



HOBO Cellular Weather Station Kit - Basic

Product Images





Short Description

The HOBO MicroRX Weather Station 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.

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Description

This weather station kit includes one year of cloud-based data access with [HOBOLink cloud-based software](#) – for 24/7 access to your data and the ability to verify system status, set up and manage alarm notifications, and schedule automated delivery of data.

Key Features


- Real-time monitoring via integrated 4G cellular connection
- Intuitive mobile app & cloud-based 24/7 data access
- Alert notifications via text/email
- Plug & play operation
- Rugged IP66/NEMA 4x weatherproof enclosure
- Powered by integrated solar panel & rechargeable battery
- Expandable, with a huge range of sensors & options.

Kit Components

- HOBO RX2102 Cellular data logger with inputs for five plug-and-play sensors
- Temperature/RH Smart Sensor with 2 metre cable - [S-THC-M002](#)
- Davis Wind Speed and Direction Smart Sensor - [S-WCF-M003](#)
- Davis 0.2 mm Resolution Rain Gauge Smart Sensor - [S-RGF-M002](#)
- Solar Radiation Shield for temperature & RH sensor - [RS3-B](#)

Note: If your needs are different, you can create your own [customised MicroRX weather station](#).

Additional Information

Brand	Onset HOBO
Country of Manufacture	United States
Explanation	<p>To see the full specifications for this product, please see the product manual under the Resources tab.</p> <p>Operating Range RX2101 and RX2103: -40° to 60°C (-40° to 140°F) RX2102 and RX2104: -20° to 60°C (-4° to 140°F)</p> <p>Smart Sensor Connectors 5</p> <p>Smart Sensor Network Cable Length 100 m (328 ft) maximum</p> <p>Smart Sensor Data Channels Maximum of 15 (some smart sensors use more than one data channel; see sensor manual for details)</p> <p>Logging Rate 1 minute to 18 hours</p> <p>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</p> <p>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)</p> <p>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.</p> <p>Memory 16 MB, 1 million measurements, continuous logging</p> <p>Alarm Notification Latency Logging interval plus 2–4 minutes, typical</p> <p>Enclosure Access Hinged door secured by two latches with eyelets for use with user-supplied padlocks</p> <p>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</p> <p>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</p> <p>Dimensions 19.95 x 13.68 x 7.49 cm (7.85 x 5.39 x 2.95 in.)</p> <p>Weight 678 g (23.9 oz)</p> <p>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</p> <p>Environmental Rating Weatherproof enclosure, NEMA 4X and IP66 (requires proper installation of cable channel system)</p> <p>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</p> <p>Antenna 4G LTE</p> <p>CE The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)</p> <p>FCC  FCC ID QIPPLS62-W, IC ID:7830A-PLS62W</p>
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	Battery only
Power	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

Product Options

Station Model



HOBO RX2102 MicroRX Solar-Powered Cellular Web-enabled Monitoring Station (Wired Sensors)

An easy-to-deploy, low-cost cellular field monitoring solution. With a compact size and rugged design, the MicroRX Station offers long-term, reliable environmental monitoring.

Temperature & Humidity 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 Sensor



Davis Wind Speed and Direction Smart Sensor for HOBO Weather Station Loggers

Davis® Wind Speed/Direction Smart Sensors are compatible with all HOBO weather station loggers.

Rain Gauge Sensor



Davis® 0.2 mm AeroCone Rain Gauge Smart Sensor for HOBO Weather Station Loggers

Davis® Rain Gauge Smart Sensors are compatible with all HOBO weather station loggers,

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)