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Application Note AN2501

Datalogging Configuration and Download

Associated Product: WattsOn-Mark II (-DL Models)

Summary

This application note shows step-by-step how to change datalogging parameters and how to download the datalog in CSV format.

The datalog configuration and download is facilitated by the free Modbus Commander software. It can be downloaded from the meter via a serial/RS-485 connection (M1 models) or ethernet (E4 models).

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1) Download and install the latest version of Modbus Commander:
https://elkor.net/product/WattsOn-Mark_II#Software

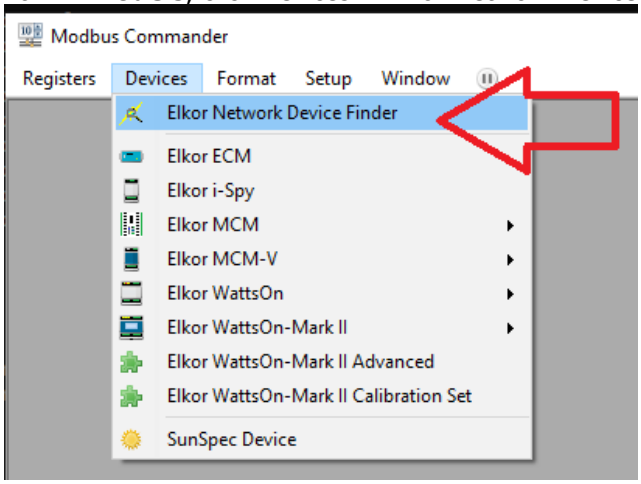
2) Ensure that the PC is connected to the meter via a serial/RS-485 connection (M1 models) or ethernet (E4 models).

   For assistance with a RS-485 connection, review the knowledgebase article here:
   https://support.elkor.net/knowledgebase.php?article=36

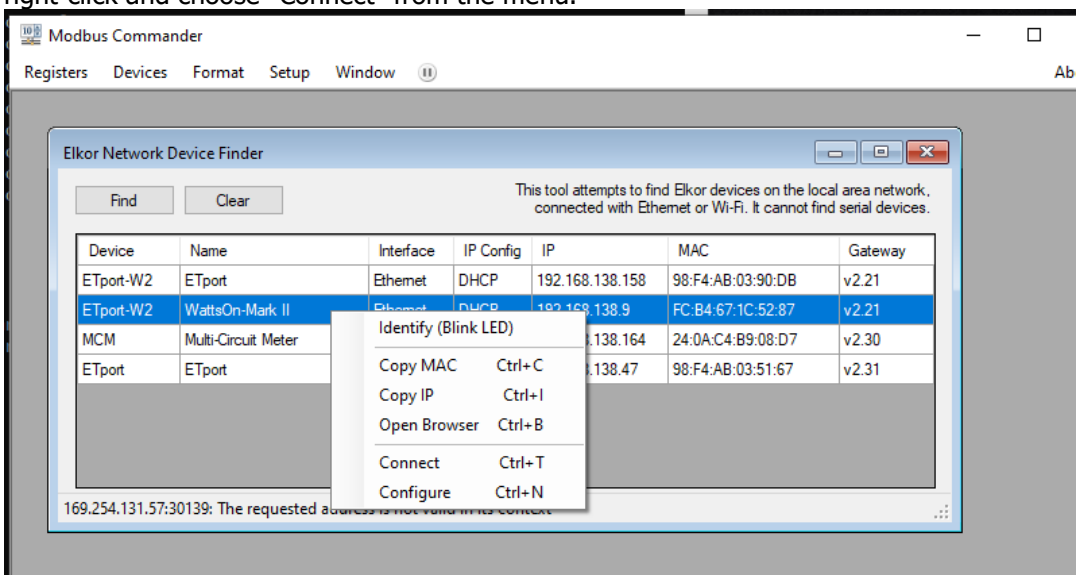
   For assistance with an ethernet connection, review the knowledgebase article here:
   https://support.elkor.net/knowledgebase.php?article=20

3) Open Modbus Commander

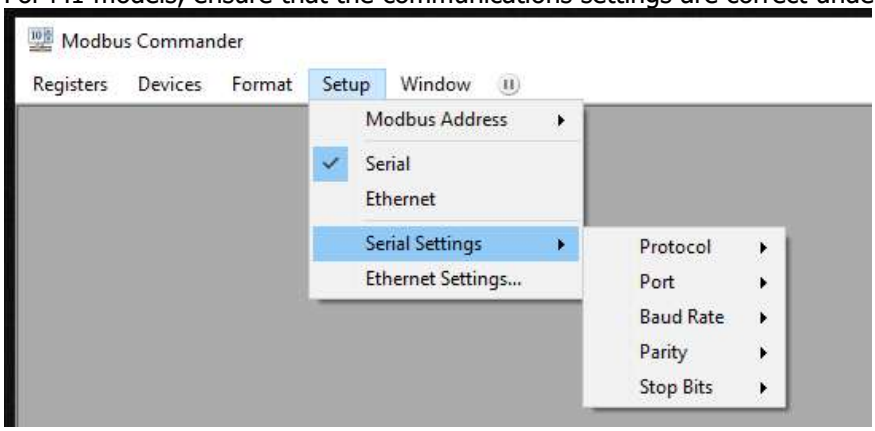
4) For **E4 Models**, click Devices > Elkor Network Device Finder



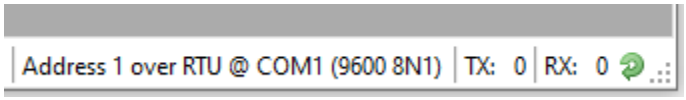
a. If more than one meter is on the network, find the desired device, click on it to select it, then right-click and choose "Connect" from the menu.



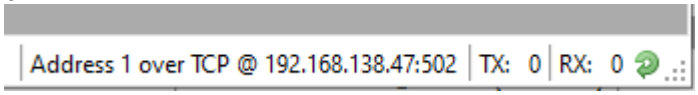
5) For M1 models, ensure that the communications settings are correct under "Setup".



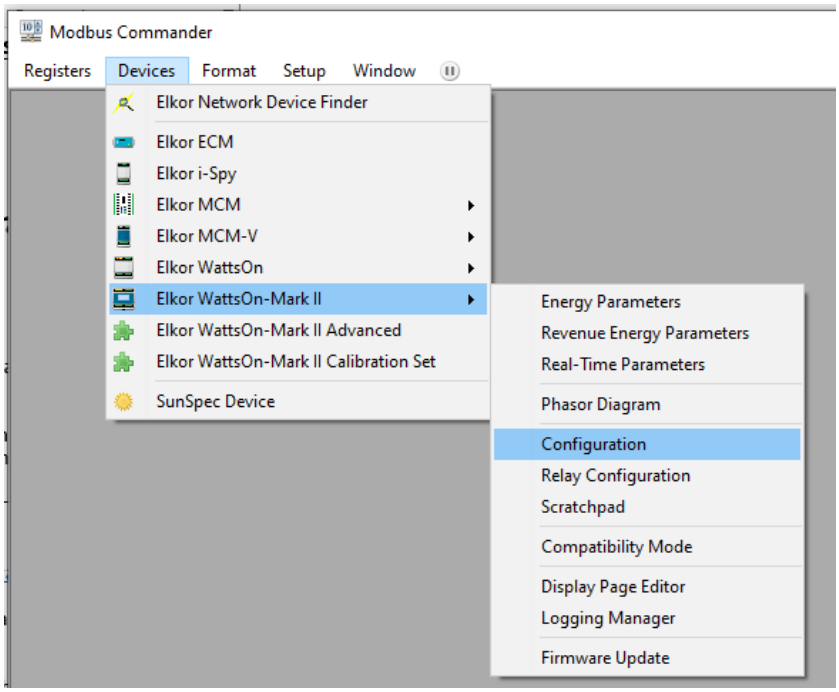
6) NOTE: the chosen communications parameters will be displayed on the bottom left of the window in the status bar. Ie:



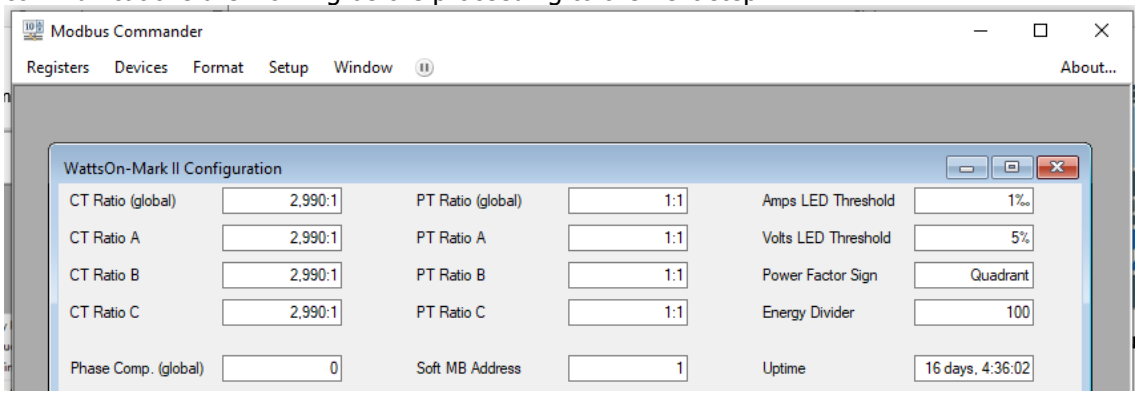
or



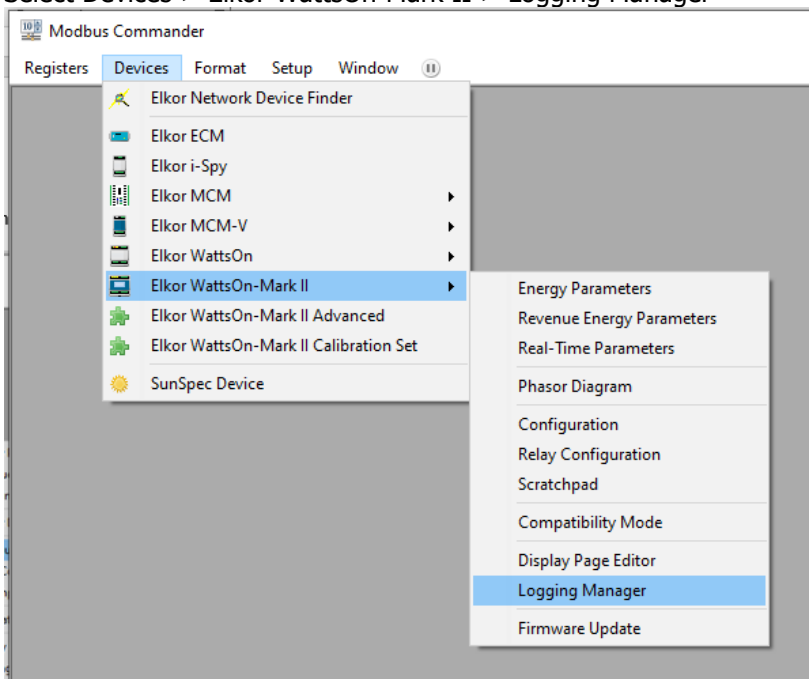
7) Confirm that communications are working by opening the Configuration Screen: Devices > WattsOn-Mark II



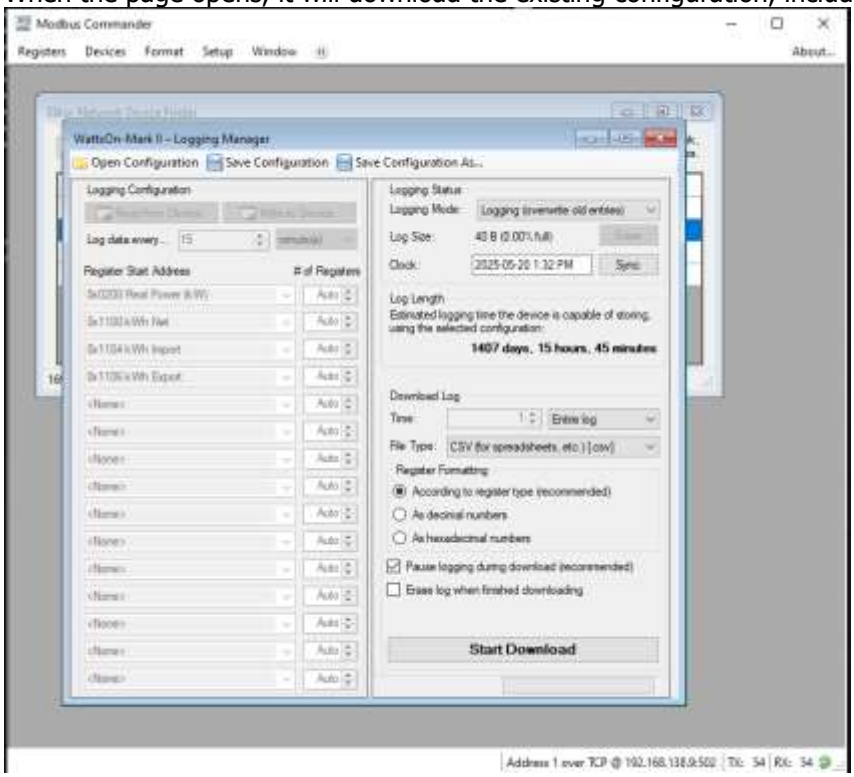
8) You should see data populated in the fields. If you are only seeing red exclamation marks, then the communication to the meter is not working. In this case, re-check the connections and ensure communications are working before proceeding to the next step.



9) Select Devices > Elkor WattsOn-Mark II > Logging Manager



10) When the page opens, it will download the existing configuration, including the time, from the meter.



11) The default (from the factory) logging configuration is as follows:

Logging Frequency	15 minutes
Register #1	Real Power (kW)
Register #2	Net Energy (kWh)
Register #3	Import Energy (kWh)
Register #4	Export Energy (kWh)

With the default logging parameters, the 2MB flash will store approximately 1407 days (3.8 years) of logging data.

Changing Logging parameters

1) To change any of the logging parameters, the log much be stopped (*Logging Mode*) and cleared "*Erase*". The log register configuration cannot differ throughout the logging cycle. Therefore, if new registers are to be added/removed from the logging configuration, the log should be stopped, downloaded (if desired), erased, and configured as new.

   Note: the logging frequency (ie: "*Log data every…*") may be changed without erasing the log.

2) After any changes to the logging frequency or registers are made, they should be written to the device "*Write to Device*". It is wise to close the Logging Manager window and re-open it, as this will re-read the configuration from the device itself to confirm that the desired settings have been applied.

3) The settings may be saved to a local file if multiple meters are to be configured identically.

4) Confirm the date/time. It may be synced with the PC time using the "*Sync*" button

Downloading the log

1) To download the log, select the desired time period (optional) and select "*Start Download*"