Monitor Software 382Mon

1 Introduction

382Mon software utility is made for visualisation and setting up of Unipower Power Monitor APM382. The software is Windows based and has the following system requirements.

1.1 System requirements

Processor: Pentium 130MHz
Harddisc: Min. 3Mb free disk space.
COM-port: 1 available RS232-port. (Max. COM8)
             The Baud rate is automatically set to 9600 baud
Monitor: Min. resolution 1024x768.
Operating system:
             Windows 98, Me
             Windows NT 3.5 or newer
             Windows 2000
             Windows XP
             Windows 7
             Windows 8, 8.1
             Windows 10

1.2 Installation

The software may be supplied in various ways; on floppy disc or CDROM together with the APM382 or from our website: www.unipower.dk. The installation procedure depends on the media.

Download

Save or execute the downloaded file „Setup.exe" and follow the installation procedure, which automatically installs the software and creates the necessary directories and shortcuts. This way all data is stored with the 382Mon software and is easy to find.

Floppy disc

Run „a:setup" and follow the installation programme.

CDROM

If the installation does not start automatically, run „setup.exe" from the CDROM and follow the installation programme.

1.3 Starting up 382Mon for the first time

382Mon is set up by default to communicate with the APM382 via Com1. Therefore, if APM382 is connected to a different Com-port, the power readings will all read „- -" as will the unit type. Also no curve will be present in the roll area. If so, the correct port must be found or chosen. From the menu select Communication and the desired Com port (see figure1.1) if the port is known. If not the software is able to detect if the APM382 is connected to one of the available COM-ports. This is done by selecting „Auto connect" from the Communication menu (see figure 1.1). If no APM is found a message is given.
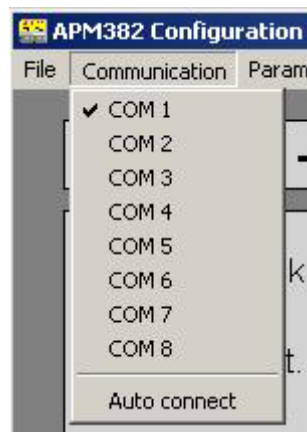

Figure 1.1 Communication

If an APM382 is connected to the selected port or found using auto connect, the power readings show the received measurements, the unit type field will show the connected unit, the roll area will start to show the measured power and the system is ready for use.

Next time 382Mon is started the correct Com port is stored (remembered), therefore setting up the port is only necessary the first time, unless a USB-COM converter is used, in which case it may be necessary to use the auto connect function each time the computer is started, since the operating system may assign the USB-converter to a different COM-port at each new startup.

User settings in 382Mon are generally stored to make use of the software as easy and straightforward as possible.
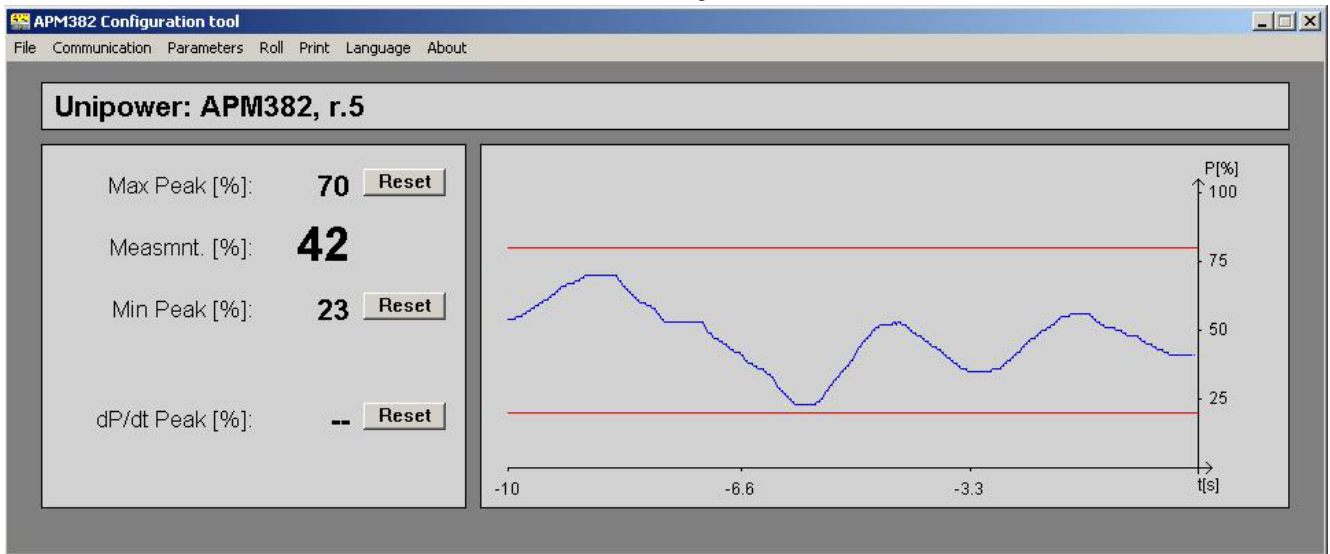
2 Layout

Figure 2.1 Layout of the screen

As well as setting up the APM382, the 382Mon also shows the actual power measurement as a real time value and as a curve with a history of 10, 30 or 60 seconds. Also the max- and min peak values are shown and the dP/dt-peak if this type of supervision is enabled.

Each peak value may be set to the actual measurement by pressing the corresponding „Reset"-key. Measurements are send every 10ms and updated every 300ms except when a dU/dt event occurs, in which case this event is signaled by showing a „dU/dt" below the dP/dt peak reading (see figure 2.2)

Figure 2.2 Signalling dU/dt (Voltage spike)

2.1 Roll area
The roll area shows a history of measurements along with the two limits (if enabled). The range of the roll area may be set to 10, 30 or 60 seconds via the menu as shown i figure 2.3
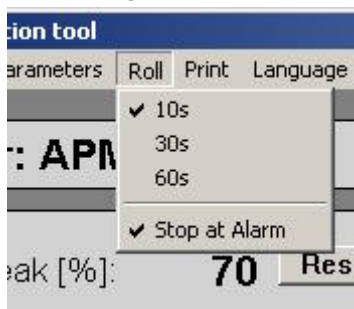

Figure 2.3 Roll settings

The curve roll may be stopped and restarted by pressing the „Pause"-key. A feature for stopping the curve roll automatically when an alarm has occurred is also added as shown in figure 2.3.

2.2 Print
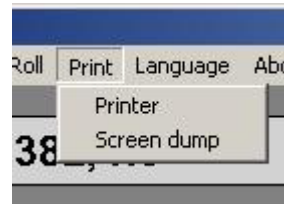382Mon includes features for both printing on paper and storing electronically in Windows BMP-format;

Figure 2.4 Print

Selecting Print->Printer from the menu (see figure 2.4) produces a complete printout with the present curve, peak values as well as all parameters.

Selecting Print->Screen dump stores the screen contents in Windows bitmap format (BMP). The user decides where to store the file and what to name the file.

2.3 Language
382Mon supports at present three languages; English, German and Danish - see figure 2.5.

Figure 2.5 Language

After selecting a language all menus and texts change. This way also all printouts are presented in the selected language.

3 Setting up APM382

The APM382 may be programmed with 382Mon utility, parameter by parameter or with a whole parameter set loaded from disk. In addition a parameter set may be saved on disk, making programming of several APM382 with the same set of parameters easy.

3.1 Parameters

From the menu (see figure 3.1) the parameters are loaded from the APM382 and shown in categories in a property sheet (see figure 3.2). If APM382 isn't correctly connected to 382Mon, a warning is given at the start of parameter setup, telling that changes cannot be sent to APM382. The parameter window may still be opened for viewing.

Figure 3.1 Selecting parameter setup

The property sheet showing the parameters contains four pages as shown in figure 3.2; One page for each limit (Limit 1 and Limit 2), one page for the dP/dt-Limit and one page for a general setup of the APM382 (Setup).
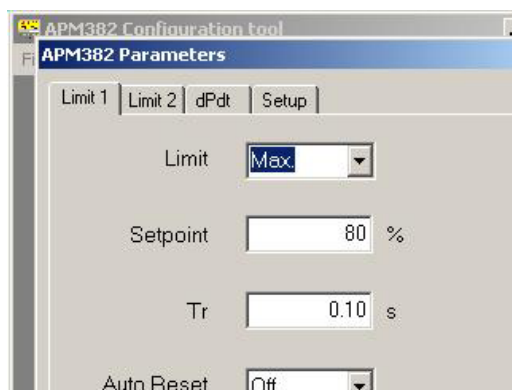
Figure 3.2 Property Sheet.

For an explanation of the parameters and their use, please refer to the data sheet for the APM382 or the technical article on our website www.unipower.dk.

When the desired changes have been made to the parameters, they are sent to the APM382 by pressing the „OK"-button. Changes are discarded if the „Cancel"-button is pressed. If the parameters are not received correctly by the APM382 a warning is shown after a time-out period of app. 2 seconds.

3.2 Save parameters on disk

All parameters for an APM382 may be stored on disk for documentation or easy programming of a new APM382. This function is found in the menu under „File" as shown on figure 3.3.
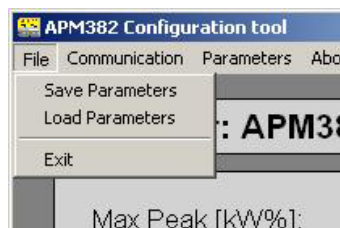
Figure 3.3 The File-menu

3.3 Load parameters from disc

To program an APM382 with a stored parameter set select „Load Parameters" from the file menu as shown in figure 3.3. This sends the parameters automatically to the APM and responds with a warning, if the parameters are not received correctly.