

outdoor

HOBO® H8 Pro Series

temperature,
external temperature,
relative humidity

The HOBO H8 Pro family of data loggers are ruggedly designed for years of reliable use in outdoor applications. HOBO Pro models offer Onset's highest level of temperature accuracy and excellent RH accuracy.

4 Models to Choose From

- single channel: temperature
- 2-channels: temperature, relative humidity
- 2-channels: intrinsically safe temperature, relative humidity
- 2-channels: temperature, external soil/water temperature probe on 6' cable

Key Specifications

Measurement ranges:
 Internal Temperature: -30° to 50°C (-22° to 122°F)
 Relative humidity: 0% to 100%
 External Temperature: -40° to 100°C (-40° to 212° F)

Accuracy:
 Temperature: ±0.2° at 21°C (±0.33° @ 70°F) in high resolution mode; ±0.5°C (±0.9°F) in standard resolution mode
 RH: ±3% over 0°-50°C (32°-122°F); ±4% in condensing environments

Temperature Resolution: 0.02°C at 21°C (0.04° at 70°F) in high resolution mode; 0.41°C (0.7°F) in standard resolution mode

Operating Range: -30° to 50°C (-22° to 122°F) and 0 to 100% RH
 RH sensor: intermittent condensing environments up to 30°C (86°F); non-condensing environments above 30°C (86°F)



Size/Weight: 102 x 81 x 51 mm
 (4 x 3.2 x 2"); 105 g (3.7 oz)
 Temp/Temp-RH; 145 g (5.1 oz)
 Temp/Ext

Features Performance

Weatherproof RH sensor*
 User-selectable resolution on temperature measurements (8 or 12-bit)
 Capacity: 65,291 standard-resolution measurements or 32,645 high-resolution measurements
 Memory mode: Stop when full
 Precision components eliminate the need for temperature calibration
 NIST-traceable temperature accuracy certification available
 Compliance certificate available

Easy to Use

User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 3 years
 Programmable start time/date
 Blinking LED confirms operation (visible through communication jack)
 Readout and relaunch in the field with optional HandCar® for Palm™ handhelds
 High speed data readout: full 64K in about 1 min. to PC, HandCar or HOBOS Shuttle

Reliable

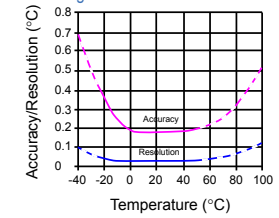
Automatic data archiving of 7 previous deployments
 Battery level indication at launch
 User-replaceable battery lasts 3 years
 Nonvolatile EEPROM memory retains data even if battery fails
 Intrinsically safe temp/RH model available

* RH sensor is designed for use in outdoor environments with cyclical high and low humidity levels. Intermittent condensation permitted only when temperatures are less than 30°C (86°F). Operation outside stated limits, or repeated sensor saturation, will lead to premature sensor failure. RH sensor requires protection from rain, splashing, mist, and airborne chemicals such as salt and ammonia. (See page 16 for shield options.)

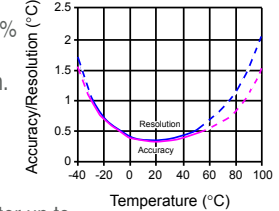
Detailed Specifications

Drop proof to 5'
 Mounting tabs, self tapping screws and hook/loop tape included
 Internal Temp Sensor response time: <35 minutes to 90% in still air
 Drift: 1% per year typical; an additional temporary drift of up to 3% can occur when average humidity is above 70%.
 Factory tune-up available.
 Time accuracy: ±1 minute per week at 20°C (68°F)
 RH Response Time: 5 minutes typical to 90% (independent of temperature)
 External Temp Sensor response time: 3 min. typical to 90% in air moving 1 m/sec; 1 min. typical in stirred water.
 0.7 cm diameter stainless steel sensor tip on 6 ft. cable (fits 1/3" hole).
 Sensor tip and cable immersion in fresh water up to 50°C (122°F) for 1 year; radiation shield recommended for use in sunlight.

Temperature Accuracy & Resolution High Resolution Mode



Temperature Accuracy & Resolution Standard Resolution Mode



HOBO H8 Pro Family Ordering

Description	Part No.
HOBO Pro Temp	H08-030-08
HOBO Pro Temp/External	H08-031-08
HOBO Pro RH/Temp	H08-032-08
HOBO Pro RH/Temp- Intrinsically Safe	H08-032-IS
Replacement battery/ service kit	HP-BK
Replacement battery	HP-B
BoxCar Pro 4.3 Starter Kit (Windows)	BCP4.3-DL
BoxCar 3.7 Starter Kit (Windows)	BC3.7-DL
HandCar Software for Palm™ handhelds	HC1.1
USB-Serial-Adapter	CABLE-USB232

Accurate temperature measurements in direct sun require a radiation shield (pg 16).

Note: A BoxCar Pro 4.3 or BoxCar 3.7 starter kit is required to operate the HOBO Pro Series loggers. Each starter kit includes software, PC interface cable and software manual. HandCar requires Palm™ to logger cable. Use with a USB port requires USB-Serial Adapter and BoxCar Pro 4.3+.

IS Intrinsically Safe Model

HandCar® software compatible

CE Compliant with all relevant directives in the European Union (EU)

HOBOS Shuttle-compatible