

SMartec DataLogger (SMDL)

By request of many potential users of the SMTAS08 temperature interface boards simple software is developed that enables the user to transfer the measured temperatures in standard files via a COM-port. This software is available as freeware in the support shop on the web.

1 Installation

To install the software the Microsoft installation software is used.

Clicking on *SmartLog.msi* will start the installation of the software.

The installed software will be placed automatically in the directory **Program Files/Smartec/Smtas08**, and a desk top icon will enable to start the software quickly.

2 Starting the program

The COM port must be defined by means of the 'On line' button.

Clicking on the 'Write log' button will start (and stop) the logging.

Before logging a file name must be given, with the possibility to choose a directory (on the right side of the screen). Logging is possible in three kinds of files:

- **Symbolic link file (SYLK)**

This spreadsheet compatible file is a common type of file that can be read by several spreadsheet programs, like Excel, Lotus etc.

If you log in a SYLK file, an existing file with the same name will be overwritten.

- **TAB delimited file**

The TAB delimited file is a text file that places TAB's between the measurements. New data will be added at the end of this file and old data will not be lost.

- **Excel file**

The program is able to transfer data directly to an Excel sheet, but only if Excel is available on the computer. If Excel is closed during the time of logging, the file will be closed and further sampled data will not be stored.

If the error message 'The log file could not be created' appears after the logging has started, this means that a file has not been chosen yet.

Logging into the file is made visible by the 'number of records written to log'.

The left column is showing the actual temperature and the number of seconds that is chosen between the samples. Sensors that are not connected will be written to an empty column. This means that at any time eight sensors will be logged.

3 Filtering

It is possible to choose between a 'moving average' and a 'low pass' filter. With 'low pass' filtering one can choose the amount in which the difference between two succeeding measurements is included in the new value. Suppose the old value is 12.8 °C and the new one is 13.5 °C. The difference between the measurements is 0.7 °C. If the filter is put on 40 % the new value will be: $13.5 + 0.40 * 0.7 = 13.78$ °C. Etc.

4 Log interval

It is possible to set up the log interval in samples. The software will then determine the time interval for logging (in hh.mm.ss) by means of the given sampling time. It will also show on screen the amount of records in the file that are logged.

5 Status

Three signalling lights on the left bottom of the screen will show the status of communication between the SMTAS08 board and the software.

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