

Light

The Light Sensor measures data in lux, a unit of illuminance, which is a measure of luminous flux per unit of area.

Materials List





- 1: Xplorer Datalogger (PS-2000)
- 1: Light Sensor (PS-2106)






Site Selection

- The sensor can be used in 3 different ranges depending on the intensity level of the light source: low light is from 0 to 2.6 lux, indoor light is from 0 to 260 lux, and outdoor light is from 0 to 26,000 lux. Accuracy is ± 1 lux of the maximum value of the selected range.
- ➡ Take care that you do not sample reflected light.
- Note environmental variables such as light penetration (sunny, shady, or dappled), groundcover (grass, dirt, or concrete), airflow, reflected light sources.

Sample Preparation

1. Press  to turn on the datalogger and attach the light sensor.
2. Select the appropriate sensor range setting for the sample:
 = low light conditions;  = indoors;  = outside in daylight.

Measurement & Recording

1. Point the sensor toward to sample site and maintain a steady height and direction; readings should stabilize in 10-15 seconds. *If readings fluctuate widely, re-assess possible environmental conditions that may be impacting the sample site.*
2. Press  to start logging data; wait 15 seconds; press  to stop logging data.
3. Record the time of day, site notes, and light reading in lux.
4. Press  to turn off the datalogger.

Clean-up & Completion

1. Unplug the sensor from the datalogger and replace items in the original storage bag(s).