

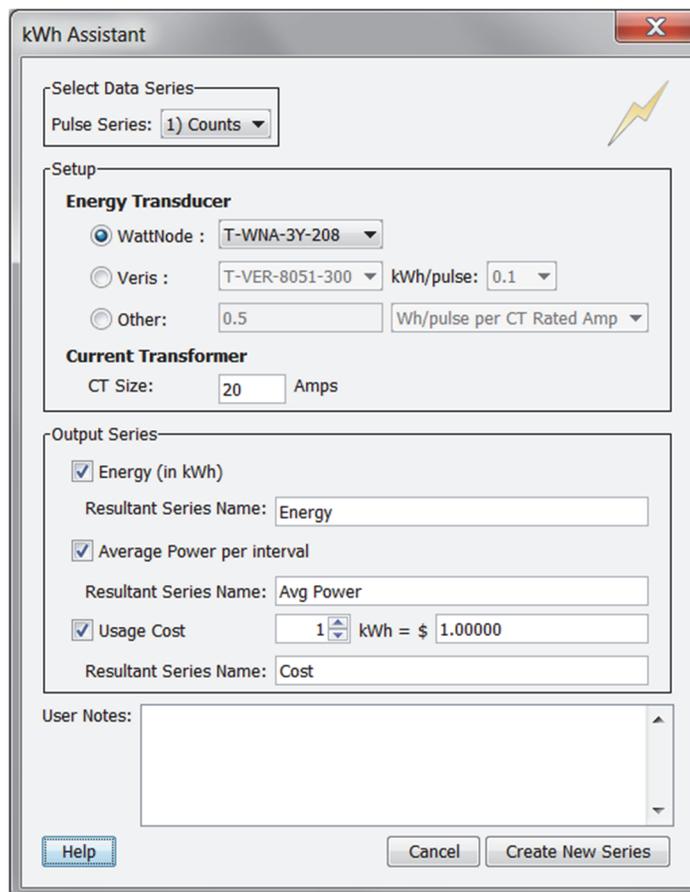
The kWh Assistant converts logged pulse to kWh, average kW, and energy cost with WattNode, Veris, or other pulse-output energy transducers, and from Raw Pulse sensors attached to a HOBOWare 4-Channel Pulse Input Data Logger (UX120-017x) and the UX90-001.

This assistant can be applied to logged data from an S-UCA-xxxx or S-UCC-xxxx Electronic Switch Pulse Input Adapter. It is not compatible with the S-UCB-xxxx or S-UCD-xxxx Contact Closure Pulse Input Adapter.

After you use the assistant and display the plot, you may apply filters to the new series.

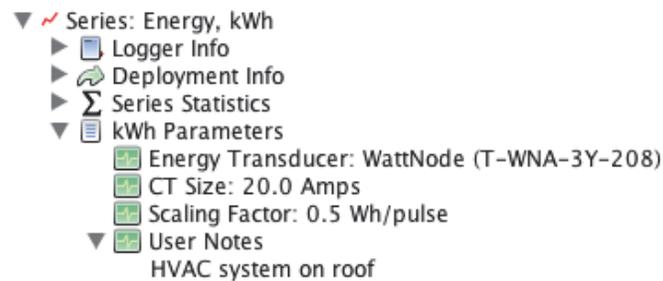
This data assistant is one of several launch utilities that can also be used at launch time for certain loggers. Refer to the *HOBOWare Pro User's Guide* for more details.

1. **At launch time:** Using a logger or sensor that supports scaling at launch time, click the Launch icon on the toolbar. Click the Scaling button. Double click the assistant name or select the assistant and click the Create button.  
**At plot setup:** Read out a logger or open a file that supports kWh scaling. Select the kWh Assistant and click the Process button.
2. In the kWh Assistant window, choose the data series you want to convert from the Pulse Series drop-down list.



3. In the Setup panel, select the Energy Transducer that was used, and choose the model number from the drop-down list. (Since the Veris transducers have a switch to define kWh/pulse, you must specify that here as well.) If your transducer is not listed, select Other and enter the conversion factor. Choose the type of conversion (Wh/pulse per CT Rated Amp, Wh/pulse, or kWh/pulse) from the drop-down list. Refer to the manual that came with your energy transducer for help with identifying the conversion factor
4. Enter the current transformer size (in Amps) in the CT Size field. (Veris transducer CT sizes are predefined.)

5. In the Output Series panel, select one or more series you wish to create. For each series, you may keep the default Resultant Series Name or type a new one.
  - To create a series that shows energy in kWh, check the Energy box.
  - To create a series that shows average power, check the Average Power per interval box.
  - To create a cost series, check the Usage Cost box and enter the cost per kWh.
6. Type any User Notes concerning the series you are creating (optional).
7. Click Create New Series.
8. If you are running this assistant at launch time, the kWh button displays the number of newly created series. If using this assistant while plotting, the new series is listed and selected in the Plot Setup window. Click the Plot button to display the series.
9. The scaled series will appear in the plot immediately or when you read out the logger if configuring this at launch time. The settings for the scaled series are listed in the Details pane of the plot:



After the plot is displayed, you may apply filters to the new series as you would for any other series in HOBOWare Pro. In addition to the minimum, maximum, and average filters that are available for most series, the energy and cost series allow you to create new series showing totals over a period of time.