

INTRODUCTION

MIDAS is a piece of computer software designed specifically for Windows applications. The software enables the central storage, display and use of electrical data from up to 255 NEMO or XTEMC multi-function power monitors. These devices must be fitted with RS485 communication and connected to one bus network. A typical application is for this information to be used for monitoring energy usage trends, and subsequently improving energy efficiency. This information may be interrogated both locally and remotely via modem and PC Anywhere. Varying levels of access are available on the software; a standard operator has access to all displays but cannot modify devices; a supervisor may modify information but not add or delete devices. The manager has access to all levels. The section below describes the various menu functions available.

DEVICES MENU

Insert Device - The manager may add devices to the database. Information programmed into the physical NEMO may be read, and nominal voltage and current entered which can be used for scaling purposes by the software.

Modify Device - Enables supervisor to modify details of an existing device.

Display Device - Enables user to display details of any selected device.

Print Device - The user can print to a local printer the details of any selected device.

Delete Device - Allows the manager to remove any device from the active programme.

Restore Device - The manager may restore any previously deleted device.

Set Alarm Threshold - The software will log and display alarm functions. This selection allows the supervisor to set software alarm thresholds for under/over voltage, overcurrent, max power, power factor and maximum demand power. Hysteresis may also be programmed.

Devices Table - Allows the user to list all devices configured in the database. Device information may also be exported to spreadsheets (.CSV files) or word processors (.TXT).

KTI & KTU Configuration - Allows the user to program current and voltage ratios on XT-EMC units.

SETTINGS MENU

Software Setup - The manager may modify directory and name information and select the serial port to be used for communication with devices.

Bargraph Setup - May be set by the supervisor. Bargraph displays may be set with independent zero and full scale values anywhere between 0 and 200% for voltage, current and power (see display of instantaneous values - instruments).

Daily Consumption - May be set by the supervisor to monitor the daily energy consumption for any day(s). Daily start and stop time can also be programmed. Up to 3 separate tariffs may be programmed.

Traces - This feature allows the user to set the software to store information for any number of parameters and any number of devices. It will table a reading every period set by the user from 1min to 60 mins. The user may set a start & stop date and may view the information in graph format and table format.

Password Setup - The manager may configure password settings for other managers, supervisors and users.

DISPLAY MENU

Instantaneous Value - 5 display screens are available:.

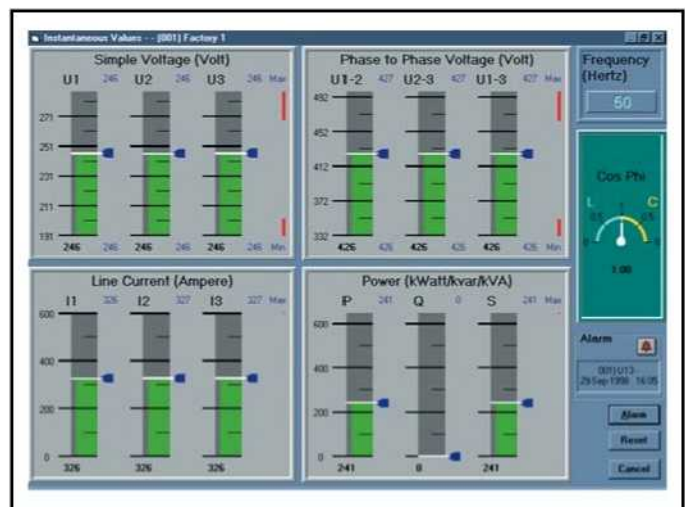
Peripheral - Displays voltage, current, power in horizontal bargraph form, plus digital reading of power factor and frequency. Details of the last recorded alarm are also shown.

Instruments - As above but in combined bargraph/pointer format. The bar changes colour against alarm setting; green indicates healthy, yellow pre-alarm, and red indicates alarm condition.

Recorder - Displays voltage, current and power in line graph format, with programmable reading interval.

Group - Displays values for a pre-determined set of devices.

Energy Meter - Displays kwh and kvarh values for all configured devices.



Display Menu, Instantaneous Values, Instruments

***Alarm Status** - Displays details of values on each device being monitored, even if not in alarm condition.

***Energy and Average Power** - Displays, per device, kwh/kvarh values and maximum demand power in digital form.

***Daily Consumption** - Displays daily energy consumption figures for each device. May also be displayed in line graph form.

***Traces** - Allows the user to view information for any active traces.

***Average Power Trend** - Displays time based average trend values for current, voltage and power.

***Min and Max Occured** - Displays, with date and time, the min and max recorded values for all instantaneous values for all devices.

***Alarm** - Displays alarm occurrences by time, date, type and value. The user may select all alarms, live or dead alarms or no communication errors, and may select any period for display.

*** Information may be exported in Excel .csv format for use/manipulation in spreadsheet format.**