RX2101, RX2103 and RX2105: 6 AA 1.5 V lithium batteries or AC power adapter (P-AC-1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Battery Life                      | <b>RX2102, RX2104 and RX2106 Battery Life:</b><br>Typical 3–5 years when operated in the temperature range -20° to 40°C (-4° to 104°F); operation outside this range will reduce the battery service life.<br>Maximum connection rates with built-in solar panel, in full sun: <ul style="list-style-type: none"><li>• 10 minute connections year round for latitudes less than ±40°</li><li>• 10 minute connections through three seasons in other regions, reduced to 30 minute connections in winter</li></ul> Maximum connection rates with external 5W or 15W solar panels: <ul style="list-style-type: none"><li>• 10 minute connections year round, in full sun</li><li>• Connection rate with external solar panels may be less if deployed in partial sun</li></ul> Battery life without solar recharging, with hourly connections and 1 minute logging: <ul style="list-style-type: none"><li>• RX2102: 3 months</li><li>• RX2104: 2 months</li><li>• RX2106: 3 months</li></ul> <b>RX2101 and RX2103 Battery Life:</b><br>Battery life with daily connections: <ul style="list-style-type: none"><li>• RX2101: 1 year with 1 minute logging</li><li>• RX2103: 1 year with 2 minute logging</li></ul> Battery life with hourly connections and 1 minute logging: <ul style="list-style-type: none"><li>• RX2101: 3 months</li><li>• RX2103: 2 months</li></ul> Note: Deployments in areas with weak cellular strength could reduce battery life.<br><b>RX2105 Battery Life:</b><br>Runs continuously with the included AC adapter. Batteries can be used as a backup to AC power; battery life of 3 months with 1 minute logging and daily connections or 2 months with 1 minute logging and hourly connections, and with approximately 10 motes. 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Materials                         | Outer enclosure: Polycarbonate/PBT blend with brass inserts; Interior: 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Wireless Radio                    | GSM/GPRS/EDGE: Quad band 850/900/1800/1900 MHz<br>UMTS/HSPA+: Seven band 800/850/900/1800/1900/2100 MHz<br>LTE: Twelve Band 700/800/850/900/1800/1900/2100/2600 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Antenna                           | 4G LTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Notices                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

Taiwan Compliance - RX2105 and RX2106 Micro RX versions only  
FCC ID QIPPLS62-W, IC ID:7830A-PLS62W

