

## Circuit Level Lighting and Plug Load Equipment

Plug load monitoring can identify how much electricity appliances are using. Types of plug loads that are often monitored are refrigerators, electric dryers, computers, and home entertainment systems. Plug load monitoring can identify large amounts of electricity that are consumed even when the appliances are turned off. WattNodes and/or CTs can be used for this monitoring.

**Circuit Level Lighting and Plug-Load Monitoring** is used to monitor interior or exterior lighting, plug-loads, or other miscellaneous equipment via individual electrical panel circuits. To do this, you will need a Current Transformer (CT) rated for the amperage of the load / circuit.

Our Current Transformers have part numbers with the following convention: CTS-xxxx-yyyy, where ...

- xxxx is the CT opening size (0750 = 0.75", 1250 = 1.25", 2000 = 2.0") and
- yyyy is the maximum amperage (5, 20, 50, 100, 200, 400, 600, 800, 1000, 1500)

### QUESTIONS:

- What range of current do you plan to monitor (not greater than what amperage)?
- How many circuits or loads will you monitor?

Item Description	Qty	Part Number(s)
Current Transformer per Circuit	1	Current Transformer (CTS-xxxx-yyyy) typically 5A, 20A, 50A or 100A
RMS Module to connect CT to logger	1	S-FS-TRMSA (can connect 2 CTs to the logger)

## Monitoring Current for an Entire Panel

### QUESTIONS:

- Not including the neutral line, how many lines does the panel have?
- What range of current do you plan to monitor (not greater than what amperage)?

Item Description	Qty	Part Number(s)
Current Transformer per Panel	1	Current Transformer (CTS-xxxx-yyy) typically 5A, 20A, 50A or 100A)
RMS Module to connect CT to logger	1	S-FS-TRMSA (can connect 2 CTs to the logger)

### Compressor and Condenser Measurement Notes:

- CTS-xxxx-yyy refers to Current Transformers where “xxxx” indicates opening size (0750 = 0.75”, 1250 = 1.25”, and 2000 = 2.0”) and “yyy” indicates rated amperage.

## Basic Logger Equipment

The list below consists of the basic equipment that you'll need to do any data logging:

- Energy Logger Pro,
- Serial cable to program the logger and download data, and
- AC power adapters to keep the logger plugged in to an AC outlet, and
- HOBOWare software.

Item Description	Qty	Part Number(s)
Energy Logger Pro	1	H22-001
Serial interface cable	1	CABLE-PC-3.5
AC Power Adapter	1	PAC-1 or ONS-AC-POWER-USA
HOBOWare Pro version 2.2 or Higher	1	BHW-PC or BHW-MAC

**NOTE:** Reference materials for all equipment used in monitoring applications should be reviewed to ensure proper use and safety precautions are observed.