The compact and rugged HOBO MicroRX Station is an easy-to-deploy, low-cost cellular solution for long-term, reliable field monitoring. Two power source options are available: a solar panel for extended deployments, and user-replaceable batteries for flexible mounting in covered or protected locations. The station includes inputs for up to five of Onset's research-grade plug-and-play sensors, and can be ordered with an additional water level sensor input with integrated flow conversion. Configurable station-side alarms trigger immediate notifications of critical conditions, and Onset's cloud-based HOBOlink platform makes it easy to view, access, and share data.

**Supported Measurements:**
- Absolute Pressure
- 4-20mA
- AC Current
- AC Voltage
- Amp Hour (Ah)
- Barometric Pressure
- DC Voltage
- Evapotranspiration
- Kilowatt Hours (kWh)
- Leaf Wetness
- Light Intensity
- PAR
- Power Factor (PF)
- Pulse Input
- Rainfall
- Relative Humidity
- Soil Moisture
- Temperature
- Volt-Amp Reactive hour
- Volt-Amps (VA)
- Water Level
- Watt Hours (Wh)
- Watts (W)
- Wind

**Key Advantages:**
- Compact size for easy deployment
- Robust, weatherproof IP66/NEMA 4X enclosure
- Two power options:
  - Integrated 1.7W solar panel with rechargeable battery pack
  - 5W and 15W external solar panels can be added (RX2102 or RX2104 only)
- User-replaceable AA lithium batteries
- Inputs for five plug-and-play smart sensors
- Optional water level sensor input (RX2103 and RX2104 only)
- 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 HOBOlink
## RX2100 Data Logger Specifications

<table>
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<tr>
<th>Feature</th>
<th>Specifications</th>
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| **Operating Range**                          | TX2101 and TX2103: -40° to 60°C (-40° to 140°F)  
TX2102 and TX2104: -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;  
±30 seconds per month in -40° to 60°C (-40° to 140°F) range |
| **Battery Type/Power Source**                | RX2102 and RX2104: 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  
RX2101 and RX2103: 6 AA 1.5 V lithium batteries or AC power adapter (P-AC-1) |
| **Battery Life**                             | **RX2102 and RX2104 Battery Life:**  
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.  
Maximum connection rates with built-in solar panel, in full sun:  
• 10 minute connections year round for latitudes less than ±40°  
• 10 minute connections through three seasons in other regions, reduced to 30 minute connections in winter  
Maximum connection rates with external 5W or 15W solar panels:  
• 10 minute connections year round, in full sun  
• Connection rate with external solar panels may be less if deployed in partial sun  
Battery life without solar recharging, with hourly connections and 1 minute logging:  
• RX2102: 3 months  
• RX2104: 2 months  
**RX2101 and RX2103 Battery Life:**  
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 |
| **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  
UMTS/HSPA+: Seven band 800/850/900/1800/1900/2100 MHz  
LTE: Twelve Band 700/800/850/900/1800/1900/2100/2600 MHz |
Antenna | 4G LTE
---|---

![CE Marking](image)
The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)

![FCC ID](image)
FCC ID QIPPLS62-W, IC ID:7830A-PLS62W

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