18 PC Logging

The PC Logging tab displays the operation of logging sap flow data direct to a computer. If no logging functions have been selected using the File menu then this tab will simply state that logging is disabled. As with logging data to the MicroSD card of the SFM1 Sap Flow Meter there are two data formats available: Log Incoming Reporting Option Data or Log Temperatures.
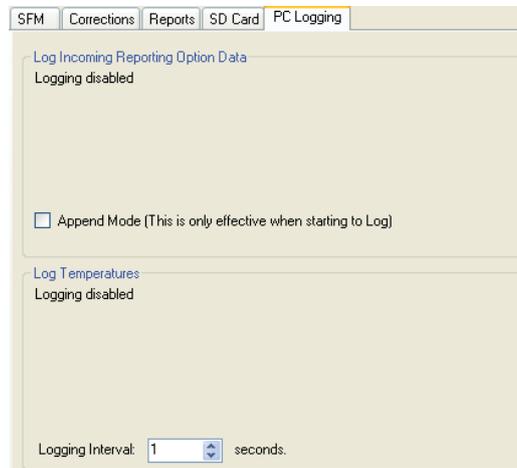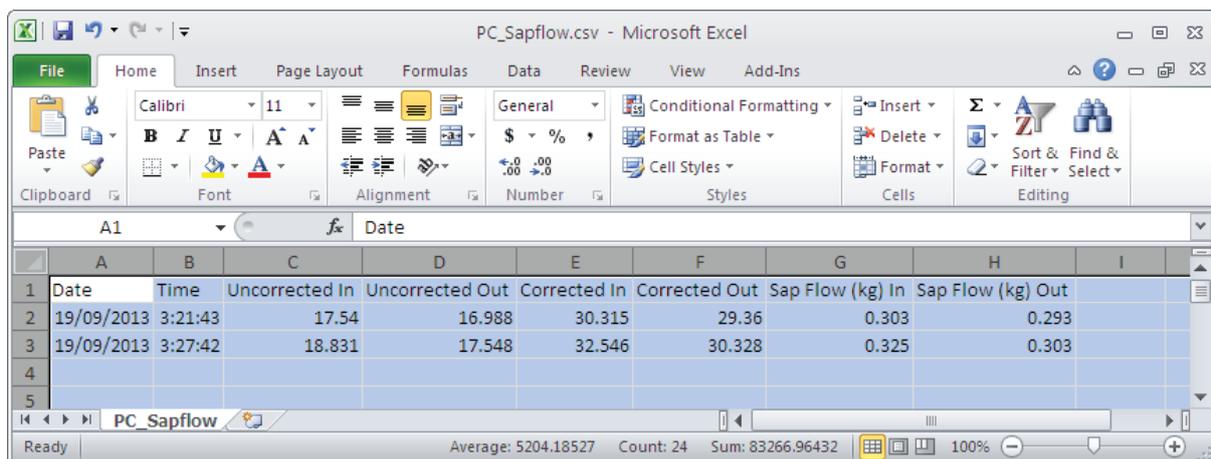

Figure 99 inactive PC Logging Tab

18.1.1 Log Incoming Reporting Option Data

The Log Incoming Reporting Option Data will record the basic parameters; Sap Velocity & Sap Flow for both Inner & Outer measurement points. Each data point is Date & Time Stamped and corresponds with the same parameters in the main data file *.CSV as logged to the MicroSD card if one is inserted into the SFM1. If no MicroSD card is inserted then only one file the, the PC_Sapflow.csv will be logged directly to the computer.

Figure 100 example sap flow data logged direct to a PC_Sapflow.csv file on the computer

18.1.1.1 Log Incoming Results – Start

To commence logging Sap Flow Data to the computer begin by accessing the File menu and select Log Incoming Results, expand this menu option and click Start. A MS Windows® Explorer "Save As" window automatically loads providing a choice of directories to save the data file to. The Default location is C:\Program Files\ICT\ICT SFM\ This directory can be changed to a user defined storage location if preferred.

Figure 101 the Menu sequence required to start Logging Incoming Sap Flow data direct to the computer

Once logging the data file will continue to increase in size as new data is logged at the user defined logging interval via the Measurement Mode drop down menu of the Measurement Control Section of the SFM software. The Log Incoming Reporting Option Data section of the PC Logging Tab will keep a live summary of the number of values logged to the file name as chosen by the user. The file name will be displayed complete with the full directory path to ensure the file is easily found.
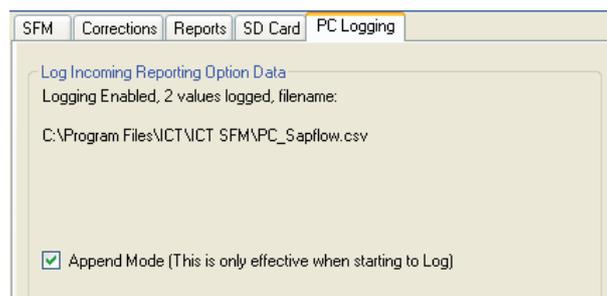

Figure 102 a summary of the sap flow mode reporting option data that has been logged direct to a computer

18.1.1.2 Append Mode

Note that the "Append Mode" can be selected to ensure that if a new logging session is resumed using an existing log file name, a new header will be placed in file at the end of the previous list of records to demarcate subsequent records that are appended to the existing file.

WARNING 20 - Failure to select "Append Mode" without renaming the log file will simply overwrite the contents of the existing log file.

18.1.1.3 Log Incoming Results – Stop

To cease logging sap flow data to the PC_sapflow.csv file direct to the computer drop down the File Menu, expand the Log Incoming Results option and click Stop. All logging to this data file will stop.
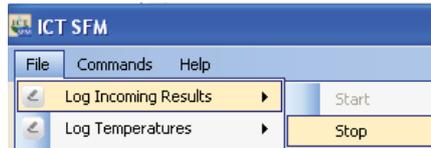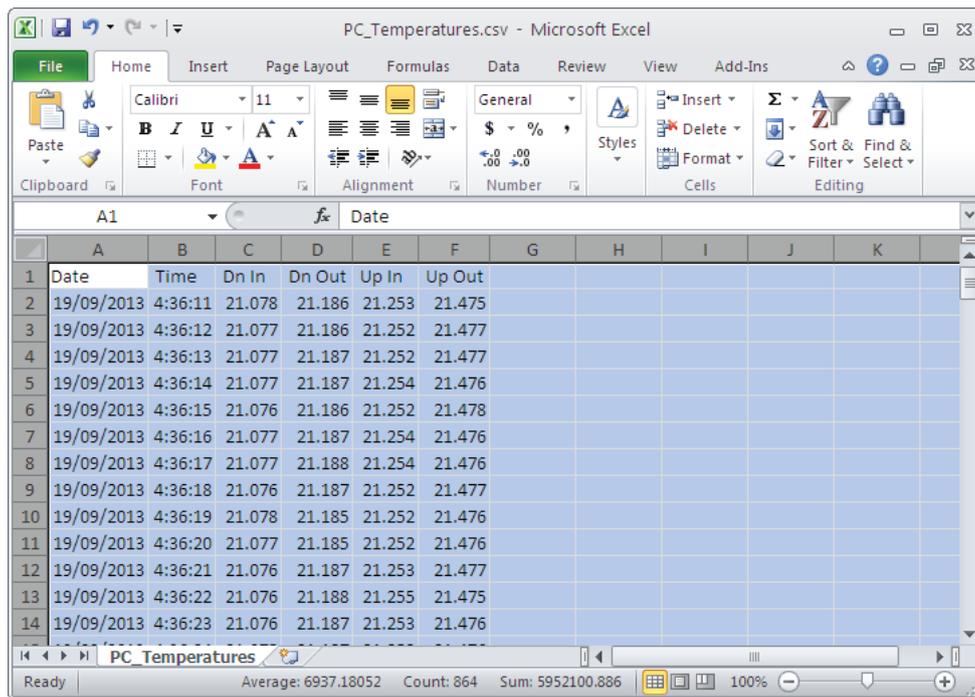

Figure 103 the expanded File Menu option sequence to stop logging sap flow data to the computer

18.1.2 Log Temperatures

When the SFM1 is configured to <u>Needle Temperature</u> mode the Raw Temperatures will be logged direct to a PC_Temperatures.csv file. Once again the data will be a duplicate of the Needle Temperature reporting mode and all settings are configured through the <u>Raw Temperature</u> mode of the <u>SD Card Logging Options</u> tab.

Figure 104 example Raw Temperatures data logged direct to a PC_Tempertaures.csv file on the computer

18.1.2.1 Log Temperatures – Start

To commence logging Raw Temperatures to the computer begin by accessing the File menu and select Log Temperatures, expand this menu option and click Start. A MS Windows® Explorer "Save As" window automatically loads providing a choice of directories to save the data file to. The Default location is C:\Program Files\ICT\ICT SFM\ This directory can be changed to a user defined storage location if preferred.

Figure 105 Start Log Temperatures function to record raw temperatures to a file on the computer

18.1.2.2 Set Logging Frequency

Once logging the data file will continue to increase in size as new data is logged at the user defined logging interval via the Measurement Mode drop down menu of the Measurement Control Section of the SFM software. The Log Temperatures section of the PC Logging Tab will keep a live summary of the number of values logged to the file name as chosen by the user. The file name will be displayed complete with the full directory path to ensure the file is easily found.
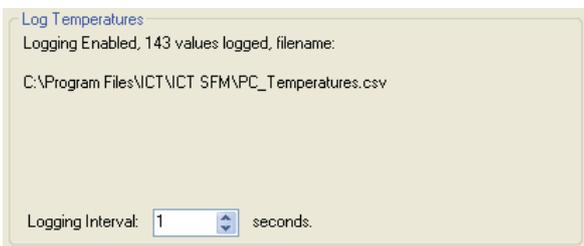

Figure 106 Log Tempertaures summary info on the SD Card tab

18.1.2.3 Log Temperatures – Stop

To cease logging Temperatures to the PC_Temperatures.csv file direct to the computer drop down the File Menu, expand the Log Temperatures option and click Stop. All logging to this data file will stop.
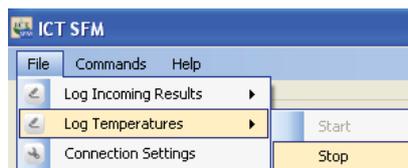

Figure 107 Stop Log Temperatures function to end recording raw temperatures to a file on the computer