



## HOBO® RX3000 Data Logger

### RX3000 Remote Monitoring Station

The HOBO RX3000, Onset's most flexible remote data logging station, provides instant access to site-specific environmental data anywhere, anytime via the internet. The station combines the versatility and sensor quality of more expensive systems, an onboard LCD display, and the convenience of plug-and-play operation. The RX3000 is a configurable system (see "Configure System" tab below).



The RX3000 station is the basic component of the cost-effective and scalable HOBOnet Field Monitoring System for crop management, environmental research, and greenhouse operations.



#### 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, Wi-Fi, and Ethernet options are available
- Configurable from your mobile device
- Optional Analog Input, Relay, and Water Level Sensor Modules
- Remote water level and water flow monitoring with Onset's water level module (RXMOD-W1)
- 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)
	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)
	<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

**Frequency Range** 2.412–2.484 GHz

**Antenna Connector** 1, no diversity supported

**Data Rates** 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)

**Number of Selectable Radio Subchannels** Up to 14 channels; profiles available will include USA, France, Japan, Spain, Canada, and “Other” (multiple countries)

**Radio Modulations** OFDM, DSSS, DBPSK, DQPSK, CCK, 16QAM, 64QAM

**Security** WEP 64/128, WPA-PSK, AES end-to-end encryption, WPA2, protocols not listed are not supported

**Maximum Receive Level** -10 dBm (with PER <8%)

**Receiver Sensitivity** -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

### Cellular (RX3003 and RX3004)

**Wireless Radio**

**RX3003:**  
GSM/GPRS/EDGE: Quad band 850/900/1800/1900 MHz, UMTS/HSPA+: Five band 800/850/900/1900/2100 MHz

**RX3004:**  
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**

**RX3003:** Penta band  
**RX3004:** 4G LTE

## 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 6pm 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

Onset Computer Corporation  
470 MacArthur Boulevard  
Bourne, MA 02532