Edinburgh Tool Day

John Hope Gateway
Royal Botanic Garden Edinburgh

July 2, 2017

Edinburgh Tool Day will explore the John Hope Gateway at the Royal Botanic Garden Edinburgh. This award-winning building was designed and constructed with numerous green features, including an east-west orientation for solar control, exterior overhangs and sunscreens for shading windows, carbon sequestering materials to help optimize building energy performance, low or no-water landscaping, low-flow plumbing fixtures, stormwater collection, a green roof, solar thermal and photovoltaic panels, and a wind turbine. The building is a featured case study in The Green Studio Handbook, 2nd edition.

This intensive Tool Day workshop offered architects, engineers, builders, facility operators, educators, and students a hands-on experience in the use of relatively low-cost instrumentation (coupled with a structured methodology) to better understand building system and component performance. Participants learn appropriate use of the instrumentation and methods to facilitate building performance investigations. Tool Day efforts focus around development of a case study that can be used as a model for future investigations.

AIA CES credit (7cr) is available.

Tool Day participants will:
1.Gain experience in the use of several types of portable instrumentation
2.Engage in Post Occupancy Evaluation (POE) investigations in an innovative building
3.Get to see a really cool building from a range of different perspectives
4.Spend a day in a beautiful botanic garden

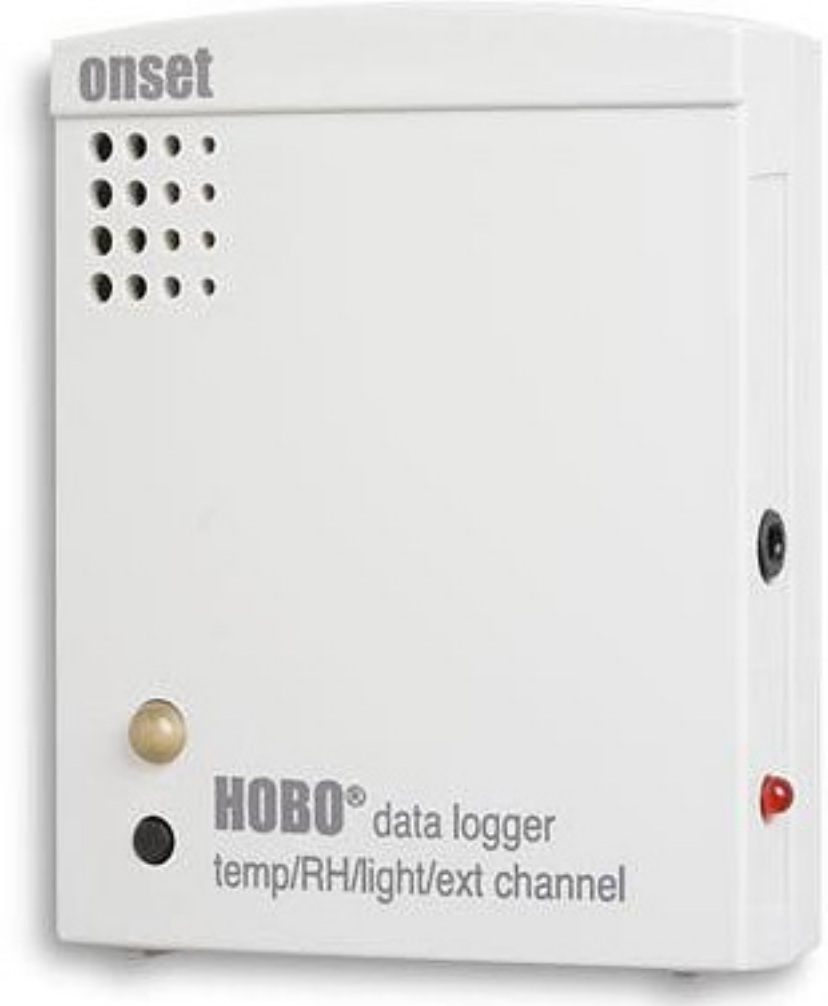
Cost: no cost

Society of Building Science Educators (SBSE) members, university students and educators, and professional architects and engineers are encouraged to participate.

Sponsored by: Society of Building Science Educators.

Organized by: Alison Kwok, University of Oregon; Bruce Haglund, University of Idaho; Walter Grondzik, Ball State University.

HOBO Temperature/Relative Humidity/ Light/External Data Logger



See < http://www.onset-comp.com/products/data-loggers/u12-012>

Overview

Measure temperature, relative humidity, light intensity, and more with the HOBO U12-012. With 12-bit resolution measurements, this data logger gathers a range of recorded data and stores 43,000 measurements.

Highlighted Features

- 12-bit resolution provides high accuracy
- Large memory for long-term deployments or fast sampling
- Programmable and push button start
- Direct USB interface for fast data offload
- Compatible with Onset's HOBO U-Shuttle for convenient data transport
- Compatible with HOBOware and HOBOware Pro for logger setup, graphing and analysis

In what environment does this data logger operate?

This data logger operates in an indoor environment.

Kestrel 3000 Pocket Weather Meter

Thank you for purchasing the Kestrel 3000 Pocket Weather Meter. This instrument will measure the following environmental conditions:

- wind speed
- wind chill
- maximum wind gust
- relative humidity
- average wind speed
- heat stress
- temperature (air, water, snow)
- dewpoint

This instrument also features a data hold function, a backlight, and an automatic power-down function. Every unit is fully tested at our factory for measurement accuracy and waterproof integrity.

See <https://www.weathermeters-direct.com/product/kestrel-3000-weather-meter-pocket>

Mode	Hint	Icons	Units of Measure
Wind Speed	SPd		m/s, ft/min, km/h, mph, kt, B
Max Gust	SPd	MAX	m/s, ft/min, km/h, mph, kt, B
Avg Speed	SPd	AVG	m/s, ft/min, km/h, mph, kt, B
Temperature	dEG		C, F
Wind Chill	chill		C, F
Humidity	r.h.	%	%
Heat Stress Index	H.I.	%	C, F
Dewpoint	d.P.		C, F

Raytek RAYMT4U MiniTemp Infrared Thermometer, -18 to 400°C (0 to 750°F)

See <https://www.raytek-direct.com/product/raytek-ray-mt4u-minitemp-portable-ir-thermometer-18-to-400c?>

MiniTempMT4 provides great ways to solve common temperature measurement problems, and are small enough to fit in your pocket.

Features

- Quickly, accurately and safely measure surface temperature
- Since the thermometer does not contact the object being measured, it is the safest way to measure hot, hard-to-reach, or moving parts, while eliminating potential damage and contamination
- Simple to use, just point and pull the trigger
- Single dot laser sighting assists with aiming (laser dot indicates the approximate center of the target spot)
- Intended for close range targets, measuring a minimum target area of 1” in diameter out to a distance of approximately 8”, and has a 6” target measurement area at 4’
- Instant readings on a large, backlit, digital display
- Temperature range of -18 to 400°C (0 to 750°F)
- °C or °F selectable
- Use it for spotting costly energy losses around windows and doors, monitoring critical temperatures in kitchen or workshop, or ensuring the environment is comfortable and safe - anywhere that temperature is a factor in process, product quality or diagnostics

Edinburgh Tool Day Assistants			
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