

HOBO[®] U30-NRC (USB) Weather Station Data Logger

- A 15 channel data logger enabling environmental and energy data to be measured, recorded, and analysed with HOBOWare Pro software
- Rugged outdoor enclosure
- Fully-integrated expandable communications
- Plug-and-play sensors
- Fast data offload via USB
- Optional analogue inputs with sensor excitation
- Relay for user-defined alarm conditions



The HOBO U30-NRC (USB) Weather Station Data Logger is a rugged data logging and monitoring device with built in USB that can be easily reconfigured and adapted to measure a wide variety of applications.

Up to 15 channels of data can be recorded and analysed via HOBOWare Pro software.

In addition, alarms can be set to trip for specific sensor readings or for overall system conditions, such as when memory or the logger battery is running low.

Wide Range of Measurements via optional tripod mount and sensors

Weather Measurements:

4-20mA
Barometric Pressure
Leaf Wetness
Light Intensity
PAR
Pulse Input
Rainfall
Relative Humidity
Soil Moisture
Solar Radiation
Temperature
Voltage Input
Wind Speed & Direction

Energy-HVAC Measurements:

4-20mA
AC Current
AC Voltage
Air Velocity
Carbon Dioxide
Compressed Air Flow
DC Current
DC Voltage
Differential Pressure
Gauge Pressure
kW
kWh
Pulse Input
Relative Humidity
Temperature
Volatile Organic Compound (VOC)
Water Flow



HOBOWare Software:

The U30-NRC requires HOBOWare launch & readout software

Specification:

- Measurement range according to sensor
- Normal operating range: -20°C to 40°C
- Extended operating range: -40 to 60°C (ask about "Rechargeable Battery service Life")
- Sensor Inputs: 5 standard; option to expand to 10
- Smart Sensor Compatibility: Compatible with most Onset smart sensors except for the S-BPA, S-TMA, and S-THA
- Data Channels: Maximum of 15 (some sensors use more than one data channel)
- Alarm Output Relay: Can be configured to be activated, deactivated or pulsed on user-defined sensor alarms. The relay can be configured as normally open or normally closed, and is rated for 30 V and 1 amp max.
- External Power is required: The system accepts AC-U30 AC Power Adapter, or Solar Panels: Solar- 1.2W/3W/6W
- Time Accuracy: 0-2 secs \pm 5 secs/week
- Alarm Output Relay: Contact closure can be configured as N/O, N/C, or pulsed (30V, 1A max)
- Sensor Cable: 100m (max)
- Expansion Slot: One expansion slot is available for factory fitted port
- Local Communication: Full speed USB
- Size: 178(H) x 117(D) x 193(W) mm
- Weight: 2 kg
- Enclosure: Polycarbonate/PBT blend with stainless steel hinge pins and brass inserts
- Rating: Weatherproof, NEMA 6
- Memory: 512K; Non-volatile
- Memory Modes: Stop when full, wrap around when full
- Operational Indicators: 6 status lights
- Logging Interval: 1 sec – 18 hours
- Battery: 4V, 4.5 or 10 AHr rechargeable (typically 3-5 year life)

Configuration:

- Choosing 2 analogue inputs provides 2 analogue inputs and sensor power; and can be user-configured for either 0-20 mA or 0-20V.
- 5 smart sensor inputs includes weatherproof inlets for up to 5 sensor cables.
- 10 smart sensors inputs includes weatherproof inlets for up to 11 sensor cables, and 1 oversized cable (0.25")

Optional Analogue Sensor Port Specifications:

- Input Channels: Two, single-ended
- Field Wiring: Two- or three-wire via screw terminals on detachable connector, 16–24 AWG.
Replacement detachable connectors: Part of spares kit, Part No. A-FS-CVIA-7P-1
- Input Range: User-configurable: 0–20 mA DC, 0–20 VDC (suitable for 2.5, 5, 10V sensors)
- Minimum / Maximum Input Voltage: 0 / 24 VDC
- Minimum / Maximum Input Current: 0 / 24 mA DC
- Minimum Current Source Impedance: > 20 K Ω
- Accuracy: \pm 0.25% of FSR from 50mV to FSV
- ADC Resolution 12 bits
Excitation Power: Switched 12 VDC, up to 50 mA; user-selectable warm-up from 5msec to 2 minutes

Order Information:

U30-NRC USB Weather Station Data Logger
CS262 UK Mains Power Supply
Solar Panels (Contact Tempcon Sales Office)
HOBOWare Launch/Download Software

