



## HOBO® RX3000 Data Logger

### RX3000 Remote Monitoring Station Data Logger

The HOBO RX3000 is Onset's next-generation remote data logging station that provides instant access to site-specific environmental data anywhere, anytime via the internet. The new station combines the flexibility and sensor quality of more expensive systems, an onboard LCD display, and the convenience of plug-and-play operation. The RX3000 has four configurable systems, that can be configured below, that consist of the following part numbers: RX3001-00-01, RX3002-00-01, RX3003-00-01 and RX3004-00-01.

#### Supported Measurements:

4-20mA, AC Current, AC Voltage, Air Velocity, Amp Hour (Ah), Amps (A), Barometric Pressure, Carbon Dioxide, Compressed Air Flow, DC Current, DC Voltage, Differential Pressure, Event, Gauge Pressure, Kilowatt Hours (kWh), Kilowatts (kW), Leaf Wetness, Light Intensity, Power Factor (PF), Pulse Input, Rainfall, Relative Humidity, Soil Moisture, Temperature, Volatile Organic Comp., Volt-Amp Reactive, Volt-Amp Reactive hour, Volt-Amps (VA), Volts (V), Water Flow, Water Level, Watt Hours (Wh), Watts (W) and Wind

#### Key Advantages:

- Flexible support for a broad range of sensors
- LCD display for easy field deployment
- Cloud-based data access through HOBOLink
  - Get 24/7 web access to your data via web browser
  - Verify RX3000 system status remotely
  - Set up and manage alarm notifications over the web
  - Schedule automated delivery of data
- Plug-and-play operation
- Alarm notifications via text, email
- Rugged double-weatherproof enclosure
- Cellular, Wifi and Ethernet Option are available
- Configure & check on your RX3000 monitoring station from your mobile devices
- Optional Analog Input and Relay Modules
- Optional third-party sensor can be purchased for Remote Water Level Monitoring
- Access to NEWA plant disease risk and insect pest models



## HOBO RX3000 Data Logger Specifications

<b>Operating Range</b>	-40° to 60°C (-40° to 140°F); no remote communications for battery voltage less than 3.9 V DC
<b>Smart Sensor Connectors</b>	10
<b>Smart Sensor Network Cable Length</b>	100 m (328 ft) maximum
<b>Smart Sensor Data Channels</b>	Maximum of 15 (some smart sensors use more than one data channel; see sensor manual for details)
<b>Module Slots</b>	2
<b>Logging Rate</b>	1 second (RX3001 and RX3002) or 1 minute (RX3003 and RX3004) to 18 hours
<b>Time Accuracy</b>	±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
<b>Battery Type/Power Source</b>	4 Volt, 10 AHr, rechargeable sealed lead-acid; external power required using one of these options: AC power adapter (AC-U30), solar panel (SOLAR-xW), or external power source 5 V DC to 17 V DC with external DC power cable (CABLE-RX-PWR)
<b>Rechargeable Battery Service Life</b>	Typical 3–5 years when operated in the temperature range -20° to 40°C (-4°F to 104°F); operation outside this range will reduce the battery service life
<b>Memory</b>	32 MB, 2 million measurements, continuous logging
<b>Alarm Notification Latency</b>	Logging interval plus 2–4 minutes, typical
<b>Enclosure Access</b>	Hinged door secured by two latches with eyelets for use with user-supplied padlocks
<b>LCD</b>	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
<b>Materials</b>	Outer enclosure: Polycarbonate/PBT blend with stainless steel hinge pins and brass inserts; Inner enclosure: Polycarbonate; Gaskets: Silicone rubber; Cable channel: EPDM rubber; Cable opening cover: Aluminum with ABS plastic thumb screws; U-Bolts: Steel with zinc dichromate finish
<b>Size</b>	18.6 x 18.1 x 11.8 cm (7.3 x 7.1 x 4.7 in.); see diagrams on next page
<b>Weight</b>	2.2 kg (4.85 lb)
<b>Mounting</b>	3.8 cm (1.5 inch) mast or wall mount
<b>Environmental Rating</b>	Weatherproof enclosure, NEMA 4X (requires proper installation of cable channel system)
<b>CE</b>	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)
<b>FCC</b>	<b>RX3002:</b> FCC ID R68XPICOW, IC ID 3867A-XPICOW <b>RX3003:</b> FCC ID QIPEHS6, IC ID 7830A-EHS6; approved for use in Taiwan and Japan <b>RX3004:</b> FCC ID QIPPLS62-W, IC ID:7830A-PLS62W
<b>Wireless Radio</b>	<b>RX3003:</b> GSM/GPRS/EDGE: Quad band 850/900/1800/1900 MHz, UMTS/HSPA+: Five band 800/850/900/1900/2100 MHz <b>RX3004:</b> 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
<b>Antenna</b>	<b>RX3003:</b> Penta band <b>RX3004:</b> 4G LTE

### Ethernet (RX3001)

**Connector** One RJ45/100BaseT

### Wi-Fi (RX3002)

**Network Standards** IEEE 802.11b/g/n

<b>Frequency Range</b>	2.412–2.484 GHz
<b>Antenna Connector</b>	1, no diversity supported
<b>Data Rates</b>	1, 2, 5.5, 11 Mbps (802.11b); 6, 9, 12, 18, 24, 36, 48, 54 Mbps (802.11g); 802.11n, HT20 MCS0 (6.5 Mbps) to HT20 MC87 (65 Mbps)
<b>Number of Selectable Radio Subchannels</b>	Up to 14 channels; profiles available will include USA, France, Japan, Spain, Canada, and “Other” (multiple countries)
<b>Radio Modulations</b>	OFDM, DSSS, DBPSK, DQPSK, CCK, 16QAM, 64QAM
<b>Security</b>	WEP 64/128, WPA-PSK, AES end-to-end encryption
<b>Maximum Receive Level</b>	-10 dBm (with PER <8%)
<b>Receiver Sensitivity</b>	-72 dBm for 54 Mbps, -87 dBm for 11 Mbps, -89 dBm for 5.5 Mbps, -90 dBm for 2.0 Mbps, -92 dBm for 1.0 Mbps
<b>Cellular (RX3003 and RX3004)</b>	
<b>Wireless Radio</b>	<p><b>RX3003:</b> GSM/GPRS/EDGE: Quad band 850/900/1800/1900 MHz, UMTS/HSPA+: Five band 800/850/900/1900/2100 MHz</p> <p><b>RX3004:</b> 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</p>
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