SolData HOBO datalogger
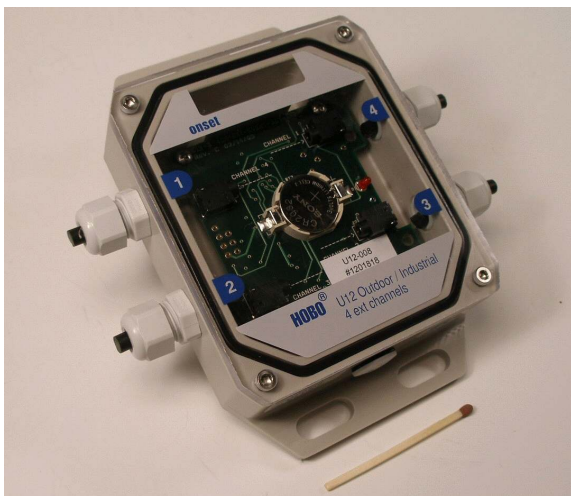## USER'S GUIDE

Purpose

The purpose of the data logger is to record e.g. solar irradiance over a period of time. A voltage probe is needed to connect the pyranometer to the logger. The logger is started from *HOBOware software* while the logger is connected to a USB port. It can then be disconnected while collecting data and reconnected later to download the data to the computer. Data can then be saved in *Excel* format for subsequent analysis.

HOBO U12-008 Logger

The HOBO U12-008 is weather resistant. It can collect data on 4 channels at the same time with 12 bit resolution.

Cable connections

The 80spc is supplied with an integral three meter long cable connection. The electrical connections are:

blue - voltage plus (0-200 mV)
black - signal ground

If the data logger is purchased with a voltage sensor and SolData 80spc pyranometer, the voltage sensor will be mounted before shipment so that you can begin collecting data at once after joining the two cables.

Specifications

input range	0-2.5 VDC
accuracy	+/-2 mV
resolution	0.6 mV

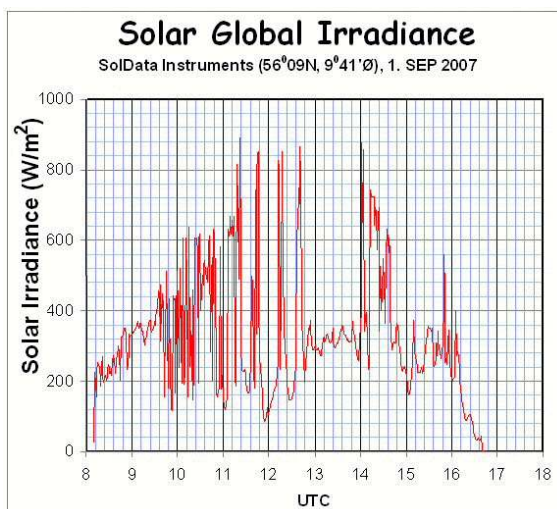|	
communication	USB direct
sample rate	1 second - 18 hours
capacity	43,000 measurements
battery level	separate channel
operating. range	-20^0C to $+70^0C$
battery life	1 year
size/mass	14x14x3.2 cm/200 gram
software	HOBOware PRO or LITE

Voltage sensor

A voltage sensor is connected to the data logger through waterproof fittings via a 2.5 mm jack connector to the data logger.

A voltage sensor is needed to connect a pyranometer to the logger.

Applications

Here are some sample measurements collected using the HOBO data logger with a SolData 80spc pyranometer:

Data collected using HOBO data logger.

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