HOBO® RX2105 Data Logger

MicroRX Station

The compact HOBO MicroRX Station is an easy-to-deploy, low-cost cellular solution for long-term, reliable monitoring of indoor conditions in warehouses, cold storage facilities, data centers, museums, commercial and residential buildings, and more. The station includes an integrated HOBOnet Manager, for easy deployment with wireless HOBOnet sensors. The station also features inputs for up to five of Onset's research-grade plug-and-play sensors. 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.

Key Advantages:

- Compact size and integrated HOBOnet Manager for easy deployment
- Scalable, with option to connect up to 50 wireless sensors; 600 m line-of-sight range
- Inputs for five plug-and-play sensors
- Includes AC power adapter and user-replaceable AA lithium batteries for battery back-up
- Built-in LCD confirms proper setup and operation
- Up to 10-minute connection rates via 4G cellular data plans
- Cloud-based monitoring and data access through HOBOlink
- Integrated mounting tabs for use with screws, zip ties, or U-bolts

Station	
Operating Range	RX2105: -40° to 60°C (-40° 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	RX2105: AC power adapter (P-AC-1) and 6 AA 1.5 V lithium batteries
Battery Life/Power Source	RX2105: Runs continuously with the included AC adapter. Batteries can be used as a backup to AC power; battery life of 3 months with 1 minute logging and daily connections or 2 months with 1 minute logging and hourly connections, and with approximately 10 motes. Note: Deployments in areas with weak cellular strength could reduce battery life.
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.); see diagrams at left
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
FC	Federal Communication Commission
CE	European Union Compliance
⟨⟩	Australia and New Zealand Compliance
	Taiwan NCC Mark
Manager	
Operating Range	-25° to 60°C (-13° to 140°F)
Radio Power	12.6 mW (+11 dBm) non-adjustable
Transmission Range	Reliable connection to 457.2 m (1,500 ft) line of sight at 1.8 m (6 ft) high Reliable connection to 609.6 m (2,000 ft) line of sight at 3 m (10 ft) high
Wireless Data Standard	IEEE 802.15.4
Radio Operating Frequencies	RX210x-922: 916–924 MHz RX210x-921: 921 MHz RX210x-900: 904–924 MHz RX210x-868: 866.5 MHz
Modulation Employed	OQPSK (Offset Quadrature Phase Shift Keying)

Data Rate	Up to 250 kbps, non-adjustable
Duty Cycle	<1%
Maximum Number of Motes	50 motes per one HOBOnet wireless sensor network
Power Source	Powered by the station
Dimensions	Mote: 16.2 x 8.59 x 4.14 cm (6.38 x 3.38 x 1.63 inches) Cable length: 2 m (6.56 ft)
Weight	159 g (5.62 oz)
Materials	PCPBT, silicone rubber seal
Environmental Rating	IP67, NEMA 6

Contact Us

Sales (8am to 5pm ET, Monday through Friday)
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