# HOBO H21 USB Micro Station Weather/Energy Data Logger (add sensors as required)

## Product Images

https://www.tempcon.co.uk/hobo-usb-micro-station-data-logger

30/04/2024
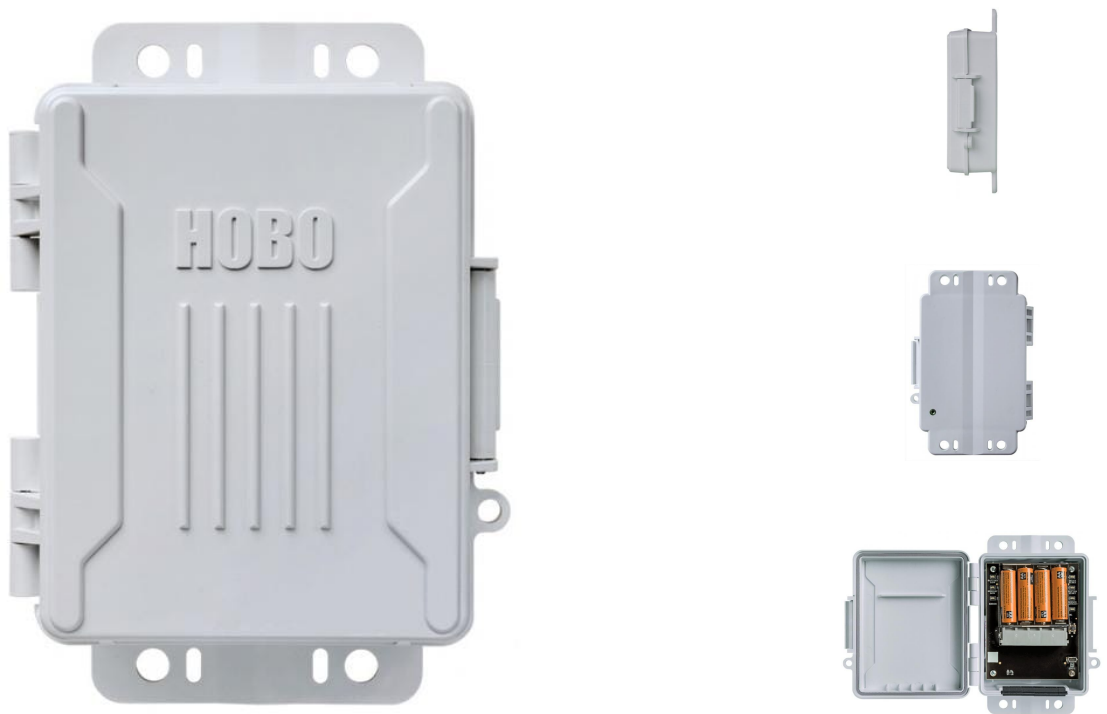
## Short Description

Rugged and compact, the redesigned HOBO H21 USB Micro Station is a weatherproof data logger for multi-channel monitoring. This battery-powered station accepts up to five plug-and-play Smart Sensors and is equipped with a built-in USB port for fast, efficient data readout to a computer, and an integrated mounting tabs for easy installation.

Requires a CABLE-USBMB and HOBOware software (select from options below).

## Description

Looking for a cellular option? The MicroRX Station offers integrated solar panel or battery-power for affordable remote data offload via 4G cellular.

Interested in water level and flow monitoring? The MicroRX Water Level Station combines the MicroRX Station with Onset's own water level sensor and pre-programmed water flow formulas.

### Key Features

- Compact size for easy deployment
- Weatherproof IP66 enclosure for harsh environments
- Data offload via CABLE-USBMB
- Includes five smart sensor inputs
- Hinged door and integrated mounting tabs
- Runs for up to a year on four standard AA batteries
- Compatible with HOBOware and HOBOware Pro software for logger setup, graphing and analysis.

The H21 can be used with a wide range of sensors; some of the more popular ones are available below. Contact us if you need any help specifying an appropriate system.

### Buying in Bulk, or Just Want Some Helpful Advice?

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

# Additional Information

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| Brand | Onset HOBO |
| Country of Manufacture | United States |
| Contents | HOBO H21-USB Micro Station<br>Four AA 1.5V alkaline batteries<br>Rubber plugs<br>Grease packet<br>Screws and washers<br>Cable ties |

| Explanation | | |
|---|---|---|
| | **Operating Range** | -20° to 50°C (-4° to 122°F) with alkaline batteries<br>-40 to 70°C (-40 to 158°F) with lithium batteries |
| | **Smart Sensor Connectors** | 5 |
| | **Smart Sensor Data Channels** | Maximum of 15 (some smart sensors use more than one data channel; see sensor manual for details) |
| | **Smart Sensor Network Cable Length** | 100 m (328 ft) maximum |
| | **Logging Interval** | 1 second to 18 hours |
| | **Start Modes** | Immediate, at interval, push button, or delayed start |
| | **Memory Modes** | Stop when full or wrap when full |
| | **Memory** | 512 KB nonvolatile flash data storage |
| | **Time Accuracy** | 0 to 2 seconds for the first data point and ±5 seconds per week at 25°C (77°F) |
| | **Battery Type** | Four AA 1.5 V alkaline batteries for operating conditions of -20° to 50°C (-4° to 122°F); four AA 1.5 V lithium batteries for operating conditions of -40 to 70°C (-40 to 158°F) |
| | **Battery Life** | 1 year, typical use (up to five sensors with 1 minute or greater logging interval) |
| | **Communication Type** | USB 2.0 interface |
| | **Full Memory Download Time** | 4 minutes |
| | **Enclosure Access** | Hinged door secured by one latch with eyelet for use with user-supplied padlock |
| | **Materials** | Outer enclosure: Polycarbonate/PBT blend with stainless steel hinge pins; Gaskets: Silicone rubber; Cable channel: EPDM rubber |
| | **Dimensions** | 17.04 x 11.94 x 4.47 cm (6.71 x 4.70 x 1.76 in.) see diagrams in manual<br>Padlock hole diameter: 0.58 cm (0.23 in.) |
| | **Weight** | 414g (14.6 oz.) |
| | **Environmental Rating** | Weatherproof enclosure, NEMA 4X and IP66 |
| | ☒ | The CE Marking identifies this product as complying with all relevant directives in the European Union (EU). |

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| Onset Product Series | H21 |
| Measurements | 4-20mA, Amp Hour (Ah), Barometric Pressure, Current AC, Dew Point, Humidity, kWh, Leaf Wetness, Light Intensity, PAR/Quantum Light, Power Factor (PF), Pulse, Rainfall, Soil Moisture, Solar Radiation, Temperature, Universal, Volt-Amp Reactive, Volt-Amp Reactive hour, Volt-Amps (VA), Voltage DC, Water Flow, Watt Hours (Wh), Watts (W), Wind Direction, Wind Speed |
| Typical applications | Energy, Environmental (Indoor), Environmental (Outdoor), Field Research, Non Specific, Weather Monitoring |
| Power | Battery only |
| Dimensions | 17.04 x 11.94 x 4.47 cm |
| Batteries | Four AA 1.5 V alkaline batteries for operating conditions of -20° to 50°C (-4° to 122°F); four AA 1.5 V lithium batteries for operating conditions of -40 to 70°C (-40 to 158°F) |
| Power | Battery only |

# Additional Options

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| **Mounting Options** | HOBO 2-Metre Tripod Kit (M-TPB-KIT) |
| | HOBO 3-Metre Tripod Kit (M-TPA-KIT) |
| **HOBOware Pro Software Options** | HOBOware Pro on USB Drive (USB cable included) |
| | HOBOware Pro on CD (USB Cable Included) |
| | HOBOware Pro - Download Only (USB cable NOT included) |
| **USB Cable (included with HOBOware Pro on USB Drive & CD)** | HOBO U-Series to PC USB Cable |
| **Temperature Sensors** | 12-Bit Temperature (2m cable) Smart Sensor |
| | 12-Bit Temperature (6m cable) Smart Sensor |
| | 12-Bit Temperature (17m cable) Smart Sensor |
| **Relative Humidity Sensors** | 12-bit Temperature/Relative Humidity (2m cable) Smart Sensor |
| | 12-bit Temperature/Relative Humidity (8m cable) Smart Sensor |
| **Rainfall Sensors** | Davis® 0.01" Rain Gauge Smart Sensor |
| | Davis® 0.2 mm Rain Gauge Smart Sensor |
| | 0.01" Rain Gauge (2m cable) Smart Sensor |
| | 0.2 mm Rainfall (2m cable) Smart Sensor |
| **Wind Sensors** | Davis® Wind Speed and Direction Smart Sensor |
| | Wind Direction Smart Sensor |
| | Wind Speed Smart Sensor |
| | Wind Speed and Direction Set Smart Sensor |
| **Barometric Pressure Sensor** | Smart Barometric Pressure Sensor |
| **Soil Moisture (Sensors)** | EC5 Soil Moisture Smart Sensor |
| | 10HS Soil Moisture Smart Sensor |
| **Leaf Wetness Sensor** | Leaf Wetness Smart Sensor |
| **Light Intensity Sensors** | Photosynthetic Light (PAR) Smart Sensor |
| | Solar Radiation (Silicon Pyranometer) Smart Sensor |

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| **Analogue Input Sensor Adapters** | 12-Bit Voltage Input Adapter Sensor |
| | 12-Bit 4-20 mA Input Adapter Sensor |
| **Pulse Input Sensor Adapters** | Electronic Switch Pulse Input Adapter - 1 Meter Sensor |
| | Electronic Switch Pulse Input Adapter - 6 Meter Sensor |
| | Contact Closure Pulse Input Adapter - 1 Meter Sensor |
| | Closure Pulse Input Adapter - 6 Meter Sensor |