# ECSwin
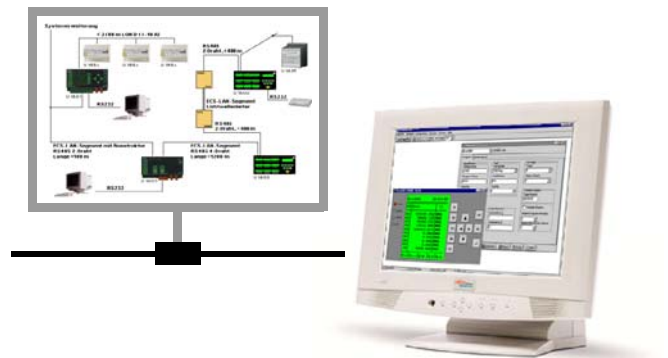# Parameters Configuration
# and Data Visualization for Summators

- Configuration of general summator parameters
- Creation of background programs
- Creation of virtual channels
- Setting of system time
- Setting of initial meter readings
- Terminal function for manual entry of commands
- Emulation of operating panel for remote control
- Graphic representation of ECS LAN network topology
- Query and graphic representation (in tabular or graphic form) of intervallic, daily, monthly and annual energy and power data which have been stored to memory at the summator
- Graphic representation of currently measured values as characteristic curves
- Runs under Windows™ VISTA, 7, 8 and 10

**ECSwin** is primarily used for configuring parameters for type U16xx summators in an **E**nergy **C**ontrol **S**ystem (**ECS-LAN**). Beyond this, read-in and visualization of energy consumption data in the form of measured value tables and graphics is supported as well.

The program has been continually revised and adapted to current requirements. Version 4.0 of **ECSwin** is now available in 32 bit version and can be used with 32 and 64 bit Windows operating systems as of **Windows™ Vista, 7, 8 and 10**. In addition to specific improvements with respect to program handling, the following new features are of special significance:

The installation routine has been adjusted to the requirements of the current 64 bit operating systems.

- As from now, the **ECSwin** software will be supplied in one version only which corresponds to the previous **ECSwinIP**. It offers network compatibility on the basis of TCP/IP sockets, thus allowing for the use of hardware COM servers or COM server programs on a remote computer and/or enabling several clients to access several **ECS-LAN** networks. On computers to which **Windows™ Vista, 7, 8 and 10** has been installed, it is also possible to use a multi-client compatible utility program (ECS-Dienst.exe) as COM server.

- The included utility program **FELANIP** for controlling the local serial interfaces is now running stably with COM1 ... 256 and up to 921600 baud!

- The development and enhancement of the previous version **ECSwinDDE** has been stopped. However, single PC operation including modem dial-up is still guaranteed with the standard installation of **ECSwin**.

- The operating features and modified parameters for the new station type **SU1604** have been embedded.

- The user interface is available in four languages (German, English, Italian and Portuguese), the manuals are availabe in three languages (German, English, Italian).

In detail, the following functions are provided by the software:

- Selection of connection
- Terminal (communication using ECL commands)
- ECS LAN logon and logoff, as well as configuration of access authorities
- Set system time within the ECS LAN
- Configure general summator parameters
- Configure channel parameters
- Set meter readings
- Configure relays
- Transfer any desired commands and data to and from the summator
- Create background programs for the use of virtual channels
- Visualization of the various U16xx front panels including display (2 lines of 16 characters each), keys and LEDs
- Ascertainment and graphic representation of ECS LAN network topology
- Querying and display (as table or characteristic curve) of intervallic, daily, monthly and annual energy and power data which have been stored to memory at the summator
- Graphic display of currently measured values (PMOM, EINT, ANA etc.) in data logger format.

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## Selected Program Components

The **terminal window** allows for free communication with a summator, although knowledge of **e**nergy **c**ontrol **l**anguage (ECL) is essential to this end. There are two basic ways in which the terminal window can be used: as an empty window to which ECL commands are normally entered using a keyboard, or as a window containing text which is generated by loading an existing command file.

The program components included in the **Configuration** menu allow the user to read in and edit existing device and channel parameters for a given summator, or to reconfigure a summator using stored data.



Data are generally managed in a table (similar to **EXCEL**), and all of the table's cells can be easily accessed. Parameters can be readily transferred to other summators with the **Transfer to ...** command. A series of plausibility checks is executed by the program during entry. This applies to, for example, certain channel parameters for which only a limited number of statuses can be entered (e.g. **On** or **Off**), limiting of the number of utilized characters, or checking for convertibility of numeric data fields.

The window for generating virtual channels provides for access to the channels of all summators within the network. By selecting channel names, a list of channels to be summated can be generated (individual channels can also be weighted). After a number has been assigned to the virtual channel, the background program is generated by **ECSwin**. Any existing background program is displayed when reassignment is executed in order to prevent inadvertent overwriting.

As opposed to the program components included in the **Configuration** menu, components in the **View** menu do not have any affect on summator parameters or data. They are used solely for the display of current data and parameters. However, the front panel display option represents an exception in that the included buttons (which emulate the keys at the summator) can be used to change parameters.
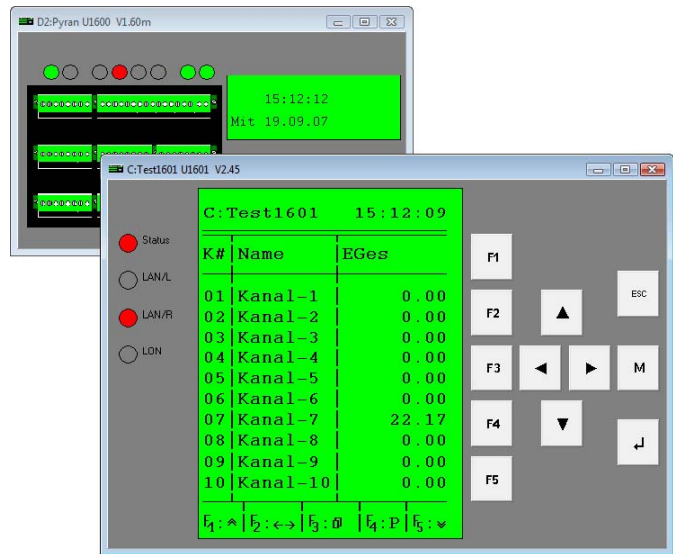


The **LAN topology** command is used to find all summators which are connected to the server PC, to read in a list of the left and right-hand neighbors of all summators, and finally to generate a representation which reflects the formal layout of the **ECS LAN**. Each summator appears as a rectangle including ID and device type. The use of color highlighting (and right bus with output at the lower edge and left bus with the output at the upper edge of the rectangle) indicates which summator is connected to the next summator via which interface. Especially where large networks are involved, this allows for quick recognition of the availability and status of each summator.
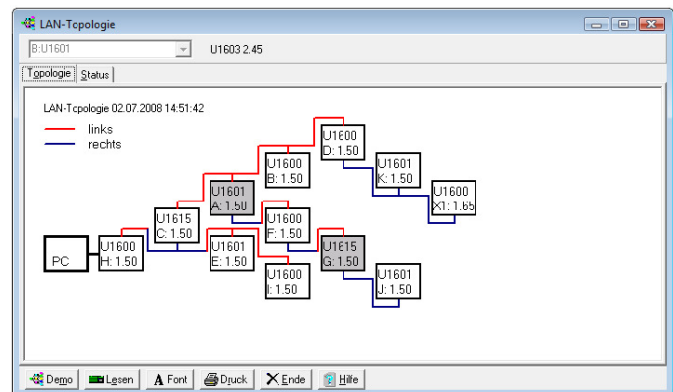


Measurement data can be read out from the U16xx summators and displayed as a table or a characteristic curve with the help of the **Energy/power** and **Line writer** functions in the **View** menu. Data from the line writer display can be saved continuously to data files. Access to interval data is supported by highlighting the formatted channels within the list of all channels, and by means of a calendar for selecting a time span. Data read out from the ECS LAN can be directly imported to other programs (e.g. MS Excel) via the Windows™ clipboard, or can be saved as a data file.
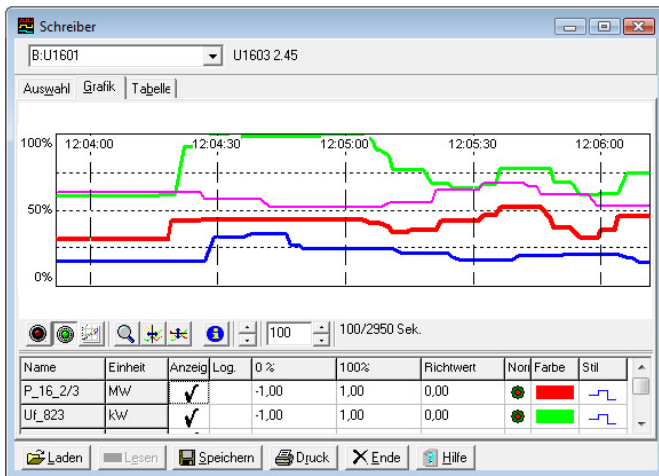
## Accessories

**ECSopt**          Software for maximum optimization for summator U160X

## Order Information

| Description | Type | Article number |
|---|---|---|
| Software for parameters and configuration via RS232 or Ethernet TCP/IP | ECSwin IP | Z302E |
| Update of version 3.x to 4.x * | ECSwin Update | Z302H |
| Additional license for 1 additional work station * | ECSwin Additional License | Z302M |
| Additional license update of version 3.x to 4.x * | ECSwin Update Zusatzlizenz | Z302N |
| Additional module, maximum optimization with U160x for ECSwin IP | ECSopt | Z302F |

\*   receipt of purchase of basic or previous software version required

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