# Using the Memory Option

Mode of Operation

The logger keeps time whenever its battery is in place. When the logger is powered from the meter, it records data into any of its banks of memory that are activated by its configuration. When a bank is full (just over one million samples), the logger starts overwriting that bank from the beginning. The logger can be downloaded at any time. If power is removed, the logger will retain its full record as long as it has battery power. When power is restored to the meter after a period when it was not powered and thus not recording, the logger will update its memory, writing a null value into each memory location where data would have been recorded if the meter had been powered. This process takes about ten seconds for every hour the meter was un-powered, or four minutes for every day. Normal recording will commence when this process is complete.

Using the Software

Note that you can install and try the software at no charge, ahead of buying meters – the first installation includes sample files so you can gauge the calibre of the graphing and File Management, including export to other systems.
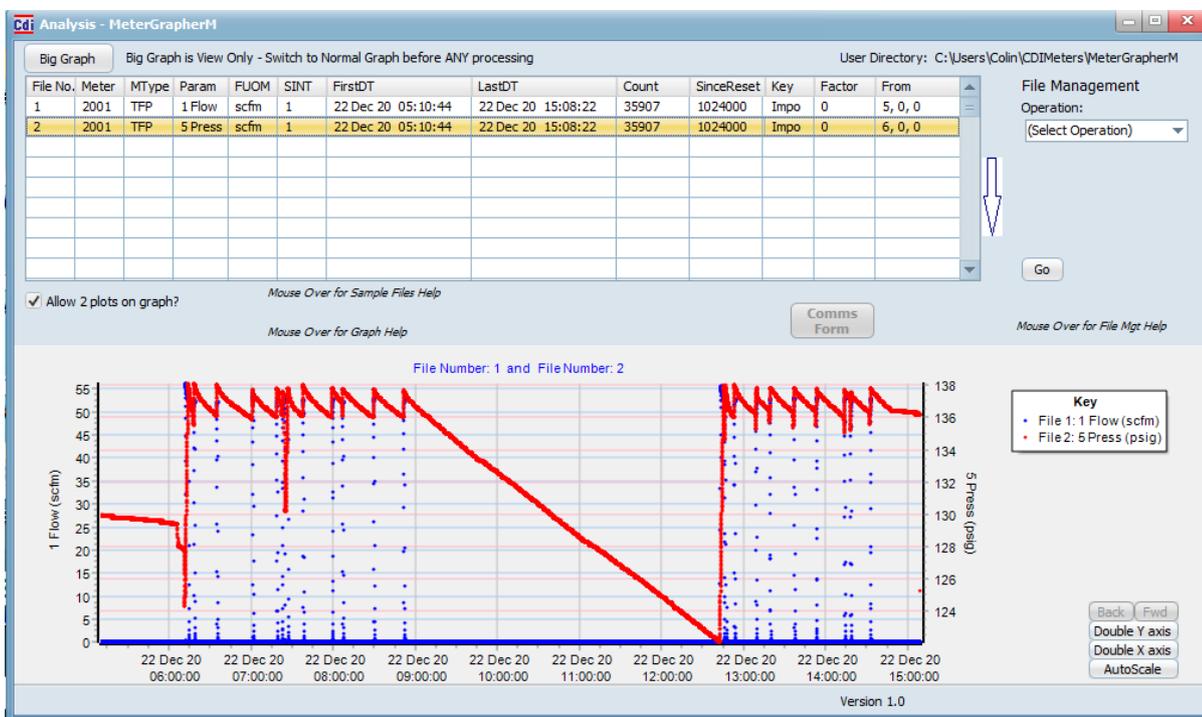
To use the software, connect your computer to the meter using the micro USB cable provided and start the software. On startup, the software will display a "Graph of Greatest Interest" (GOGI) which is a quick snapshot of the flow history. To obtain additional data, click the "Comms Form" button. The central portion of the Comms form allows you to view or modify the logger's configuration. If you have switched meters without re-starting the software, click "Read Config" to read in information on the new meter. The list shows the parameter assigned to each bank of memory and the sampling interval, in seconds, for that bank. Parameters and sampling intervals can be changed using the dropdowns in the list of banks. A button below reads a default configuration into the list, and a button below that writes the configuration shown into the logger. Writing the configuration re-starts the logging process and discards all data recorded so far. The section of the Comms form on the right pertains to reading data from the logger. At the top, you can select a limit on the number of samples. Reading a full bank of memory takes almost a minute and the screen refreshes slowly, so you may want to limit the download to 32K or 256K for most purposes. The buttons below show the dates when the downloaded data would begin, and asterisks indicate if the size of download selected is determining the date. Click the button to read data from a bank and click the "Analysis Form" button to see the result.