

Data Management System

Installation

Requirements

The Data Management System, referred to as the 'DMS', requires a PC running Windows XP or later and a free USB socket for data downloads.

Installing the DMS

This section tells you how to install the program on your system and how to run the program.

It is best to close all programs before installing the software. You should have at least 5 Mb of hard disk space available for the installation.

- Insert the CD in the computer;
- Find the 'Installation files' folder on the CD then open the 'Data Management Software (DMS)' folder;
- Run the *DMSInstaller.exe* file and follow the prompts to complete the installation

Running the DMS

Click the Windows Start button on your desktop, select programs, select Distell then locate the DMS icon from the files listed there.

You can use the program straight away after installation. The program enables you to download, print, save, and export data, quickly and efficiently. The DMS also allows you to create and upload your own custom calibrations to the Fatmeter (see the Technical Manual on the CD-ROM and on the Distell website). All program functions are accessed using the menu and toolbar options. There is a comprehensive on-line help facility, which is available by clicking on the Help menu option.

Historical data download

This function enables you to download readings that are stored in the Fatmeter.

The data includes the date and time of the sample, the calibration setting that was used, the number and values of the individual samples taken, and the average value of the samples.

To illustrate the procedure, we'll assume that you have taken some sample readings with the Fatmeter and are ready to download them to your PC.

Step 1: Connecting the Meter

Connect the meter to a USB port on your PC, using the data cable supplied with the meter, then turn the meter on. When the cable is connected the USB driver software installed on the PC will create one or two 'virtual serial ports'. Normally these are COM3 / COM4, but this may change if you have other USB virtual serial devices installed. Your computer will normally reserve COM1 and COM2 for built-in hardware, or for legacy purposes

Step 2: Configure the DMS

Start the DMS then use the Preferences option under the Edit menu to select the COM port to use. If the USB driver created COM3 and COM4 then you would choose COM4 here. In general you should always select the virtual COM port with the higher number. If you see an error message when you

select the COM port then ensure that the meter is connected properly and turned on. If it is, try selecting a different COM port.

Once you have connected the meter and selected the correct communication port, select Download Historical Data from the Download menu. The DMS will now monitor the COM port for incoming data from the meter.

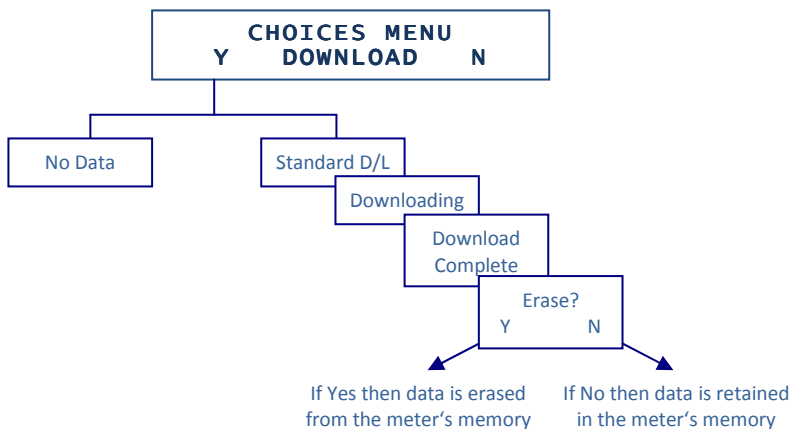
Step 3: Initiate the download from the meter

Once the DMS is ready and waiting for data, the meter needs to be told to begin the download.

Find the 'Download' option in the choices menu (see 'Menu Structure'). At the 'Standard D/L' option, press the **Read / Yes** button then look for the data arriving at the DMS.

If no data is seen at the DMS then you may have selected the wrong COM port. Go back to step 2 and try an alternative port.

Once the data has been safely downloaded then you can, if you wish, erase the data from the meter. You can, alternatively, allow data to build up in the meter up to the maximum 1000 readings. If you wish to clear the data from the meter at a later stage then you can use the Clear option from the Choices menu.



When the data has been successfully downloaded, it will appear in the DMS in a spreadsheet / grid form. With the data in the DMS you can now:

- Print the data
- Add extra columns of information
- Save the data in native form as an .FMD file.
- Export the data as a Comma Separated Value (.CSV) file for exporting into other applications such as Excel, Access, etc.

Real time data download

You can use this function to download data in real time, sample by sample, each time that an average reading is created by the meter. The real time data will appear on screen line by line as you use the meter.

The purpose of the real time facility is to allow the user to see sample data instantaneously, as the readings are taken. Each time that an average reading is generated by the meter, it downloads the sample data via the USB communications port.

There is no specific process in the meter to download data in real time; the samples are automatically sent to the PC as they are taken.

Enabling real-time data download

Connect the meter to the PC and start the DMS, as described in steps 1 and 2 of 'Historical data download', above, then select 'Real-time download' from the Download menu.

Data will now appear in the DMS once the average reading has been recorded in the meter.

Annotating the data

The DMS presents the data in a grid with one row for each set of samples. You can add extra columns to the grid using the 'Add a new column' option of the Edit menu, and use that column to add notes about any given sample. Extra columns can also be deleted using the 'Delete column' option of the Edit menu.

DMS data files

Like most applications, the DMS can save data to a file on disk and load it back in again. Data is stored in a proprietary format in files with a .FMD extension. The Open and Save options under the File menu are used to load and save these data files.

Printing data

The DMS can print a report of the data for audit purposes. The Print option is under the File menu.

Exporting data

The DMS was never intended to be an analysis tool. Instead, you can export the data to a Comma Separated Value file (.CSV) for use within a spreadsheet or database. To export the data, select Save As... under the File menu, then select 'CSV files (*.CSV)' in the 'Save as type' option.

Data Management Software help

The DMS program provides an On-Line Help Facility. This can be accessed at any time when using the software program.

Advanced topics

The DMS has the capability to create custom calibrations and to upload those calibrations to the meter. These are areas that are not expected to be of interest to most users, so they are not documented here. You can, however, read more about them in our Technical Manual, which is available on the CD-ROM or can be downloaded from the Distell website.