doctor art
conservation & laser

HOBO	
code	**Description**
HOBO U10	
MAHB1010.0	**HOBO U10 TEMP LOGGER**

Measurement range: -20° to 70°C (-4° to 158°F)
Accuracy: ± 0.53°C from 0° to 50°C (± 0.95°F from 32° to 122°F)
Resolution: 0.14°C at 25°C (0.25°F at 77°F)
Drift: 0.1°C/year (0.2°F/year)
Response time: 10 minutes in airflow of 1 m/s (2.2 mph), typical to 90%
Time accuracy: Approximately ± 1 minute per month at 25°C (77°F)
Operating range: Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)
Battery life: 1 year typical use
Memory: 64K bytes (52,000 10-bit measurements)
Weight: 26 g (0.82 oz)
Dimensions: 45 x 60 x 20 mm (1.8 x 2.38 x 0.77 inches)

MAHB1011.0	**HOBO U10 T/RH LOGGER**

Measurement range: Temperature: -20° to 70°C (-4° to 158°F) RH: 25% to 95% RH
Accuracy: Temperature: ± 0.53°C from 0° to 50°C (± 0.95°F from 32° to 122°F) RH: ± 3.5% from 25% to 85% over the range of 15° to 45°C (59° to 113°F); ± 5% from 25% to 95% over the range of 5° to 55°C (41° to 131°F),
Resolution: Temperature: 0.14°C at 25°C (0.25°F at 77°F) RH: 0.07% @ 25°C and 30% RH
Sample Rate: 1 second to 18 hours, user selectable
Drift: Temperature: 0.1°C/year (0.2°F/year) RH: <1% per year typical
Response time in airflow of 1 m/s (2.2 mph)
Temperature: 10 minutes, typical to 90% RH: 6 minutes, typical to 90%
Time accuracy: Approximately ± 1 minute per month at 25°C (77°F)
Operating range: Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)
Battery life: 1 year typical use
Memory: 64K bytes (52,000 10-bit measurements)
Weight: 26 g (0.82 oz)
Dimensions: 45 x 60 x 20 mm (1.8 x 2.38 x 0.77 inches)

HOBO U12	
MAHB1201.0	**HOBO U12 TEMP LOGGER**

Measurement range: -20° to 70°C
Accuracy: ± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F)
Resolution: 0.03°C at 25°C (0.05°F at 77°F)
Sample Rate: 1 second to 18 hours, user selectable
Drift: 0.1°C/year (0.2°F/year)
Response time In airflow of 1 m/s (2.2 mph): 6 minutes, typical to 90%
Plot BTime accuracy: ± 1 minute per month at 25°C (77°F)
Operating temperature Logging: -20° to 70°C (-4° to 158°F)
Launch/readout: 0° to 50°C (32° to 122°F), per USB specification
Battery life: 1 year typical use
Memory: 64K bytes (43,000 12-bit measurements)
Weight: 46 g (1.6 oz)
Dimensions: 58 x 74 x 22 mm (2.3 x 2.9 x 0.9 inches)

MAHB1206.0	**U12 4 EXTERNAL CHANNELS LOGGER**

Analog channels: 0 to 2.5 Vdc; 0 to 5 Vdc; 0 to 10 Vdc; 4-20 mA
Accuracy (logger only): ± 2 mV ± 2.5% of absolute reading; ± 2 mV ± 1% of reading for logger-powered sensors
Timebase error Plot Resolution: 0.6 mV
Sample Rate: 1 second to 18 hours, user selectable
Time accuracy: ± 1 minute per month at 25°C (77°F)
Operating range: -20 to 70°C (-4° to 158°F)
Operating temperature: Logging: -20° to 70°C (-4° to 158°F)
Launch/readout: 0° to 50°C (32° to 122°F), per USB specification
Humidity range: 0 to 95% RH, non-condensing
Battery life: 1 year typical use
Memory: 64K bytes (43,000 12-bit measurements)
Weight: 46 g (1.6 oz)
Dimensions: 58 x 74 x 22 mm (2.3 x 2.9 x 0.9 inches)

MAHB1211.0	**HOBO U12 TEMP/RH LOGGER**
	Measurement range: Temperature: -20° to 70°C (-4° to 158°F) RH: 5% to 95% RH
	Accuracy: Temperature: ± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F)
	RH: ±2.5% from 10% to 90% RH (typical), to a maximum of ±3.5%
	Resolution:Temperature: 0.03°C at 25°C (0.05°F at 77°F) RH AccuracyRH: 0.03% RH
	Sample Rate: 1 second to 18 hours, user selectable
	Drift Temperature: 0.1°C/year (0.2°F/year) RH: <1% per year typical; RH hysteresis 1%
	Response time in airflow of 1 m/s (2.2 mph) Temperature: 6 minutes, typical to 90% RH: 1 minute, typical to 90%
	Time accuracy: ± 1 minute per month at 25°C (77°F)
	Operating temperature: Logging: -20° to 70°C (-4° to 158F)
	Launch/readout: 0° to 50°C (32° to 122°F), per USB specification
	Battery life: 1 year typical use
	Memory: 64K bytes (43,000 12-bit measurements)
	Weight: 46 g (1.6 oz)
	Dimensions: 58 x 74 x 22 mm (2.3 x 2.9 x 0.9 inches)

MAHB1212.0	**U12 TEMP/RH/LIGHT/EXT CHANNEL LOGGER**
	Measurement range:Temperature: -20° to 70°C (-4° to 158°F) RH: 5% to 95% RH Light intensity: 1 to 3000 footcandles (lumens/ft2) typical; maximum value varies from 1500 to 4500 footcandles (lumens/ft2)
	Analog channels: 0 to 2.5 Vdc; 0 to 5 Vdc; 0 to 10 Vdc; 4-20 mA
	Accuracy: Temperature: ± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F)
	RH: ±2.5% from 10% to 90% RH (typical), to a maximum of ±3.5%
	RH Accuracy Light intensity: Designed for indoor measurement of relative light levels, see Plot D for light wavelength response
	External input channel (see sensor manual): ± 2 mV ± 2.5% of absolute reading
	Resolution: Temperature: 0.03°C at 25°C (0.05°F at 77°F) RH: 0.03% RH
	Sample Rate: 1 second to 18 hours, user selectable
	Drift:Temperature: 0.1°C/year (0.2°F/year) RH: <1% per year typical; RH hysteresis 1%
	Response time in airflow of 1 m/s (2.2 mph): Temperature: 6 minutes, typical to 90% RH: 1 minute, typical to 90%
	Time accuracy: ± 1 minute per month at 25°C (77°F)
	Operating temperature: Logging: -20° to 70°C (-4° to 158°F)
	U12-012 Plot DLaunch/readout: 0° to 50°C (32° to 122°F), per USB specification
	Battery life: 1 year typical use
	Memory: 64K bytes (43,000 12-bit measurements)
	Weight: 46 g (1.6 oz)
	Dimensions: 58 x 74 x 22 mm (2.3 x 2.9 x 0.9 inches)

MAHB1213.0	**U12 TEMP/RH/2 EXTERNAL CHANNEL**
	Measurement range: Temperature: -20° to 70°C (-4° to 158°F) RH: 5% to 95% RH
	Analog channels: 0 to 2.5 Vdc; 0 to 5 Vdc ; 0 to 10 Vdc; 4-20 mA
	Accuracy: Temperature: ± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F)
	RH: ±2.5% from 10% to 90% RH (typical), to a maximum of ±3.5%
	RH AccuracyExternal input channel (see sensor manual): ± 2 mV ± 2.5% of absolute reading
	Resolution: Temperature: 0.03°C at 25°C (0.05°F at 77°F)
	RH: 0.03% RH
	Sample Rate: 1 second to 18 hours, user selectable
	Drift: Temperature: 0.1°C/year (0.2°F/year) RH: <1% per year typical; RH hysteresis 1%
	Time accuracy: ± 1 minute per month at 25°C (77°F)
	Response time in airflow of 1 m/s (2.2 mph) Temperature: 6 minutes, typical to 90% RH: 1 minute, typical to 90%
	Operating temperature: Logging: -20° to 70°C (-4° to 158°F)
	Launch/readout: 0° to 50°C (32° to 122°F), per USB specification
	Battery life: 1 year typical use
	Memory: 64K bytes (43,000 12-bit measurements)
	Weight: 46 g (1.6 oz)
	Dimensions: 58 x 74 x 22 mm (2.3 x 2.9 x 0.9 inches)

MAHBT002.0	**STAINLESS STEEL PROBE**
	Probe Dimensions: 102mm (4 in.) food-grade stainless steel probe with pointed tip; 3.2mm (±0.01") diameter
	Cable Length: 1.8m (6 foot)
	Range: -40° to 100°C (-40° to 212°F) in air or water. Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F)
	Drift:< 0.1 °C (0.2 °F) per year
	Response time in air: 3 minutes typical to 90% in air moving 1m/sec (2.2mph)

MAHBT005.0	**HOBO 1.8M TEMP EXT PROBE**
	Range: -40° to 50°C (-40° to 122°F) in water or soil -40° to 100°C (-40° to 212°F) in air
	Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F)
	Drift: < 0.1°C (0.2°F) per year
	Resolution with U12: 0.03° at 20°C (0.05°F at 68°F)
	Response time: < 3 minutes typical to 90% in 1 m/sec air flow/< 30 seconds typical to 90% in stirred water
	Housing: Stainless-steel sensor tip
	Probe dimensions: 0.5 cm x 2.5 cm (0.20 in. x 1.0 in.)
	Length: 1.8m

MAHBT008.0	**HOBO 6M EXT TEMP PROBE**
	Range: -40° to 50°C (-40° to 122°F) in water or soil -40° to 100°C (-40° to 212°F) in air Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F) Drift: < 0.1°C (0.2°F) per year Resolution with U12: 0.03° at 20°C (0.05°F at 68°F) Response time: < 3 minutes typical to 90% in 1 m/sec air flow/< 30 seconds typical to 90% in stirred water Housing: Stainless-steel sensor tip Probe dimensions: 0.5 cm x 2.5 cm (0.20 in. x 1.0 in.) Length: 6m
MAHBT010.0	**HOBO 15,2M EXT TEMP PROBE**
	Range: -40° to 50°C (-40° to 122°F) in water or soil -40° to 100°C (-40° to 212°F) in air Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F) Drift: < 0.1°C (0.2°F) per year Resolution with U12: 0.03° at 20°C (0.05°F at 68°F) Response time: < 3 minutes typical to 90% in 1 m/sec air flow/< 30 seconds typical to 90% in stirred water Housing: Stainless-steel sensor tip Probe dimensions: 0.5 cm x 2.5 cm (0.20 in. x 1.0 in.) Length: 15,2m
MAHBCO21.0	**HOBO TELAIRE CO2 PROBE**
	Measurement Range: 0 to 2500 ppm when using the cable MAHBA015.0 and a U12 or ZW 0 to 4000 ppm when using a H22 or U30 Telaire 7001 Operating Range: 32°F to 122°F (0°C to 50°C), 0 to 95% RH, non-condensing Display Resolution: ±1 ppm Accuracy: ±50 ppm or 5% of reading Repeatability: ±20 ppm Temperature Dependence: ±0.1% of reading per °C or ±2 ppm per °C Battery Type: Four AA batteries (not included) Battery Operation: 80 hours (alkaline) External Power Supply Specifications: AC/DC adapter (included) Output: 6 VDC, 500mA output.
MAHBA015.0	**TELAIRE 7001 CO2 SENSOR INPUT CABLE**
	CO2 Sensor to Logger Cable (20.3cm – 8 inches) for use with U12 and ZW loggers
MAHBT024.0	**HOBO AIR VELOCITY SENSOR**
	Measurement ranges, "O" model: 0.15 - 5 m/s (30 - 985 fpm) Measurement range, "P" model: 0.15 - 10 m/s (30 - 1969 fpm) Accuracy: Greater of 10% of reading or +/-0.05 m/s or 1% full-scale Standard medium: Air at standard pressure (101.3 kPa, 29.95" Hg) Operating temperature range: 15 – 35 C (59 – 95 F) Storage temperature: -10 to 100C Supply voltage: 7-13 VDC Supply current: 40 - 75 mA (10K ohm nominal) Warm-up time: < 5 sec Response time: 1.5 sec Output: Linear 0 - 4 VDC full scale for calibrated range, up to 4.9 VDC beyond calibrated range Sensor head material: Plastic Dimensions: 100 mm x 12 mm diameter for "S" model, 91 mm x 12 mm for "L" model Vibration: Up to 25 G Acceptable angle: +/- 300 from perpendicular Repeatability: +/- 1% under same conditions

doctor art
conservation & laser

HOBO ZW	
MAZWRCV1.0	**HOBO ZW DATA RECEIVER**
	HOBO ZW data receiver collects incoming logged sensor data from HOBO data nodes and transfers the data to the computer via USB cable. Buffer Memory - up to 96k measurements Power Options - AC power adapter; via USB cabled to PC; (3) alkaline AAA batteries included. Range - Approx. 100 m (300 ft.) depending on obstructions or interference Weight - 138 g (4.87 oz.) w/ batteries Size - 96.5 x 108 x 28 mm (3.8 x 4.25 x 1.1 in.) Max # of Nodes Supported - 100 Radio power - 1.6 mW (2 dBm) Wireless data standard - IEEE 802.15.4 2.4 GHz band Price includes: HOBOwarePro software disc; mounting stand; USB connection cable; batteries; wall mounting accessories; setup guide and power adapter.
MAZWROU1.0	**HOBO ZW DATA ROUTER**
	Hobo ZW Data Router extends the range of the radio signal conveying data acquired by Hobo ZW Data Node and transmit it to a Data Receiver. Power: AC. Range: 100 meters unless obstructions and interference. Weight: 138 g. Dimensions: 96.5 mm x108x28. Radio Power: 1.6mW.
MAHZW003.0	**HOBO ZW DATA NODE T/RH**
	Hobo ZW Data Node T / RH. Transmits data in real time to Hobo ZW Data Receiver. Memory: 4k measurements. Measuring range: 1min-18pm. Transmission interval: 2 min. Power supply: AC adapter, battery backup. Measurement range: Temp: -40 ° C / +70 ° C, RH: 5% -95%. Accuracy: Temp: + / -0.2 ° C (0 ° -50 ° C), RH: + / -2.5% (10% -90%) max + / -3.5%. Operating Range: -20 ° / +50 ° C, 5% / 95% RH. Resolution: temp 0.02 ° C @ 25 ° C, 0.03% RH. Response time: 5 min temp and RH in the air with speed 1m/sec 10min. Radius: 100 m except for obstructions and interference. Weight: 138g. Dimensions: 96.5x108x28mm. radio power: 1.6mW.
MAHZW006.0	**HOBO ZW DATA NODE, 4 ANALOG PART**
	Hobo ZW Data Node 4 analog transmits data in real time to Hobo ZW Data Receiver. Memory: 3K measurements. Measuring range: 1 min-18 h. Transmission interval: from 2 min. Power supply: AC adapter or battery backup. Measuring range: 0-2.5 Vdc, 0-5 Vdc, 0-10 Vdc, 4-20 mA. Accuracy: + / -1544 mV plus 2% (typical). Operating Range: -20 ° C / +50 ° C, 5% -95% RH. Resolution: 0.6mV. Radius: 100 m unless obstructions or interference. Weight: 138g. Dimensions: 96.5x108x28 mm. Radio Power: 1.6mW.
MAHZW007.0	**HOBO ZW DATA, EXT T/RH 2 ANALOG**
	Hobo ZW Data Node Ext T/RH/2 analog channels. Includes 2 external temperature sensors and relative humidity + 2 analog inputs. Transmits data in real time to Hobo ZW Data Receiver. Memory: 3k measurements. Measuring range: 1min-18pm. Transmission interval: 2 min. Power supply: AC adapter, battery backup. Measurement range: Temp: -40 ° C / +70 ° C, RH: 5% -95%; inputs: 0-2.5Vdc; 0-5Vdc, 0-10Vdc, 4-20mA. Accuracy: Temp: + / -0.2 ° C (0 ° -50 ° C), RH: + / -2.5% (10% -90%) max + / -3.5%; analog: + /-1.544mV plus 2% (typical). Operating Range: -20 ° / +50 ° C, 5% / 95% RH. Resolution: temp 0.02 ° C @ 25 ° C, 0.03% RH; analog 0.6mV. Response time: 5 min temp and RH in the air with speed 1m/sec 10min. Probe size of 1 cm diameter; 1.8 m cable; Radius: 100 m except for obstructions and interference. Weight: 138g. Dimensions: 96.5x108x28mm. radio power: 1.6mW.
MAHBT002.0	**STAINLESS STEEL PROBE**
	Probe Dimensions: 102mm (4 in.) food-grade stainless steel probe with pointed tip; 3.2mm (±0.01") diameter Cable Length: 1.8m (6 foot) Range: -40° to 100°C (-40° to 212°F) in air or water. Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F) Drift:< 0.1 °C (0.2 °F) per year Response time in air: 3 minutes typical to 90% in air moving 1m/sec (2.2mph)
MAHBT005.0	**HOBO 1.8M TEMP EXT PROBE**
	Range: -40° to 50°C (-40° to 122°F) in water or soil -40° to 100°C (-40° to 212°F) in air Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F) Drift: < 0.1°C (0.2°F) per year Resolution with U12: 0.03° at 20°C (0.05°F at 68°F) Response time: < 3 minutes typical to 90% in 1 m/sec air flow/< 30 seconds typical to 90% in stirred water Housing: Stainless-steel sensor tip Probe dimensions: 0.5 cm x 2.5 cm (0.20 in. x 1.0 in.) Length: 1.8m

MAHBT008.0	**HOBO 6M EXT TEMP PROBE**
	Range: -40° to 50°C (-40° to 122°F) in water or soil -40° to 100°C (-40° to 212°F) in air
	Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F)
	Drift: < 0.1°C (0.2°F) per year
	Resolution with U12: 0.03° at 20°C (0.05°F at 68°F)
	Response time: < 3 minutes typical to 90% in 1 m/sec air flow/< 30 seconds typical to 90% in stirred water
	Housing: Stainless-steel sensor tip
	Probe dimensions: 0.5 cm x 2.5 cm (0.20 in. x 1.0 in.)
	Length: 6m

MAHBT010.0	**HOBO 15,2M EXT TEMP PROBE**
	Range: -40° to 50°C (-40° to 122°F) in water or soil -40° to 100°C (-40° to 212°F) in air
	Accuracy: ±0.21°C from 0° to 50°C (0.38°F from 32° to 122°F)
	Drift: < 0.1°C (0.2°F) per year
	Resolution with U12: 0.03° at 20°C (0.05°F at 68°F)
	Response time: < 3 minutes typical to 90% in 1 m/sec air flow/< 30 seconds typical to 90% in stirred water
	Housing: Stainless-steel sensor tip
	Probe dimensions: 0.5 cm x 2.5 cm (0.20 in. x 1.0 in.)
	Length: 15,2m

MAHBCO21.0	**HOBO TELAIRE CO2 PROBE**
	Measurement Range:
	0 to 2500 ppm when using the cable MAHBA015.0 and a U12 or ZW
	0 to 4000 ppm when using a H22 or U30
	Telaire 7001 Operating Range:
	32°F to 122°F (0°C to 50°C), 0 to 95% RH, non-condensing
	Display Resolution: ±1 ppm
	Accuracy: ±50 ppm or 5% of reading
	Repeatability: ±20 ppm
	Temperature Dependence: ±0.1% of reading per °C or ±2 ppm per °C
	Battery Type: Four AA batteries (not included)
	Battery Operation: 80 hours (alkaline)
	External Power Supply Specifications:
	AC/DC adapter (included)
	Output: 6 VDC, 500mA output.

MAHBA015.0	**TELAIRE 7001 CO2 SENSOR INPUT CABLE**
	CO2 Sensor to Logger Cable (20.3cm – 8 inches) for use with U12 and ZW loggers

MAHBT024.0	**HOBO AIR VELOCITY SENSOR**
	Measurement ranges, "O" model: 0.15 - 5 m/s (30 - 985 fpm)
	Measurement range, "P" model: 0.15 - 10 m/s (30 - 1969 fpm)
	Accuracy: Greater of 10% of reading or +/-0.05 m/s or 1% full-scale
	Standard medium: Air at standard pressure (101.3 kPa, 29.95" Hg)
	Operating temperature range: 15 – 35 C (59 – 95 F)
	Storage temperature: -10 to 100C
	Supply voltage: 7-13 VDC
	Supply current: 40 - 75 mA (10K ohm nominal)
	Warm-up time: < 5 sec
	Response time: 1.5 sec
	Output: Linear 0 - 4 VDC full scale for calibrated range, up to 4.9 VDC beyond calibrated range
	Sensor head material: Plastic
	Dimensions: 100 mm x 12 mm diameter for "S" model, 91 mm x 12 mm for "L" model
	Vibration: Up to 25 G
	Acceptable angle: +/- 300 from perpendicular
	Repeatability: +/- 1% under same conditions

doctor **art**
conservation & laser

HOBO U14 LCD	
MAHBD003.0	**HOBO U14 LCD T/RH**
	Operating temperature range -20°C to +50°C, (-4°F to +122°F) , 0 to 100% RH non-condensing; Operating relative humidity range 0 to 95%, non-condensing, noncorrosive environment Capacity: Temp and RH: 21,500 measurements; Temp Only: 43,000 measurements Software-selectable sampling intervals: 1 second up to 18 hours, recording times up to 1 year. Programmable start time/date. Recording modes: Stop when full. Launch Modes: Immediate, Delayed. Nonvolatile EEPROM memory retains data even if batteries fail LCD Size: 33 x 50.8 mm Displays temperature and relative humidity simultaneously Displays °C or °F (selectable within host software) Displays memory remaining and battery level Displays flashing ALERT for out-of-limits conditions (selectable within host software) and stops flashing on offload or return to normal range. Alarms. High and low set points for both temperature and relative humidity Selectable delays for each set point. Alert conditions reset on offload or return to normal range. Selectable Contact Relay: Normally Closed or Normally Open Contact rating: 48VDC, 1A max Contact resistance: less than 1 Ohm Wire size range is 22AWG to 14AWG 0% Low Battery Range Communications. Offloads data to PC or U-Shuttle via USB cable. Readout full logger (64K) in less than 30 seconds. Time accuracy: ±1 minute per month at 20°C (68°F). Power: 3 AAA Alkaline batteries, user-replaceable. Size/Weight: 125 x 92 x 31 mm; 170 g with batteries Temp AccuracyInternal 12-Bit Temperature Sensor: Measurement range: -20°C to 50°C (-4°F to 122°F) Accuracy: 0.2°C over 0° to 50°C (0.36°F over 32° to 122°F) Resolution: 0.03°C RH @ 25°C (0.05° at 77°F) Response time: 15 minutes (to 90% in airflow of 1 m/sec Temperature Accuracy Drift: Negligible Internal 12-Bit Relative Humidity Sensor User replaceable Measurement range: 0-100% RH, -20 to 50°C RH Accuracy±2.5% from 10% to 90% RH (typical), to a maximum of ±3.5% Resolution: 0.03°C RH @ 25°C Response time to 90%: 2 minutes Accuracy Drift: <2% over 5 years typical Hysteresis: 1% typical External Sensors For External Sensor Specifications, see the sensor's user manual. The batteries will last one year in typical conditions (logging intervals of ? 1 minute with weekly offloads and average temperatures greater than 10°C or 50°F). Frequent offloads and/or extreme temperatures will reduce battery life
MAHBD004.0	**HOBO U14 LCD EXT CHANNEL**
	Operating temperature range -20°C to +50°C, (-4°F to +122°F) , 0 to 100% RH non-condensing; Operating relative humidity range 0 to 95%, non-condensing, noncorrosive environment Capacity: Temp and RH: 21,500 measurements; Temp Only: 43,000 measurements Software-selectable sampling intervals: 1 second up to 18 hours, recording times up to 1 year. Programmable start time/date. Recording modes: Stop when full. Launch Modes: Immediate, Delayed. Nonvolatile EEPROM memory retains data even if batteries fail LCD Size: 33 x 50.8 mm Displays temperature and relative humidity simultaneously Displays °C or °F (selectable within host software) Displays memory remaining and battery level Displays flashing ALERT for out-of-limits conditions (selectable within host software) and stops flashing on offload or return to normal range. Alarms. High and low set points for both temperature and relative humidity Selectable delays for each set point. Alert conditions reset on offload or return to normal range. Selectable Contact Relay: Normally Closed or Normally Open Contact rating: 48VDC, 1A max Contact resistance: less than 1 Ohm Wire size range is 22AWG to 14AWG 0% Low Battery Range Communications. Offloads data to PC or U-Shuttle via USB cable. Readout full logger (64K) in less than 30 seconds. Time accuracy: ±1 minute per month at 20°C (68°F). Power: 3 AAA Alkaline batteries, user-replaceable. Size/Weight: 125 x 92 x 31 mm; 170 g with batteries External Sensors For External Sensor Specifications, see the sensor's user manual. The batteries will last one year in typical conditions (logging intervals of ? 1 minute with weekly offloads and average temperatures greater than 10°C or 50°F). Frequent offloads and/or extreme temperatures will reduce battery life

MAHBT014.0	**HOBO 2M TEMP/RH PROBE**
	Measurement Range: Temp: -40°C to 75°C RH: 0-100% RH at -40°C to 75°C; Accuracy: Temp: +/- 0.21°C from 0°C to 50°C. RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. Resolution: Temp: 0.02°C at 25°C RH: 0.1% RH at 25°C. Bits Per Sample: Temp: 12; RH: 10 Drift: Temp: < 0.1°C per year RH: < 1% per year typical; hysteresis 1% Response Time: Temp: 5 minutes in air moving 1 m/sec RH: 5 minutes in air moving 1 m/sec with protective cap Operating Temperature Range: -40°C to 75°C Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments. For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield. Sensor Dimensions: 10 x 35 mm Weight: - 110 g Number of Data Channels: 2 Cable Lengths Available: 2.5 m Length of Smart Sensor Network Cable: 0.5 m Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight.
MAHBT020.0	**HOBO 8M TEMP/RH PROBE**
	Measurement Range: Temp: -40°C to 75°C RH: 0-100% RH at -40°C to 75°C; Accuracy: Temp: +/- 0.21°C from 0°C to 50°C. RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. Resolution: Temp: 0.02°C at 25°C RH: 0.1% RH at 25°C. Bits Per Sample: Temp: 12; RH: 10 Drift: Temp: < 0.1°C per year RH: < 1% per year typical; hysteresis 1% Response Time: Temp: 5 minutes in air moving 1 m/sec RH: 5 minutes in air moving 1 m/sec with protective cap Operating Temperature Range: -40°C to 75°C Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments. For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield. Sensor Dimensions: 10 x 35 mm Weight: - 110 g Number of Data Channels: 2 Cable Lengths Available: 8m Length of Smart Sensor Network Cable: 0.5 m Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight.
MAHBT003.0	**HOBO 2M TEMP PROBE**
	Measurement range: -40° to 100°C Accuracy: < ±0.2°C from 0° to 50°C Resolution: < ±0.03°C from 0° to 50°C Drift: < ±0.1°C per year Measurement Averaging Option: Yes Environmental Rating: Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C Housing: Stainless steel sensor tip Dimensions: 7 x 38 mm Cable Lengths: 2.0 m Length of Smart Sensor Network Cable: 0.5 m Radiation Shield strongly recommended for use in sunlight
MAHBT003.0	**HOBO 6M TEMP PROBE**
	Measurement range: -40° to 100°C Accuracy: < ±0.2°C from 0° to 50°C Resolution: < ±0.03°C from 0° to 50°C Drift: < ±0.1°C per year Measurement Averaging Option: Yes Environmental Rating: Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C Housing: Stainless steel sensor tip Dimensions: 7 x 38 mm Cable Lengths: 6.0 m Length of Smart Sensor Network Cable: 0.5 m Radiation Shield strongly recommended for use in sunlight
MAHBA014.0	**HOBO LCD PROTECTIVE CASE**
	Resistant to external weather conditions. Water-resistant sensor output. Allows easy reading of data through the door removable, water-resistant. Material: polycarbonate with UV stabilizers. Dimensions: 127 x 71 x 57 mm Weight: 315 g
MAHBV001.0	**HOBO REMOTE ALARM**
	2-Zone Remote Alarm for the HOBO LCD Temp/RH Data Logger and other monitoring equipment with relay output

HOBO PRO V2	
MAHBP231.0	HOBO PRO V2 TEMP/RH

	The HOBO Pro v2 Temperature/Relative Humidity data logger is a weatherproof data logger with built-in temperature and relative humidity sensors. The Relative Humidity sensor provides superior durability in humid environments and is user replaceable. Weatherproof housing for use in outdoor or condensing environments. Replaceable Relative Humidity sensor provides fast response and superior recovery from condensing conditions. Optic USB interface for fast and reliable download Temperature Sensor Operation range: Internal sensors: -40° to 70°C Accuracy: 0.2°C over 0° to 50°C Resolution: 0.02°C at 25°C Response time: (typical to 90%) Internal sensors: 40 minutes in air moving 1 m/sec Stability (drift): < 0.1°C (0.18°F) per year Relative Humidity Sensor Operation range: 0-100% RH, -40° to 70°C Exposure to conditions below -20°C or above 95% RH may temporarily increase the sensor error by an additional 1% Accuracy: ±2.5% from 10 to 90% typical, to a maximum of ±3.5%. Resolution: 0.03% Response time (typical to 90%): 40 minute in air moving 1 m/sec with protective cap Stability (drift): < 1% per year typical; hysteresis 1% Logger Operation range -40° to 70°C Real-time clock ± 1 minute per month 0° to 50°C Battery 1/2 AA, 3.6 Volt lithium, user-replaceable Battery life (typical use): 3 years with 1 minute or greater logging interval Memory (non-volatile): 64K bytes memory (approx. 21,000 temperature and RH measurements) Launch modes: Immediate start; delayed start Logging interval: Fixed-rate or multiple logging intervals, with up to 8 user-defined logging intervals and durations; logging intervals from 1 second to 18 hours (refer to HOBOware software manual) Offload modes: Offload while logging; stop and offload Battery indication: Battery voltage can be viewed in status screen and optionally logged in datafile. Low battery indication in datafile. Weight: 57 g Dimensions: Housing measures 10.2 × 3.8 cm
MAHBP232.0	**HOBO PRO V2 EXT T/RH**
	HOBO Pro v2 outdoor temperature / humidity data logger is a logger with a temperature and relative humidity sensor on a 6 meter cable. The relative humidity sensor offers fast response and superior durability in humid environments, and is user replaceable. Temperature sensor. Operating range: -40 ° to 70 ° C, accuracy: 0.2 ° C over 0 ° to 50 ° C. Resolution: 0.02 ° C to 25 ° C Response time (typically 90%), stability (drift): <0.1 ° C (0.18 ° F) for years, relative humidity sensor. Operating range: 0-100% RH, -40 ° to 70 ° C; Accuracy: ± 2.5% from 10 to 90% typical, to a maximum of ± 3.5%. Resolution: 0.03% Stability (drift): <1% for typical year, 1% hysteresis Logger. The operation from -40 ° to 70 ° C. Real-time clock ± 1 minute per month from 0 ° to 50 ° C Battery 1/2 AA, 3.6 volt lithium battery, user replaceable Battery life (typical use): 3 years with 1 minute or greater logging interval. Memory (non-volatile): 64K bytes of memory (about 21,000 measurements of temperature and relative humidity) Cable 184 cm in diameter sensor 1 cm
MAHBP233.0	**HOBO PRO V2 TEMP/1.8M EXT TEMP**
	The HOBO Pro v2 Temperature/External Temperature data logger is a weatherproof data logger with an external soil/water temperature sensor on a 6-foot cable useful for situations where just one temperature probe is required. An internal temperature sensor is also included. Temperature Sensor Operation range: Internal sensors: -40° to 70°C External sensors: -40° to 100°C; Accuracy: 0.2°C over 0° to 50°C; Resolution: 0.02°C at 25°C; Stability (drift): < 0.1°CLogger. The operation from -40 ° to 70 ° C. Real-time clock ± 1 minute per month from 0 ° to 50 ° C Battery 1/2 AA, 3.6 volt lithium battery, user replaceable; Battery life (typical use): 3 years with 1 minute or greater logging interval. Memory (non-volatile): 64K bytes of memory (about 21,000 measurements of temperature and relative humidity). Cable 184 cm in diameter sensor 1 cm
MAHBP234.0	**HOBO PRO V2 2x 1.8M EXT TEMP**
	The HOBO Pro v2 2x External Temperature Data Logger is a weatherproof data logger with two external soil/water temperature probes on 6-foot cables for fast sensor response and deployment in tight spaces. Temperature Sensor Operation range: External sensors: -40° to 100°C; Accuracy: 0.2°C over 0° to 50°C; Resolution: 0.02°C at 25°C; Stability (drift): < 0.1°CLogger. The operation from -40 ° to 70 ° C. Real-time clock ± 1 minute per month from 0 ° to 50 ° C Battery 1/2 AA, 3.6 volt lithium battery, user replaceable; Battery life (typical use): 3 years with 1 minute or greater logging interval. Memory (non-volatile): 64K bytes of memory (about 21,000 measurements of temperature and relative humidity). Cable 184 cm in diameter sensor 1 cm
MAHBA003.0	**HOBO RS1 RADIATION SHIELD**
	The solar radiation shield is recommended for temperature and RH measurement accuracy in locations exposed to direct or reflected solar radiation. Mounts on tripods, masts, or flat vertical surfaces. For MAHBP231.0 -233.0.
MAHBA016.0	**HOBO CLAMP KIT**

	This clamp allows the MAHBP231.0 to be mounted in the MAHBA003.0 radiation shields.
MAHBA013.0	**HOBO RS3 RADIATION SHIELD**
	The RS3 Solar Radiation Shield protects external sensors from the effects of sunlight and rain to ensure high accuracy measurements. Designed to allow maximum air flow around the sensor, the RS3 shield offers 2.5x faster response time to changing conditions. For PRO V2, Weather Station, Micro Station with external sensors.
MAHPW001.0	**HOBO WATER PRO V2 TEMP**
	Underwater Temperature logger Waterproof to 120m Memory: 42.000 measurements, programmable from 1 s to 18 hours Range: -20°C a 50°C Accuracy: ± 0.02° a 25°C Resolution 12 bit: 0,2° @ 25°C Size: 11,4 x 3 cm Weight: 42g Battery life: 6 years (factory replacable)
	HOBO PENDANT
MAHBV003.0	**HOBO PENDANT G**
	Measurement range: ± 3 G; 29.4 m/s² Accuracy: ± 0.075 G; 0.735 m/s² at 25°C; ± 0.105 G; 1.03 m/s² from -20°C to 70°C Resolution: 0.025 g; 0.245 m/s² Logging interval: 1 second to 18 hours, 12minutes, 15 seconds in Normal mode 0.01 seconds (100 Hz) to 0.99 seconds (1.01 Hz) in Fast mode Operating range: In water/ice: -20° to 50°C; In air: -20° to 70°C Water depth rating: 30 m from -20° to 20°C Battery life: 1 year typical use in Normal mode; 7 days logging at 0.01 seconds (100 Hz) in Fast mode Memory: 64K bytes (approximately 21.8K combined x-, y-, and z-axis readings or events) Weight: 18 g Dimensions: 58 x 33 x 23 mm Optic Base U-1 or U-4 is required.
MAHBV004.0	**HOBO PENDANT TEMP/LIGHT 64K LOGGER**
	A miniature two-channel temperature and relative light level data logger, this 64K model is waterproof and value-priced for deployment in indoor, outdoor, and underwater applications measuring relative light levels and ambient temperatures. This 64K model stores approximately 52K of 10-bit readings. Measurement range Temperature: -20° to 70°C (-4° to 158°F) Light: 0 to 320,000 lux (0 to 30,000 lumens/ft2) Accuracy: Temperature: ± 0.53°C from 0° to 50°C Resolution: Temperature: 0.14°C at 25°C Drift: Less than 0.1°C/year Operating range In water/ice: -20° to 50°C In air: -20° to 70°C Water depth rating: 30 m from -20° to 20°C Battery life: 1 year typical use Memory: 64K bytes (approximately 28K combined temperature and light readings or events) Weight: 18 g Optic Base U-1 or U-4 is required.
MAHBV002.0	**HOBO PENDANT TEMP/ALARM 64K**

	Underwater Temp/Alarm Logger Measurement range: -20° to 70°C Alarms: High and low alarms can be configured for total amount of contiguous or non-contiguous time outside of user-defined limits between -20° and 70°C Accuracy: ± 0.53°C from 0° to 50° Resolution: Temperature: 0.14°C at 25°C Drift: Less than 0.1°C/year operating range: In water/ice: -20° to 50°C In air: -20° to 70°C Water depth rating: 30 m from -20° to 20°C Battery life: 1 year typical use Memory: 64K bytes (approximately 52K sample and event readings) Weight: 18 g Dimensions: 5.8 x 3.3 x 2.3 (centimeters) Optic Base U-1 or U-4 is required.

HOBO WEATHER STATION	
MAHBMS03.0	**HOBO WEATHER STATION STARTER KIT**

	Kit includes:
	  HOBO U30 NRC data logger with 10 inputs
	  1.2W Solar Panel
	  Temperature/RH Smart Sensor with 2-meter cable
	  Wind Speed Smart Sensor with 3-meter cable
	  Wind Direction Smart Sensor with 3-meter cable
	  Full Crossarm for Wind Speed/Direction sensors
	  Solar Radiation Shield for Temperature & RH sensor
	HOBO U30 NRC data logger with 10 inputs
	Normal operating range: -20°C to 40°C (-4°F to 104°F); Local Communication: Full Speed USB via USB mini-B connector; Size: 17.8 H x 11.7 D x 19.3 W cm; Weight: 2 kg. Data Storage Memory: Nonvolatile flash data storage, 512K bytes local storage. Memory Modes: Stop when full, wrap around when full. Operational Indicators: Up to six (depending upon options) status lights provide basic diagnostics. Logging Interval: 1 second to 18 hours, user-specified interval. Battery Type: 4 Volt, 4.5 AHr or 10 AHr, Rechargeable sealed lead-acid. Rechargeable Battery Service Life: Typical 3-5 years depending upon conditions of use. Operation within the extended operating range (but outside the normal range) will reduce battery service life. Time Accuracy: 0 to 2 seconds for the first data point and ±5 seconds per week at 25°C. Environmental Rating: Weatherproof enclosure
	1.2W Solar Panel: 1.2 Watt, 6 Volt Solar Panel. Weight: 0.49 kg. Dimensions: 15.2 cm H x 11.7 cm W.
	Temperature/RH Smart Sensor with 2-meter cable: Measurement Range: Temp: -40°C to 75°C (-40°F to 167°F). RH: 0-100% RH at -40° to 75°C (-40° to 167°F); Accuracy: Temp: +/- 0.21°C from 0° to 50°C; RH: +/- 2.5% from 10% to 90% RH; Resolution: Temp: 0.02°C at 25°C; RH: 0.1% RH at 25°C. Sensor Dimensions: 10 x 35 mm.
	Wind Speed Smart Sensor with 3-meter cable: Measuring average speed and average wind direction, speed bursts every three secondi.Condizioni Operating: -40 ° to 75 ° C, anodized aluminum exterior and stainless steel, wind speed sensor thermoplastic reinforced with fiberglass and stainless steel bearings. Durability approximately 2 to 5 years depending on climatic conditions. Sensor: 317 mm x 419 mm; bracket: 355 mm x 12.7 mm and 700 g Cable: 3.0 m Direction sensor: Range: 0 to 358 ° C, accuracy: ± 5 °; accuracy: 1.4 °. Gusts sensor Range: 0 to 44 m / s, accuracy ± 0.5 m / s if <17 m / s, ± 3% if 17 to 30 m / s, ± 4% if 30 to 44 m / s Accuracy: 0.19 m / s.

MAHBMS04.0	**HOBO WEATHER STATION**
	HOBO U30 NRC data logger with 10 inputs. Normal operating range: -20°C to 40°C (-4°F to 104°F); Local Communication: Full Speed USB via USB mini-B connector; Size: 17.8 H x 11.7 D x 19.3 W cm; Weight: 2 kg. Data Storage Memory: Nonvolatile flash data storage, 512K bytes local storage. Memory Modes: Stop when full, wrap around when full. Operational Indicators: Up to six (depending upon options) status lights provide basic diagnostics. Logging Interval: 1 second to 18 hours, user-specified interval. Battery Type: 4 Volt, 4.5 AHr or 10 AHr, Rechargeable sealed lead-acid. Rechargeable Battery Service Life: Typical 3-5 years depending upon conditions of use. Operation within the extended operating range (but outside the normal range) will reduce battery service life. Time Accuracy: 0 to 2 seconds for the first data point and ±5 seconds per week at 25°C. Environmental Rating: Weatherproof enclosure 1.2W Solar Panel: 1.2 Watt, 6 Volt Solar Panel. Weight: 0.49 kg. Dimensions: 15.2 cm H x 11.7 cm W. Wide Range of Measurements: 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.
MAHBMS04.1	**HOBO WEATHER STATION GSM**
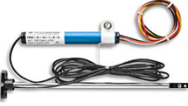
HOBO U30 GSM data logger with 10 inputs. Normal operating range: -20°C to 40°C (-4°F to 104°F); GSM module. Local Communication: Full Speed USB via USB mini-B connector; Size: 17.8 H x 11.7 D x 19.3 W cm; Weight: 2 kg. Data Storage Memory: Nonvolatile flash data storage, 512K bytes local storage. Memory Modes: Stop when full, wrap around when full. Operational Indicators: Up to six (depending upon options) status lights provide basic diagnostics. Logging Interval: 1 second to 18 hours, user-specified interval. Battery Type: 4 Volt, 4.5 AHr or 10 AHr, Rechargeable sealed lead-acid. Rechargeable Battery Service Life: Typical 3-5 years depending upon conditions of use. Operation within the extended operating range (but outside the normal range) will reduce battery service life. Time Accuracy: 0 to 2 seconds for the first data point and ±5 seconds per week at 25°C. Environmental Rating: Weatherproof enclosure
1.2W Solar Panel: 1.2 Watt, 6 Volt Solar Panel. Weight: 0.49 kg. Dimensions: 15.2 cm H x 11.7 cm W.
Wide Range of Measurements: 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.

MAHBT014.0	**HOBO 2M TEMP/RH PROBE**
	Measurement Range: Temp: -40°C to 75°C RH: 0-100% RH at -40°C to 75°C; Accuracy: Temp: +/- 0.21°C from 0°C to 50°C. RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. Resolution: Temp: 0.02°C at 25°C RH: 0.1% RH at 25°C. Bits Per Sample: Temp: 12; RH: 10 Drift: Temp: < 0.1°C per year RH: < 1% per year typical; hysteresis 1% Response Time: Temp: 5 minutes in air moving 1 m/sec RH: 5 minutes in air moving 1 m/sec with protective cap Operating Temperature Range: -40°C to 75°C Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments. For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield. Sensor Dimensions: 10 x 35 mm Weight: - 110 g Number of Data Channels: 2 Cable Lengths Available: 2.5 m Length of Smart Sensor Network Cable: 0.5 m Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight.
MAHBT020.0	**HOBO 8M TEMP/RH PROBE**
	Measurement Range: Temp: -40°C to 75°C RH: 0-100% RH at -40°C to 75°C; Accuracy: Temp: +/- 0.21°C from 0°C to 50°C. RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. Resolution: Temp: 0.02°C at 25°C RH: 0.1% RH at 25°C. Bits Per Sample: Temp: 12; RH: 10 Drift: Temp: < 0.1°C per year RH: < 1% per year typical; hysteresis 1% Response Time: Temp: 5 minutes in air moving 1 m/sec RH: 5 minutes in air moving 1 m/sec with protective cap Operating Temperature Range: -40°C to 75°C Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments. For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield. Sensor Dimensions: 10 x 35 mm Weight: - 110 g Number of Data Channels: 2 Cable Lengths Available: 8m Length of Smart Sensor Network Cable: 0.5 m Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight.
MAHBT003.0	**HOBO 2M TEMP PROBE**
	Measurement range: -40° to 100°C Accuracy: < ±0.2°C from 0° to 50°C Resolution: < ±0.03°C from 0° to 50°C Drift: < ±0.1°C per year Measurement Averaging Option: Yes Environmental Rating: Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C Housing: Stainless steel sensor tip Dimensions: 7 x 38 mm Cable Lengths: 2.0 m Length of Smart Sensor Network Cable: 0.5 m Radiation Shield strongly recommended for use in sunlight
MAHBT003.0	**HOBO 6M TEMP PROBE**
	Measurement range: -40° to 100°C Accuracy: < ±0.2°C from 0° to 50°C Resolution: < ±0.03°C from 0° to 50°C Drift: < ±0.1°C per year Measurement Averaging Option: Yes Environmental Rating: Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C Housing: Stainless steel sensor tip Dimensions: 7 x 38 mm Cable Lengths: 6.0 m Length of Smart Sensor Network Cable: 0.5 m Radiation Shield strongly recommended for use in sunlight
MAHBA013.0	**HOBO RS3 RADIATION SHIELD**
	The RS3 Solar Radiation Shield protects external sensors from the effects of sunlight and rain to ensure high accuracy measurements. Designed to allow maximum air flow around the sensor, the RS3 shield offers 2.5x faster response time to changing conditions. For PRO V2, Weather Station, Micro Station with external sensors.

doctor **art**
conservation & laser

MAHBT024.0	HOBO AIR VELOCITY SENSOR
	Measurement ranges, "O" model: 0.15 - 5 m/s (30 - 985 fpm) Measurement range, "P" model: 0.15 - 10 m/s (30 - 1969 fpm) Accuracy: Greater of 10% of reading or +/-0.05 m/s or 1% full-scale Standard medium: Air at standard pressure (101.3 kPa, 29.95" Hg) Operating temperature range: 15 – 35 C (59 – 95 F) Storage temperature: -10 to 100C Supply voltage: 7-13 VDC Supply current: 40 - 75 mA (10K ohm nominal) Warm-up time: < 5 sec Response time: 1.5 sec Output: Linear 0 - 4 VDC full scale for calibrated range, up to 4.9 VDC beyond calibrated range Sensor head material: Plastic Dimensions: 100 mm x 12 mm diameter for "S" model, 91 mm x 12 mm for "L" model Vibration: Up to 25 G Acceptable angle: +/- 300 from perpendicular Repeatability: +/- 1% under same conditions
MAHBT021.0	LEAF WETNESS SMART SENSOR
	Measurement range: 0 (dry) to 100% (wet) Range: -40°C to 70°C Repeatablility: ± 5% Resolution: 0.59% Stability: < ± 5% per year Interchangeability between sensors (over the range 10-90%): ± 10% Measurement Averaging Option: No Housing: No coating required Sensor Type: Capacitive Grid Dimensions: Sensor plate: 4.7 cm x 5.1 cm Tube: 12.2 cm length x 1.8 cm diameter Cable length: 3m Approximate Weight: 127 g for sensor, and 290 g with mounting bracket Mounting Bracket: 20 cm long;Sensor can be positioned at any angle between 0 and 90 degrees (vertical) Number of Data Channels: 1
MAHBT019.0	HOBO BAROMETRIC PRESSURE SENSOR W/10cm CAB
	The Barometric Pressure Sensor provides average barometric pressure for each logging interval over the range of 660 mb to 1070 mb (19.47 to 31.55 inHg). The operating temperature range for this sensor is -40° to 70°C (-40° to 158°F); sensor survival is supported from -20° to +70°C (-4° to +158°F). Accuracy: ±3.0 mbar over full pressure range at 25°C; maximum error of ±5.0 mbar over -40° to 70°C Resolution: 0.1 mbar This specialized smart sensor must be used inside a logger enclosure to assure protection from direct exposure to the weather. Measurement parameters: average over logging interval, user-defined sampling interval from 1 second Dimensions: 4.5 cm x 4.8 cm x 1.6 cm Approximate Weight: 30 g Cable Length: 10 cm
MAHBL001.0	HOBO 12-BIT PAR SENSOR
	The Photosynthetic Light (PAR) Smart Sensor is intended to measure light intensity for the frequencies relevant for photosynthesis. Range: 0 to 2500 umol/m2/sec, wavelengths of 400 to 700 nm; Accuracy: ±5 umol/m2/sec or ± 5%, whichever is greater in sunlight; Resolution: 2.5 umol/m2/sec; Housing: anodized aluminum housing with acrylic diffuser and o-ring seal;Dimensions: 4.1 cm height x 3.2.4 cm diameter; Weight: 120 g; Cable Length: 3 m
MAHBT011.0	HOBO SILICON PYRANOMETER SMART SENSOR
	The Solar Radiation Smart Sensor is a light sensor (silicon pyranometer) with a measurement range of 0 to 1280 W/m2 over a spectral range of 300 to 1100 nm. This sensor reports the average light intensity over a user-set set logging interval from a minimum of 1 second. Although the azimuth error is only ±2% error at 45° from vertical, a light sensor bracket and light sensor level are recommended. Measurement range: 0 to 1280 W/m2 Operating Temperature Range: -40° to 75°C (-40° to 167°F) Resolution: 1.25 W/m2 Spectral Range: 300 to 1100 nm Dimensions: 4.1 cm high x 3.2 cm diameter (1 5/8 in. x 1 1/4 in.) Approximate Weight: 120 g Cable Length: 3 m

MAHBA021.0	HOBO LIGHT SENSOR LEVEL
	Simply drop the light sensor level over the PAR, Pyranometer or solar radiation sensor to determine if the sensor is level.

MAHBT012.0	HOBO RAINFALL SENSOR
	Measurement range: 0–12.7 cm or 0–5 in. per hour; maximum 4000 tips per interval Operating Range: 0° to 50°C; survival -40° to 75°C Mechanism: Tipping bucket, stainless steel shaft with brass bearings Resolution: 0.2 mm and 0.01 inch models Calibration: Requires annual calibration; can be field calibrated by user or returned to factory Calibration Accuracy: ±1.0% at up to 20 mm or 1" per hour Housing: Aluminum housing and collector Dimensions: 22.8 cm height x 15.4 cm diameter, 154 mm receiving orifice Approximate Weight: 1 Kg Cable Lengths: 2 meter

MAHBW002.0	HOBO WIND SENSOR SET
	Wind Speed/Gust Measurement Range : 0 to 45 m/s; Maximum Wind Speed Survival: 54 m/sec; Accuracy ± 1.1 m/s or ± 4% of reading whichever is greater; Resolution: 0.38 m/s; Starting Threshold 1.0 m/s; Operating Temperature Range: -40°C to +75°C. Environmental Rating: Weatherproof; Service Life: greater than 5 years typical; Housing: Three cup polycarbonate anemometer: Modified Teflon® bearings and hardened beryllium shaft with ice shedding design; Bearing Type: Modified Teflon® bearings; Turning Radius : 9.5 cm; Dimensions 41 x 16 cm including 1.27 cm diameter mounting rod; 5.5 cm drip overhang. Weight Approximately 700 g. Wind Direction Measurement Range : 0 to 355 degrees; Maximum Wind Speed Survival: 60 m/sec; Accuracy ± 5 degrees; Resolution: 1.4 degrees; Starting Threshold 1.0 m/s; Operating Temperature Range: -40°C to +75°C. Environmental Rating: Weatherproof; Service Life: 4 to 6 years typical depending upon environmental conditions; Housing: Injection-molded housing and vane, static dissipating base, lead-free silicon bronze nose, and aluminum mounting rod; Bearing Type: two shielded stainless steel ball bearings; Turning Radius : Approximately 13.5 cm; Dimensions 46 x 20 cm (18 x 8.5 in) including 1.27 cm (0.5 in) diameter mounting rod, 2.5 mm (0.1 in) drip overhang. Weight Approximately 370 g.

MAHBS001.0	HOBO 1.2 Watt SOLAR PANEL
	1.2 Watt Solar Panel - for sunny locations and/or locations with low data transfer requirements Features: 1.2 Watt, 6 Volt Solar Panel Weight: 0.49 kg (1.08 lb) Dimensions: 15.2 cm H x 11.7 cm W (6 x 4.6 inches)

MAHBT027.0	HOBO FULL CROSS ARM
	91.2 cm bracket for wind sensor

MAHBT015.0	HOBO HALF CROSS ARM
	49cm bracket for wind sensor

MAHBT016.0	HOBO 3 M TRIPOD KIT
	Kit for mounting HOBO Weather Station and Microstation. Includes tripod stand 3m, elements for anchoring to the ground and level.

doctor art
conservation & laser

HOBO MICROSTATION	
MAHBMS01.0	**HOBO MICROSTATION**
	Operating Range: -20° to 50°C with alkaline batteries, -40° to 70°C with lithium batteries Sensor Inputs: Up to four smart sensors (including multiple-parameter sensors) Communication: 3.5 mm serial port Dimensions: 8.9 cm H x 11.4 cm D x 5.4 cm W Weight: 0.36 kg Memory: 512K nonvolatile flash data storage Memory Modes: Stop when full, wrap around when full Operational Indicators: Seven lights provide logging and sensor network status Logging Interval: 1 second to 18 hours, user-specified interval Battery Life: 1 year typical use (up to 4 sensors with 1 minute or longer logging interval) Battery Type: Four standard AA alkaline batteries included (for operating conditions -20° to 50°C ; optional AA lithium batteries available for operating conditions of -40° to 70°C Time Accuracy: 0 to 2 seconds for the first data point and ±5 seconds per week at 25°C Data Type: Supports measurement averaging based on availability of supporting data from sensor Logger Start Modes: Immediate, push-button, or delayed start options Data Communication: Current reading while logging, offload while logging, or offload when stopped Weatherproof Mounting: Mount vertically on flat surface 18 cm or wider; optional mast mounting kit for use on 4.1 cm diameter masts Enclosure Access: Cover secured by four screws Sensor Network Cable Length: 100 m maximum Measurements: The Micro Station supports the following measurements (sensors sold separately): 4-20mA, Barometric Pressure, DC Voltage, Kilowatt Hours (kWh), Leaf Wetness, Light Intensity, Pulse Input, Rainfall, Relative Humidity, Soil Moisture, Temperature, Water Flow, Wind
MAHBA018.0	**HOBO MICROSTATION MOUNTING KIT**
	Micro Station Mast Mounting Kit
MAHBT014.0	**HOBO 2M TEMP/RH PROBE**
	Measurement Range: Temp: -40°C to 75°C RH: 0-100% RH at -40°C to 75°C; Accuracy: Temp: +/- 0.21°C from 0°C to 50°C. RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. Resolution: Temp: 0.02°C at 25°C RH: 0.1% RH at 25°C. Bits Per Sample: Temp: 12; RH: 10 Drift: Temp: < 0.1°C per year RH: < 1% per year typical; hysteresis 1% Response Time: Temp: 5 minutes in air moving 1 m/sec RH: 5 minutes in air moving 1 m/sec with protective cap Operating Temperature Range: -40°C to 75°C Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments. For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield. Sensor Dimensions: 10 x 35 mm Weight: - 110 g Number of Data Channels: 2 Cable Lengths Available: 2.5 m Length of Smart Sensor Network Cable: 0.5 m Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight.
MAHBT020.0	**HOBO 8M TEMP/RH PROBE**
	Measurement Range: Temp: -40°C to 75°C RH: 0-100% RH at -40°C to 75°C; Accuracy: Temp: +/- 0.21°C from 0°C to 50°C. RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. Resolution: Temp: 0.02°C at 25°C RH: 0.1% RH at 25°C. Bits Per Sample: Temp: 12; RH: 10 Drift: Temp: < 0.1°C per year RH: < 1% per year typical; hysteresis 1% Response Time: Temp: 5 minutes in air moving 1 m/sec RH: 5 minutes in air moving 1 m/sec with protective cap Operating Temperature Range: -40°C to 75°C Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments. For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield. Sensor Dimensions: 10 x 35 mm Weight: - 110 g Number of Data Channels: 2 Cable Lengths Available: 8m Length of Smart Sensor Network Cable: 0.5 m Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight.

MAHBT003.0	**HOBO 2M TEMP PROBE**
	Measurement range: -40° to 100°C Accuracy: < ±0.2°C from 0° to 50°C Resolution: < ±0.03°C from 0° to 50°C Drift: < ±0.1°C per year Measurement Averaging Option: Yes Environmental Rating: Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C Housing: Stainless steel sensor tip Dimensions: 7 x 38 mm Cable Lengths: 2.0 m Length of Smart Sensor Network Cable: 0.5 m Radiation Shield strongly recommended for use in sunlight
MAHBT003.0	**HOBO 6M TEMP PROBE**
	Measurement range: -40° to 100°C Accuracy: < ±0.2°C from 0° to 50°C Resolution: < ±0.03°C from 0° to 50°C Drift: < ±0.1°C per year Measurement Averaging Option: Yes Environmental Rating: Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C Housing: Stainless steel sensor tip Dimensions: 7 x 38 mm Cable Lengths: 6.0 m Length of Smart Sensor Network Cable: 0.5 m Radiation Shield strongly recommended for use in sunlight
MAHBA013.0	**HOBO RS3 RADIATION SHIELD**
	The RS3 Solar Radiation Shield protects external sensors from the effects of sunlight and rain to ensure high accuracy measurements. Designed to allow maximum air flow around the sensor, the RS3 shield offers 2.5x faster response time to changing conditions. For PRO V2, Weather Station, Micro Station with external sensors.
MAHBT024.0	**HOBO AIR VELOCITY SENSOR**
	Measurement ranges, "O" model: 0.15 - 5 m/s (30 - 985 fpm) Measurement range, "P" model: 0.15 - 10 m/s (30 - 1969 fpm) Accuracy: Greater of 10% of reading or +/-0.05 m/s or 1% full-scale Standard medium: Air at standard pressure (101.3 kPa, 29.95" Hg) Operating temperature range: 15 – 35 C (59 – 95 F) Storage temperature: -10 to 100C Supply voltage: 7-13 VDC Supply current: 40 - 75 mA (10K ohm nominal) Warm-up time: < 5 sec Response time: 1.5 sec Output: Linear 0 - 4 VDC full scale for calibrated range, up to 4.9 VDC beyond calibrated range Sensor head material: Plastic Dimensions: 100 mm x 12 mm diameter for "S" model, 91 mm x 12 mm for "L" model Vibration: Up to 25 G Acceptable angle: +/- 300 from perpendicular Repeatability: +/- 1% under same conditions
MAHBT021.0	**LEAF WETNESS SMART SENSOR**
	Measurement range: 0 (dry) to 100% (wet) Range: -40°C to 70°C Repeatablility: ± 5% Resolution: 0.59% Stability: < ± 5% per year Interchangeability between sensors (over the range 10-90%): ± 10% Measurement Averaging Option: No Housing: No coating required Sensor Type: Capacitive Grid Dimensions: Sensor plate: 4.7 cm x 5.1 cm Tube: 12.2 cm length x 1.8 cm diameter Cable length: 3m Approximate Weight: 127 g for sensor, and 290 g with mounting bracket Mounting Bracket: 20 cm long;Sensor can be positioned at any angle between 0 and 90 degrees (vertical) Number of Data Channels: 1

doctor art
conservation & laser

MAHBT019.0	HOBO BAROMETRIC PRESSURE SENSOR W/10cm CAB
	The Barometric Pressure Sensor provides average barometric pressure for each logging interval over the range of 660 mb to 1070 mb (19.47 to 31.55 inHg). The operating temperature range for this sensor is -40° to 70°C (-40° to 158°F); sensor survival is supported from -20° to +70°C (-4° to +158°F). Accuracy: ±3.0 mbar over full pressure range at 25°C; maximum error of ±5.0 mbar over -40° to 70°C Resolution: 0.1 mbar This specialized smart sensor must be used inside a logger enclosure to assure protection from direct exposure to the weather. Measurement parameters: average over logging interval, user-defined sampling interval from 1 second Dimensions: 4.5 cm x 4.8 cm x 1.6 cm Approximate Weight: 30 g Cable Length: 10 cm

MAHBL001.0	HOBO 12-BIT PAR SENSOR
	The Photosynthetic Light (PAR) Smart Sensor is intended to measure light intensity for the frequencies relevant for photosynthesis. Range: 0 to 2500 umol/m2/sec, wavelengths of 400 to 700 nm; Accuracy: ±5 umol/m2/sec or ± 5%, whichever is greater in sunlight; Resolution: 2.5 umol/m2/sec; Housing: anodized aluminum housing with acrylic diffuser and o-ring seal;Dimensions: 4.1 cm height x 3.2.4 cm diameter; Weight: 120 g; Cable Length: 3 m

MAHBT011.0	HOBO SILICON PYRANOMETER SMART SENSOR
	The Solar Radiation Smart Sensor is a light sensor (silicon pyranometer) with a measurement range of 0 to 1280 W/m2 over a spectral range of 300 to 1100 nm. This sensor reports the average light intensity over a user-set set logging interval from a minimum of 1 second. Although the azimuth error is only ±2% error at 45° from vertical, a light sensor bracket and light sensor level are recommended. Measurement range: 0 to 1280 W/m2 Operating Temperature Range: -40° to 75°C (-40° to 167°F) Resolution: 1.25 W/m2 Spectral Range: 300 to 1100 nm Dimensions: 4.1 cm high x 3.2 cm diameter (1 5/8 in. x 1 1/4 in.) Approximate Weight: 120 g Cable Length: 3 m

MAHBA021.0	HOBO LIGHT SENSOR LEVEL
	Simply drop the light sensor level over the PAR, Pyranometer or solar radiation sensor to determine if the sensor is level.

MAHBT012.0	HOBO RAINFALL SENSOR
	Measurement range: 0–12.7 cm or 0–5 in. per hour; maximum 4000 tips per interval Operating Range: 0° to 50°C; survival -40° to 75°C Mechanism: Tipping bucket, stainless steel shaft with brass bearings Resolution: 0.2 mm and 0.01 inch models Calibration: Requires annual calibration; can be field calibrated by user or returned to factory Calibration Accuracy: ±1.0% at up to 20 mm or 1" per hour Housing: Aluminum housing and collector Dimensions: 22.8 cm height x 15.4 cm diameter, 154 mm receiving orifice Approximate Weight: 1 Kg Cable Lengths: 2 meter

MAHBW002.0	HOBO WIND SENSOR SET
	Wind Speed/Gust Measurement Range : 0 to 45 m/s; Maximum Wind Speed Survival: 54 m/sec; Accuracy ± 1.1 m/s or ± 4% of reading whichever is greater; Resolution: 0.38 m/s; Starting Threshold 1.0 m/s; Operating Temperature Range: -40°C to +75°C. Environmental Rating: Weatherproof; Service Life: greater than 5 years typical; Housing: Three cup polycarbonate anemometer: Modified Teflon® bearings and hardened beryllium shaft with ice shedding design; Bearing Type: Modified Teflon® bearings; Turning Radius : 9.5 cm; Dimensions 41 x 16 cm including 1.27 cm diameter mounting rod; 5.5 cm drip overhang. Weight Approximately 700 g. Wind Direction Measurement Range : 0 to 355 degrees; Maximum Wind Speed Survival: 60 m/sec; Accuracy ± 5 degrees; Resolution: 1.4 degrees; Starting Threshold 1.0 m/s; Operating Temperature Range: -40°C to +75°C. Environmental Rating: Weatherproof; Service Life: 4 to 6 years typical depending upon environmental conditions; Housing: Injection-molded housing and vane, static dissipating base, lead-free silicon bronze nose, and aluminum mounting rod; Bearing Type: two shielded stainless steel ball bearings; Turning Radius : Approximately 13.5 cm; Dimensions 46 x 20 cm (18 x 8.5 in) including 1.27 cm (0.5 in) diameter mounting rod, 2.5 mm (0.1 in) drip overhang. Weight Approximately 370 g.

MAHBS001.0	HOBO 1.2 Watt SOLAR PANEL
	1.2 Watt Solar Panel - for sunny locations and/or locations with low data transfer requirements Features: 1.2 Watt, 6 Volt Solar Panel Weight: 0.49 kg (1.08 lb) Dimensions: 15.2 cm H x 11.7 cm W (6 x 4.6 inches)
MAHBT027.0	**HOBO FULL CROSS ARM**
	91.2 cm bracket for wind sensor
MAHBT015.0	**HOBO HALF CROSS ARM**
	49cm bracket for wind sensor
MAHBT016.0	**HOBO 3 M TRIPOD KIT**
	Kit for mounting HOBO Weather Station and Microstation. Includes tripod stand 3m, elements for anchoring to the ground and level.

ACCESSORI	
MAHBDT01.0	**HOBO U-SHUTTLE**
	For in-field data offload and relaunch of HOBO U-series loggers and HOBO Weather Stations, Micro Stations. Data capacity: 4MB; transfers to computeri n 3-5 min Weight:153 g; Dimensions: 11.0 x 6.9 x 2.7 cm; battery life typically one year, 2 AA alkaline batteries.
MAHBBS04.0	**HOBO OPTIC BASE U-4**
	The new Optic USB Base Station and a series of couplers are used to offload data from any HOBO data logger with an Optic USB interface. The Optic USB Base Station connects to your computer via USB, while connecting to the logger via an appropriate coupler. Couplers for all compatible loggers are included with the BASE-U-4. Couplers are included for compatibility with six of our most popular logger types including.
MAHBBS01.0	**HOBO OPTIC BASE U-1**
	The Pendant Base Station and Coupler provide fast optical infrared (IR) communication for easy logger launch and readout of HOBO Pendant loggers. The Base Station connects via USB to a host computer, while the Coupler attaches the logger to the Base Station for communications The Pendant Base Station offloads full 64K logger in 30 seconds or a full 8K logger in 6 seconds, and is splash resistant
MAHBDT02.0	**HOBO WATERPROOF SHUTTLE**
	The HOBO Waterproof Shuttle provides convenient readout and relaunching of underwater and outdoor HOBO loggers with an Optic USB interface, and is waterproof to 20m. The HOBO Waterproof Shuttle can also be used as a base station. Couplers are included for compatibility with five of our most popular logger types including: UA Pendants, U20 water level loggers, the U22 Water Temp Pro v2, our UTBI TidbiT, U24 Conductivity and U23 loggers. HOBOware Pro software required. Onset offers a range of data retrieval and communications options to make data offload from HOBO loggers fast and easy.
MAHBA019.0	**HOBO SENSOR EXTENSION CABLE**

	A 10-meter Smart Sensor male-to-male extender cable, plus a female-to-female adaptor. With Hobo Weatherproof Connection Housing (MAHBA020.0)
MAHBA020.0	**HOBO WEATHERPROOF CONNECTING HOUSING**
	Per impermeabilizzare i collegamenti smartsensor in esterno. Include sigillante siliconico.
MAHBA011.0	**HOBO SUBMERSIBLE CASE**
	The Submersible Case is a rugged waterproof enclosure constructed of white polypropylene and featuring a stainless-steel reinforced bail for reliable case attachment. This case will accommodate one HOBO U12, U10
MAHBA005.0	**HOBO 4-20 mA INPUT CABLE**
	Cable for connecting sensor with 4-20mA output to HOBO U-Series and ZW Series external-channel data loggers
MAHBT023.0	**HOBO PULSE INPUT ADAPTER**
	The Electronic Switch Pulse Input Adapter connects sensors with pulse outputs to loggers with smart-sensor inputs. This Smart Sensor is compatible with electronic switch closures such as FET or open-collector outputs, or CMOS-level logic signals with a maximum input frequency of 120 Hz (120 pulses per second).
MAHBA001.0	**HOBO VOLTAGE INPUT CABLE**
	An external input cable with 13mm tinned braided wire leads. Voltage input specifications vary with attached logger. Overall length of this cable is 1.8m Can be plugged directly into the external input jacks of U12 or ZW Family loggers to expand the range of measurement options and applications. 0-2.5Vdc
MAHBT017.0	**HOBO 4-20mA ADAPTER**
	The 12-bit 4-20 mA Input Adapter interfaces with any sensor providing a 4-20 mA signal to connect to smart sensor compatible data loggers. This adapter features both a non-switched input and a battery-saving switched input that extends the life of external batteries. It also provides a trigger signal for controlling power to attached external sensors, while offering digital filtering which improves measurement accuracy with 32 readings/sample and 60 Hz noise rejection.
MAHBT026.0	**HOBO AC ADAPTER**
	The AC-SENS-1 is an AC power adapter that provides DC power to sensors that require it. This expands the range of 3rd party sensors that can be used with Onset's HOBO U12, HOBO U30, and HOBO ZW series products. Input: 100-240VAC @ 50/60Hz 0.2A Output: 12VDC @ 0.5A

doctor art
conservation & laser

HOBO SOFTWARE	
MSHBS012.0	**HOBOWARE PRO SOFTWARE FOR PC AND MAC**
	HOBOware Pro for Windows is the most powerful software for logger management, data graphing, data analysis, and data export. Data Assistants and Alarm & Readout Tool provide advance data analysis and monitor/notification of out-of-range conditions. Graphing & analysis- HOBOware's powerful graphing and analysis tools allow you to plot, analyze and extract key information from multiple data loggers with a few simple clicks. It also allows you quickly create custom graphs to document your data. Alarm capabilities - The included real-time alarm and readout tool offers peace-of-mind knowing that you can receive instant notification via cell phone or email if conditions exceed set thresholds. HOBOnod Manager software, a component of HOBOware Pro for use with HOBO ZW Series data nodes, lets you view real-time energy and environmental data, set alarm notifications, and get an at-a-glance view of your network with the Network Map feature
MSHBS009.0	**HOBOWARE LITE SOFTWARE FOR PC AND MAC**

	HOBOware Lite is the entry-level software for HOBO USB loggers, offering easy logger launch, readout, and data plotting. HOBOware Lite does not support any of data assistants or data shuttles.
	Features: Setup & Status Checks; Launching a logger is easy with HOBOware Pro software's launch screen
	Graphing and Analysis
	HOBOware Pro software's powerful graphing features let you plot and filter data.
	Export Data to Other Programs:
	    One-click export to Microsoft Excel
	    Support for international date and time formats
	    Copy and paste graph images into other programs
	Other Features:
	    Offload logged data or check status while logging
	    Print graphs, details or points
	    Print preview

MAHBA008.0	**HOBO INTERFACE CABLE FOR PC**
	Interface Cable for PC computers
MAHBA012.0	**HOBO USB CABLE**
	This USB logger-to-PC communications cable is 1,8m long and coated in black plastic