



HOBO Cellular Weather Station Kit - Intermediate

Product Images



Short Description

The HOBO RX3000 Weather Station Intermediate Kit provides instant access to site-specific air temperature,

relative humidity, rainfall and wind speed/direction data anywhere, anytime on your desktop or mobile device.

Buying in Volume, or Want Same Helpful Advice?

Call **+44 (0)1243 558270**, click on the webchat box below, or fill out our [contact form](#).

Description

Key Features

- Cloud-based 24/7 data access via [HOBOLink](#) web-enabled software platform
- 4G cellular communication (also works with 3G/2G)
- Solar powered
- Plug-and-play operation
- Alert notifications via text/email
- Rugged double-weatherproof enclosure.







Kit Components

- HOBO RX3000 Cellular Remote Monitoring Station Data Logger - [RX3004-00-01](#)
- 15W Solar Panel - [SOLAR-15W](#)
- Temperature/RH Smart Sensor with 2 metre cable - [S-THC-M002](#)
- Wind Speed and Direction Smart Sensor Set - [S-WSET-B](#)
- 0.2 mm Resolution Rain Gauge Smart Sensor with 2 metre cable - [S-RGB-M002](#)
- Full Cross-Arm for wind speed/direction sensors - [M-CAA](#)
- Solar Radiation Shield for temperature & RH sensor - [RS3-B](#)

The RX3000 accepts up to 10 plug-and-play Smart Sensors, or up to 50 [HOBOnet](#) wireless sensors. Just plug in your sensor and it's automatically recognised – no programming, wiring, or calibration necessary.

Note: If your needs are different, you can create your own [customised RX3000 weather station](#) with the wide range of sensors available.

Additional Information

Brand	Onset HOBO																																																																																			
Country of Manufacture	United States																																																																																			
Explanation	RX3000 Range Specifications																																																																																			
	<table><tr><td>Operating Range</td><td>-40° to 60°C (-40° to 140°F); no remote communications for battery voltage less than 3.9 V DC</td></tr><tr><td>Smart Sensor Connectors</td><td>10</td></tr><tr><td>Smart Sensor Network Cable Length</td><td>100 m (328 ft) maximum</td></tr><tr><td>Smart Sensor Data Channels</td><td>Maximum of 15 (some smart sensors use more than one data channel; see sensor manual for details)</td></tr><tr><td>Module Slots</td><td>2</td></tr><tr><td>Logging Rate</td><td>1 second (RX3001 and RX3002) or 1 minute (RX3003 and RX3004) to 18 hours</td></tr><tr><td>Time Accuracy</td><td>±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</td></tr><tr><td>Battery Type/Power Source</td><td>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)</td></tr><tr><td>Rechargeable Battery Service Life</td><td>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</td></tr><tr><td>Memory</td><td>32 MB, 2 million measurements, continuous logging</td></tr><tr><td>Alarm Notification Latency</td><td>Logging interval plus 2-4 minutes, typical</td></tr><tr><td>Enclosure Access</td><td>Hinged door secured by two latches with eyelets for use with user-supplied padlocks</td></tr><tr><td>LCD</td><td>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</td></tr><tr><td>Materials</td><td>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</td></tr><tr><td>Size</td><td>18.6 x 18.1 x 11.8 cm (7.3 x 7.1 x 4.7 in.); see diagrams on next page</td></tr><tr><td>Weight</td><td>2.2 kg (4.85 lb)</td></tr><tr><td>Mounting</td><td>3.8 cm (1.5 inch) mast or wall mount</td></tr><tr><td>Environmental Rating</td><td>Weatherproof enclosure, NEMA 4X (requires proper installation of cable channel system)</td></tr><tr><td></td><td>The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)</td></tr><tr><td></td><td>RX3002: FCC ID R68XPICOW, IC ID 3867A-XPICOW RX3003: FCC ID QIPFH56, IC ID 7830A-EH56; approved for use in Taiwan and Japan RX3004: FCC ID QIPPLS62-W, IC ID:7830A-PLS62W</td></tr><tr><td>Wireless Radio</td><td>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</td></tr><tr><td>Antenna</td><td>RX3003: Penta band RX3004: 4G LTE</td></tr><tr><td colspan="2">Ethernet (RX3001)</td></tr><tr><td>Connector</td><td>One RJ45/100BaseT</td></tr><tr><td colspan="2">Wi-Fi (RX3002)</td></tr><tr><td>Network Standards</td><td>IEEE 802.11b/g/n</td></tr><tr><td>Frequency Range</td><td>2.412-2.484 GHz</td></tr><tr><td>Antenna Connector</td><td>1, no diversity supported</td></tr><tr><td>Data Rates</td><td>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)</td></tr><tr><td>Number of Selectable Radio Subchannels</td><td>Up to 14 channels; profiles available will include USA, France, Japan, Spain, Canada, and "Other" (multiple countries)</td></tr><tr><td>Radio Modulations</td><td>OFDM, DSSS, DBPSK, DQPSK, CCK, 16QAM, 64QAM</td></tr><tr><td>Security</td><td>WEP 64/128, WPA-PSK, AES end-to-end encryption, WPA2, protocols not listed are not supported</td></tr><tr><td>Maximum Receive Level</td><td>-10 dBm (with PER <8%)</td></tr><tr><td>Receiver Sensitivity</td><td>-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</td></tr><tr><td colspan="2">Cellular (RX3003 and RX3004)</td></tr><tr><td>Wireless Radio</td><td>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</td></tr><tr><td>Antenna</td><td>RX3003: Penta band RX3004: 4G LTE</td></tr><tr><td>Ideal For</td><td>Professional</td></tr><tr><td>Onset Product Series</td><td>RX</td></tr><tr><td>Measurements</td><td>Dew Point, Humidity, Rainfall, Temperature, Wind Direction, Wind Speed</td></tr><tr><td>Typical applications</td><td>Environmental (Outdoor), Field Research, Weather Monitoring</td></tr><tr><td>Power</td><td>Solar power with battery back-up</td></tr></table>	Operating Range	-40° to 60°C (-40° to 140°F); no remote communications for battery voltage less than 3.9 V DC	Smart Sensor Connectors	10	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)	Module Slots	2	Logging Rate	1 second (RX3001 and RX3002) or 1 minute (RX3003 and RX3004) 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	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)	Rechargeable Battery Service Life	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	Memory	32 MB, 2 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 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	Size	18.6 x 18.1 x 11.8 cm (7.3 x 7.1 x 4.7 in.); see diagrams on next page	Weight	2.2 kg (4.85 lb)	Mounting	3.8 cm (1.5 inch) mast or wall mount	Environmental Rating	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)		RX3002: FCC ID R68XPICOW, IC ID 3867A-XPICOW RX3003: FCC ID QIPFH56, IC ID 7830A-EH56; approved for use in Taiwan and Japan RX3004: FCC ID QIPPLS62-W, IC ID:7830A-PLS62W	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	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	Ideal For	Professional	Onset Product Series	RX	Measurements	Dew Point, Humidity, Rainfall, Temperature, Wind Direction, Wind Speed	Typical applications	Environmental (Outdoor), Field Research, Weather Monitoring	Power
Operating Range	-40° to 60°C (-40° to 140°F); no remote communications for battery voltage less than 3.9 V DC																																																																																			
Smart Sensor Connectors	10																																																																																			
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)																																																																																			
Module Slots	2																																																																																			
Logging Rate	1 second (RX3001 and RX3002) or 1 minute (RX3003 and RX3004) 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	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)																																																																																			
Rechargeable Battery Service Life	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																																																																																			
Memory	32 MB, 2 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 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																																																																																			
Size	18.6 x 18.1 x 11.8 cm (7.3 x 7.1 x 4.7 in.); see diagrams on next page																																																																																			
Weight	2.2 kg (4.85 lb)																																																																																			
Mounting	3.8 cm (1.5 inch) mast or wall mount																																																																																			
Environmental Rating	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)																																																																																			
	RX3002: FCC ID R68XPICOW, IC ID 3867A-XPICOW RX3003: FCC ID QIPFH56, IC ID 7830A-EH56; approved for use in Taiwan and Japan RX3004: FCC ID QIPPLS62-W, IC ID:7830A-PLS62W																																																																																			
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																																																																																			
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																																																																																			
Ideal For	Professional																																																																																			
Onset Product Series	RX																																																																																			
Measurements	Dew Point, Humidity, Rainfall, Temperature, Wind Direction, Wind Speed																																																																																			
Typical applications	Environmental (Outdoor), Field Research, Weather Monitoring																																																																																			
Power	Solar power with battery back-up																																																																																			

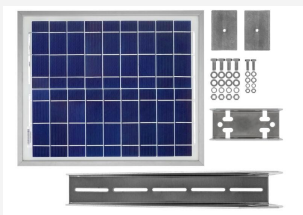
Station Model



HOBO RX3000 Remote Monitoring Data Logging Station

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.

Solar Panel



HOBO SOLAR-15W - 15 Watt Solar Panel

This solar panel is ideal for very cloudy locations, higher latitudes, and/or when connecting analog sensors with high excitation power requirements.

Temperature & Humidity Smart Sensor



HOBO S-THC-M002 12-bit Temperature/Relative Humidity Smart Sensor (2m cable)

The HOBO 12-bit Temperature/Relative Humidity Smart Sensor is designed to work with all HOBO data loggers that accept Smart Sensors. All sensor parameters are stored inside the Smart Sensor, which automatically communicates configuration data information to the logger without any programming, calibration, or extensive user setup.

Wind Speed and Direction Smart Sensor Set



HOBO S-WSET-B Wind Smart Sensor Set

The Wind Sensor Set includes Onset's research-grade plug-and-play Wind Speed Smart Sensor and the Wind Direction Smart Sensor. This combination provides average wind speed, highest three-second wind gust and average wind direction for the measurement interval. These durable sensors will provide many years of accurate and reliable performance.

Rain Gauge Smart Sensor with 2 Metre Cable



S-RGB-M002 Rain Gauge Smart Sensor

The S-RGB-M002 Rain Gauge is scaled for metric measurements and is suitable for use with HOBO Weather Stations and compatible loggers.

The S-RGB-M002 measures up to 10 cm of rain per hour with a resolution of 0.2 mm and a maximum of 4000 tips per interval.

Full Cross-Arm for wind speed/direction sensors



M-CAA -Weather Station Full Cross Arm

For use with Onset tripods or masts, the full cross arm assures unobstructed wind measurement. Full cross arm (91.2cm/36in) provides mounting for two wind sensors.

Solar Radiation Shield



HOBO RS3-B Solar Radiation Shield

The RS3-B Solar Radiation Shield protects external sensors from the effects of sunlight and rain to ensure high accuracy measurements and is designed to allow maximum air flow around the sensor.

Part No:
RS3-B

Additional Options

Mounting Options	HOBO 2-Metre Tripod Kit (M-TPB-KIT)
	HOBO 3-Metre Tripod Kit (M-TPA-KIT)
Data Plan	Basic 4G Plan - 60 minutes interval - up to 22 sensors (SP-811)
	Standard 4G Plan - 10 minutes interval - up to 25 sensors (SP-813)
	Premium 4G Plan - 10 minutes interval - up to 65 sensors (SP-815)
Handheld Anemometer (to help you position weather station wind sensor in optimum location for maximum wind)	Kestrel 1000 (Pro-quality, made in USA)