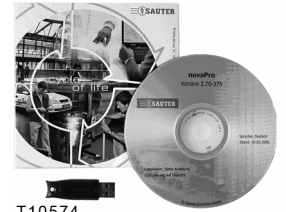# SWMP36/24USB : novaPro

novaPro, allows the centralised operation and monitoring of technical plant with decentralised, autonomous substations.

Microsoft Windows-based Ethernet network program for the visualisation and editing of process data, with control, optimisation and monitoring functions. Approximately sixty drivers for linking to alien systems, plus database via ODBC, OLE, DDE, SQL, OPC, enable the horizontal integration of a wide range of sub-processes in a building. Due to its modularity, **novaPro** can be tailored to the individual requirements of a particular installation. The advanced alarm management system permits incidents to be reported via SMS, e-mail, fax or voice-mail.

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Type [1]	Features
novaPro basic package [2]	
SWMP3600/2400	Basic package with Parallel dongle including 250 addresses
SWMP36/24USB	Basic package with USB dongle including 250 addresses
Extensibility	
SWMP3600DP	Data-point increase for novaPro by 1 address
SWMP3600DP50	Data-point increase for novaPro by 50 addresses
SWMP3600DP100	Data-point increase for novaPro by 100 addresses
SWMPPC	Dongle increase by 1 participant (PC station)
SWMPALJ	novaPro update to latest version
Options	
SWMPCLIPONUSB	Clip-on licence, USB dongle, incl. addresses and software tool
SWMPCLIPON	Clip-on licence with parallel dongle, incl. addresses and software tool
SWMPNAME	Change the name of the installation
SWMPLOG	Logbook functions: password/command
SWMPOPCS	OPC server
SWMPBACNETSER	BACnet server (gateway max. 10,000 objects)
SWMPINFO	Info reporter (alarm forwarding)
SWMPWAHL	EY3600 dial-up (requires EY2400)
SWMPWAERME	Heat-quantity module
SWMPTZPROT	Cyclical protocols
SWMPTSQL	Tool SQL database (bidirectional data exchange is possible)
SWMPTDA	Tool for data analysis; link via SQL database tool
SWMPTRAUM	Tool for room occupancy
SWMPOPCC	OPC client
SWMPRELAIS8	Driver for relay outputs
SWMPDDE	DDE interface
SWMPFEM	Software FEM for Windows, accounting program
SWMPDATENBANK	Export database
SWMPEXPSONDER	Data export of special formats for project-related requirements
SWMPTDSCSV400	Export the data memory into a CSV file

Accessories

EYZ 291 F001	**novaNet 291 novaNet-Router**; see PDS 96.691
EYZ 485 F001	V.24/EY2400 DL converter; see PDS 96.210
7301023001 [2]	novaPro manual: Operation
7301022001 [2]	novaPro manual: Engineering (Part 1)
7301040001 [2]	novaPro manual: Auxiliary modules (Part 2)
7301051001 [2]	novaPro manual: Auxiliary modules (Part 3)
EYK300F700 [2]	Communication card: novaNet over Ethernet for AS3600 modular
RELAIS8 [2]	External contact outputs with RS232-novaPro connection

[1]   Dongle and novaPro licence with EY3600, EY2400 and Modbus drivers; 2 participants, direct-print re-routing, operating protocol

[2]   SCU article no

Links	
SWMPINSTA	Link to INSTA ACTIVITY
SWMPZUMTOBEL	Link to Zumtobel LUXMATE BMS
SWMPMINOL	Link to M-BUS-MINOL-/PADMESS centre
SWMPINTOUCH	Link to Intouch Wonderware
SWMPFUNKRUF	Link to BOSCH – Funkruf RP201
SWMPFSAIA301	Link to Saia
SWMPFPLMASTER	Link to Jean Müller PL-Master
SWMPFPARKLEIT	Link to parking management system (Scheidt and Bachmann)
SWMPFNPO	Link to novaPro Open
SWMPFMULTITON	Link to Multitone
SWMPISTA	Link to M-Bus-ISTA-Memonic centre
SWMPFISYGLT	Link to ISYGLT bus system
SWMPTBSAVE	Link via TB-Save
SWMPSM88	Link to SM88 fire-alarm/security system (Siemens)
SWMPSCHRACK	Link to BMZ-MAXIMA/SCHRACK SECONET
SWMPBUESP1	Link to BuES-Bus P1/Witos
SWMPASCOM942	Link to TATECO 942SI
SWMPASCOM940	Link to TATECO 940SI
SWMP3964R	Link to 3964R/RK512 protocol
SWMPFDIGIDIM	Link to DIGIDIM, Lightning Control System (HELVAR)
SWMPFIDELIO	Link to FIDELIO hotel booking system

Type [1]	**Features**
Links	
SWMPFHYDRO400	Link to Hydrometer HYDRO-CENTER 250 Memory
SWMPFHOTELIP	Link to Amadeus hotel booking system via TCP/IP
SWMPFGOSSEN	Link to Gossen Metrawatt A2000 products
SWMPFESPA	Link to Siemens Sigmasys via ESPA protocol
SWMPFDSC	Link to dinotec DSC2000
SWMPFCODESYS	Link to CoDeSys SP RTE Soft SPS
SWMPFBMZSECUR	Link to Securipro (Securiton) via OPC
SWMPFBERGZ	Link to Berg UPM30 or UPM3010 meter
SWMPFALCA4400	Link to ALCATEL 4400 Notification Server
SWMPESSER	Link to ESSER 8007/8008 fire-alarm system
SWMPFIX	Link to Intellution FIX
SWMPFEBAL	Link to EBal (order SWMPTSQL separately)
eRCD	
SWMPTERCD10	eRCD for 10 clients
SWMPTERCD25	eRCD for 25 clients
SWMPTERCD50	eRCD for 50 clients
SWMPTERCD100	eRCD for 100 clients
SWMPTERCD200	eRCD for 200 clients
SWMPTERCD500	eRCD for 500 clients
SWMPTERCD1000	eRCD for 1000 clients
SWMPTERCDER10	eRCD update by 10 clients

[2]   SCU article no

Sauter Systems

novaPro provides the user (under Microsoft Windows NT/2000/XP) with full SCADA/HMI functionality. In addition, all information can be viewed and edited using a standard web browser via either an intranet or the internet.

Main Features

- Modular software, freely configurable.

- Standardised user interface as per Windows Standard NT/2000/XP.

- Simple, self-explanatory engineering resources that enable the operator to expand the system. The configuration changes can be done online.

- Plant visualisation and operation from within the plant schematics and/or plant list.

- Dynamic plant schematics with portrayal of process variables as numerical values, bar graph, symbol, fill function, text, min. 10 trend-curve diagrams each with up to 6 different addresses per plant schematic (can be hidden/shown).

- Dynamic plant list.

- Alarm monitoring with alarm report and operating log.

- Alarm logging, allocable to any printer in the novaPro net and/or entries into a file.

- Alarm forwarding per voice-mail, SMS, fax and/or e-mail.

- Switching and positioning commands and setpoint changes from within the plant schematic.

- Time-dependent functions/annual calendar.

- Arithmetical, logical and module functions such as heat quantity, meters, controllers and limit monitoring of process values.

- Differentiated password protection, either hierarchic or with equal authorisation, with 100 levels.

- Recording of historical data and portrayal thereof as trend curves.

- Export of HDB data for use in external programs.

- Display of the main product information concerning the monitored units (e.g. spare-part details, maintenance information etc.).

- Mathematical formula package.

- Tabular presentation of all process data points as a plant protocol with up to 64 saveable combinations.

- Easy-to-use graphic editor and program.

- Symbol and micro library.

- Object assignment with offline test function.

- Freely definable text and graphic buttons.

- Logbook for system activities and user interventions.

Sauter Systems

Dynamic plant schematics

The portrayal of plant values and conditions is effected by dynamic process schematics and/or plant lists.

To improve clarity, the whole project can in be split up into plant sections which can be shown as either diagrams or lists. The current process variables are shown as counter values, fill functions, bar graphs, symbols and text. For reasons of usefulness, a layout plan or a building overview is created as the basic diagram.

From this overview, other, ordered dynamic overview plans (or the preferred plant section direct) can be called up via buttons. The plant sections then show the associated process with all analog and binary values and conditions shown. Added to these items of information is inter-project information such as date, time, most recent alarm etc. The switching of loads, the changing of setpoints etc. cannot, for safety reasons, be performed direct from the dynamic plant schematic. Such functions are contained in pick-up windows containing the associated, password-protected buttons. These pick-up windows can be called up from dynamic process diagrams/plant lists.

Analog values can be monitored to pre-definable limit values.

Recording of historical data

All addresses can be saved either at definable times (shortest interval is 1 sec) or when an event (e.g. a fault) occurs. Access to historical data is possible at any time, using trend curves that can be viewed in the dynamic process diagram.

If addresses need to be saved simultaneously, up to 128 of them can be grouped together in database tables.

Each database table can hold up to 29999 entries.

There are up to 100 database tables available, and they are processed simultaneously. When the maximum number of data records has been attained, the oldest entry is overwritten. These data can be written beforehand onto any drive (e.g. diskette). The export of these data – in order to portray process variables in accordance with national and customer-specific guidelines in the form of tables or presentation graphics – is possible in dBase3 format..

Trend curves

These show the temporal progress of one or more variables as curves over a horizontal time axis.

In every dynamic plant schematic, an up to 10 trend curve diagrams, each with up to 6 different addresses, can be shown simultaneously as curves, marked with (freely definable) different colours. The horizontal axis represents time, the vertical axis the values of the addresses. The scaling of the axes can be altered.

Man Machine Interface

novaPro provides all the tools that you need to be able to establish an effective user interface and a monitoring application. Configuration changes can be done online; their effects are visible immediately.

Graphics program

The Graphics Editor is used to create the statistical process schematics. Resources, such as mouse, zoom etc. are available. The Graphics Editor lets the user edit the schematics quickly and easily. Functions such as delete, line, rectangle, circle, ellipse, fill, colour change, zoom and edit picture extracts are the main elements of the Graphics Editor. An extensive symbol library is available for simple graphics. Graphics created on other software, such as Designer, can be imported via the Windows clipboard.

Test function
The plant schematics' dynamised addresses can be tested using the integrated test function, regardless of the process data.

Alarm monitoring with upkeep of an alarm report
An alarm is the reporting of the status of an address under certain, previously defined marginal conditions. Depending on the status of both the alarm and the optional acknowledgement, alarm messages can be marked in the alarm list as plain text by freely definable colours for the entries. All four conditions (Normal, Alarm, Acknowledged, Normal without previous acknowledgement) of an alarm can be configured. There are up to 256 different alarm groups available for this purpose. The alarm list can be viewed and archived at any time. It is possible to simultaneously print out the alarms with a freely definable text of up to 60 characters on up to 3 printers per network subscriber. It is also possible to put such alarms into a file instead of printing them out. The most recent alarm can be shown in the dynamic plant schematics. When an alarm occurs, it can place a pre-defined diagram (e.g. the diagram with the active alarm) automatically in the foreground. Furthermore, an event can be notified both optically and acoustically by a pop-up window and sound respectively. The alarm table can hold up to 22 000 entries. The alarm report manages up to 5 000.

The alarms can be forwarded as voice-mail, SMS, fax and/or e-mail.

Annual calendar
These take the form of a twelve-month calendar in which the days or date periods can be marked. The coming twelve months are available for entries

Password protection
Differentiated password protection, either hierarchic or with equal rights, with 4 classes in 100 password levels.

Open architecture
novaPro has extensive tools for exchanging data with other programs. **novaPro** supports the standard interfaces such as ODBC, OLE, DDE Client/Server, OPC Client/Server, SQL Client/Server, 3964R/RK512 Master/Slave.

Links:
Link to Sauter novaPro Open management system

Link to non-Sauter systems such as InTouch, SoftPLC, Multitone ACCESS 3000 or ACCESS 1000, Cityruf, Insta Activity, Tele Base, FIX-EDA, BOSCH RP 201, ASCOM, Fidelio, ALV-EOS, ISTA memonic, Dinotec, Luxmate, parking management system, BÜG, Schrack fire-alarm centre,

Padmess, IOS media control system and others..

Link to standard bus systems such as EIB, Profibus, M-Bus, Modbus.

Link to Sauter's EY2400 and EY3600 automation stations

Link to non-Sauter equipment such as Siemens, Schrack, BuES, ESSER, Hiross-Hiflex/Hirolink, GOSSEN-METRAWAT A2000, SAIA, BERG UPM30/UPM3010

Link to pump systems of the following makes: WILO, Danfoss, Grundfos and KSB (via Sauter automation stations).

Coupling from pc to Sauter automation stations
The automation stations can be connected via Ethernet, modem dial-up, or a two-wire line.

Coupling with integrated lightning protection.

Coupling from PC to PC: multi-user capability
In a structured network, up to 30 subscribers can be linked via Ethernet TCP/IP.

Address capacity
EY2400: max. 1200 addresses per link via EYZ 485 and serial port (up to 8 links to one PC)

EY3600: max. 2000 addresses per EYZ 291 (up to 8 links to one PC)

Mixture of EY2400 and EY3600 links: up to 8 links on one PC are possible.

Processing of min. 26,000 numerical and system addresses (for further stations). An address presents a measured value, counter value, alarm or operating status. For bi-directional functions such as switching command with feedback, metering with reset function etc., one address each (i.e. a total of two addresses) are needed separately for the acquisition and command directions. Apart from the definable addresses, there are system addresses (such as date, time, minute signal, second signal) available; new system addresses can be parameterised.

Processing of up to 1000 text elements for signals.

Minimum PC requirements

Processor:	Intel Pentium III 1.8 GHz (recommended: 3 GHz or higher)
Memory:	512 MB RAM
Hard disk:	min. 1.8 GB (depending on the size of the plant; 9 GB recommended)
CD drive:	for the installation
Ports:	1 mouse
	2 serial RS-232; optional with interface extension
	1 network connector
	1 LPT connector for printer
	1 USB port for dongle
Operating system:	Microsoft Windows 2000, Windows XP, and for Server Windows 2000 and Windows 2003 with the latest service packs
Web browser:	Microsoft Internet Explorer 6.0 and Virtual Machine (Java)
Web server:	Microsoft IIS (Internet Information Server), optional for terminal- server/client applications
Graphic card:	min. 32 MB RAM

Sauter Systems