

U1600 – EXCEL Macro

Data Transfer from the Energy Control System to Microsoft Excel

Program Features

The U1600.XLM macro is used in combination with MS Excel (as of version 4.x) for Windows 3.x, 9x, Me, NT, 2000 and XP. It is used for reading out data from one or several U16xx summators within the ECS LAN (U1600, U1601, U1602, U1603, U1613, U1615, U1650), and representing these data in numeric form in an Excel spreadsheet. Additional, customer-specific analyses can be performed with the Excel spreadsheet. A link is established between Excel and the summators with the help of a dynamic link library (DLL) whose functions are utilized by the U1600.XLM macro.

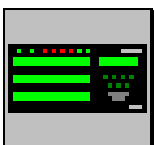
The following data can be read out according to the memory structure of the U16xx:

- Energy per interval from the summators during a time period specified by means of date and time
- Maximum energy values per interval (11 absolute maximum values)
- Energy and maximum measured interval value per day for the last 10 days and the current day
- Energy and maximum measured interval value per month for the last 12 months and the current month
- Energy and maximum measured interval value per year for the last 2 years and the current year

(All data defined here as “energy” quantities can also be made available as power quantities if desired.)

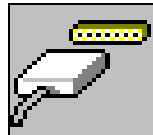
It is also possible to configure serial interface parameters for communication with the U16xx summator with modem initialization and de-initialization strings only if required. Access to “data transmission” and “interface setup” macros is made available via the icons integrated into the Excel user interface:

Icon for Starting Data Transfer



Data transfer from the U16xx is prepared by clicking this icon. The data transfer dialog box then appears.

Interface Configuration Icon



The serial port at your PC can be configured for connection to the U16xx after clicking this icon. The interface dialog box then appears.

All of the dialog boxes and error message windows used by the macro program include a context sensitive hyper-text help function.

Data Transfer

Assuming that all port parameters have been correctly configured, clicking the icon which initiates data transfer causes the macro to find all connected summators, and then opens a dialog box for the entry of additionally required information.



The following functions can be selected with the various options:

“From time” / “To time”: If interval measurement data are transferred, the start time or the finish time is displayed for the specified interval.

“Energy” / “Power”: Values are transferred either as energy or power values.

“Mean value”: Mean values for the specified time period are transferred.

“Int. Maximum”: Transferred values are maximum interval values (i.e. highest 15 minute mean value) for the specified time period.

“Interval”: Interval data can be transferred (as a rule 15 minute values). This command is only advisable with formatted channels. The viable time range for stored data depends upon the contents of the summator’s format list.

“Day”: Values can be transferred for the current day, and for as many as the last 10 days.

“Month”: Values can be transferred for the current month, and for as many as the last 12 months.

“Year”: Values can be transferred for the current year, and for as many as the last 2 years.

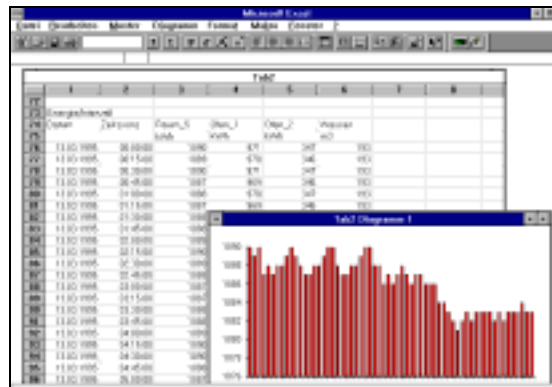
Interface

The dialog box shown below is used to select and configure the serial port for connection to the U16xx. A help file including descriptions of the elements contained in the dialog box can be accessed by clicking the help button.



In addition to entries for the physical interface, parameters can be configured here for operation with a modem as well if necessary, including maintenance of a list of dial-up numbers.

Example: Data Analysis with MS Excel



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