



kWh Assistant

For HOBOWare® Pro Software

User's Guide

License Agreement

This software is furnished in accordance with a separate license agreement included with the software, and subject to any restrictions set forth therein. For more information about Onset's licensing terms and policies, contact Onset Customer Service at 1-800-LOGGERS, or visit <http://www.onsetcomp.com/legal>.

About Data Assistants

Data assistants are plug-in utilities for HOBOWare Pro. They let you create new data series by combining data recorded by the logger with additional data that you enter before you display the plot. If your logger or datafile contains data that supports a data assistant, you will see a Data Assistants section at the bottom of the Plot Setup dialog. Select an assistant and click **Process** to continue. Some Data Assistants are also available when launching the logger. For information about installing and managing data assistants, refer to the following page at the Onset web site:

<http://www.onsetcomp.com/dataAssistants>

© 2008–2011 Onset Computer Corporation. All rights reserved.
Doc #: 10571-G

Onset and HOBOWare Pro are registered trademarks of Onset Computer Corporation. WattNode is a registered trademark of Continental Control Systems, LLC. All other trademarks are the property of their respective companies.

Introduction

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

This assistant can be applied to logged data from a 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.

Using the kWh Assistant

From the Logger Launch window:

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.

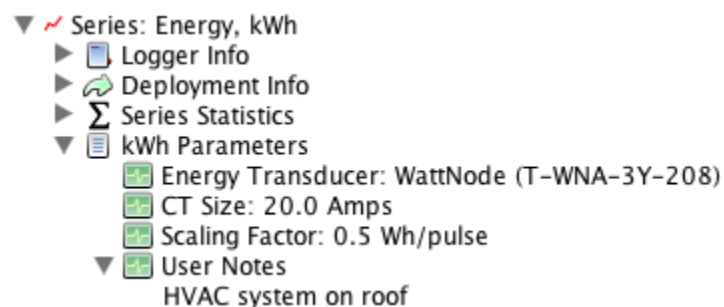
At plot setup: Read out a logger or open a file that supports kWh scaling. Select the kWh Assistant and click the Process button.

2. In the kWh Assistant dialog, choose the data series you want to convert from the Pulse Series drop-down list.

The screenshot shows the 'kWh Assistant' dialog box. It is divided into several sections:

- Select Data Series:** A dropdown menu showing '1) Counts, Compressor 4'.
- Setup:**
 - Energy Transducer:** Three radio buttons: 'WattNode' (selected), 'Veris', and 'Other'. Each has a corresponding dropdown menu. 'WattNode' is set to 'T-WNA-3Y-208'. 'Veris' is set to 'T-VER-8051-300'. 'Other' is set to '0.5'. There is also a 'kWh/pulse' field set to '0.1' and a 'Wh/pulse per CT Rated Amp' field.
 - Current Transformer:** A 'CT Size' field set to '20' and a unit 'Amps'.
- Output Series:** Three checkboxes are checked: 'Energy (in kWh)', 'Average Power per interval', and 'Usage Cost'. Each has a 'Resultant Series Name' field. 'Energy' is set to 'Energy', 'Avg Power' is set to 'Avg Power', and 'Cost' is set to 'Cost'. There is also a 'kWh = \$' field set to '0.10000'.
- User Notes:** A text area containing 'HVAC system on roof'.
- Buttons:** 'Cancel' and 'Create New Series'.

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 dialog. 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:



Available Filters

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.

Software Updates

If you have an Internet connection, HOBOWare Pro can periodically ask if you would like it to check the Onset website for software updates. This includes updates to your data assistants.

The default is to check once per week, but you can configure HOBOWare Pro to check daily or monthly. In Preferences, go to the General pane. **Check for HOBOWare updates** is located under the Startup heading.

You may check for updates manually at any time. Choose **Check for Updates** from the Help menu.