asix® 5

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Commercial Information Products Price List
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ASKOM

RELIABLE SOLUTIONS OF AUTOMATION SYSTEMS
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asix software package

asix software package consists of several functionally interconnected products. A basic part of the package is **asix** visualization system being a SCADA (Supervisory Control And Data Acquisition) class software that performs wide range of functions for operator supervision over the technological objects, assuring both analog and digital data acquisition, possibility of process control, alarm and event recording, report generation and making process data available within the computer network. Every run-time license of **asix** allows designing of all system components, therefore *development* is available at no charge.

For correct **asix** operation, the following hardware and software requirements should be fulfilled:
- operating system: MS Windows 2000/XP, MS Windows Server 2003,
- processor: minimum - Intel Pentium,
- RAM system memory: recommended 256 MB,
- video: minimum - SVGA with 256 colours and 800x600 resolution,
- pointing device: anyone supported by operating system (mouse, trackball, touch screen),
- NetBIOS protocol implemented (for network instalation).

The **asix** operates in one of the following language versions:
- Polish,
- English,
- Russian,

independently from the operating system language.

asix system is offered in the following packages:
- Standalone engineering station,
- Network engineering station,
- Operator station,
- Operator server,
- Network terminal,
- Operator terminal,
- Asix4Internet,
- AsAlert,
- AsAudit,
- OPC/DDE/OLE/.NET Server.

New **asix**-EDUS educational package is intended to university / college usage. It includes 5 licenses with the functionality dependent on the way of configuring the USB hardware dongles used to run the software. An additional program available in the package enables reprogramming of the dongles according to the users' needs – so that the program could work as:
WAUT – network terminal,
WAUW – unlimited operator station,
WAUS – unlimited operator server,
WAUO – operator terminal.

There are additional options available for each dongle:

- **asix** -4Internet – portal/ WWW server for simultaneous operation of one client,
- AsAudit,
- station/server extension to multi-monitor operation.

The **asix** -EDUS license is valid for 1 academic year (till 30 September) – after this time the free of charge updating is needed in ASKOM company.

Standalone engineering station is a license dedicated for development of applications. It allows to create all elements of application and perform run-time tests based either on communication links to PLC's or on virtual variables (with no connection to a physical source of data). The license has no limit on number of process variables but restricts application run-time to two hours ; data archiving and alarm servicing are executed only locally.

Network engineering station is a license dedicated for development of network applications. It allows design and testing of operator server applications. Thus it has capabilities, beyond the ones of Standalone engineering station, to access process data through network channels, to use network archives and to operate in check-up mode of alarm recognition (i.e. review the alarm list stored on operator servers). Run time in application mode is limited to two hours.

Operator station is a license dedicated for local operator stations which allows also to use network data (made available by Operator Servers) as well as makes data available to other applications of Windows environment by DDE/OLE/OPC/.NET server. The operator station provides servicing of alarms in local and check-up mode (i.e. review of alarm lists stored in remote operator servers), collects local data archives and allows to use (read) network archives. Operator station with more than 64 variables limit can also be used as the Operator terminal with available functionality of networked alarm servicing.

Operator station exists in six versions differing from each other by the number of process variables allowed in applications, namely 32 / 64 / 128 / 256 / 512 / 1024 / 4096 variables and without limit on number of variables (i.e. 2^{32} variables).

Operator server, like Operator station, is a license dedicated for operator computers but with additional possibility to export process data to other **asix** computers (operator stations and terminals) and to ensure network alarm servicing (broadcasting actual alarm statuses and alarm acknowledgement on all computers within the network). Apart form all features of Operator station, the Operator server makes possible to operate **in hot-redundancy mode** ensuring functions of data archive synchronization and redundancy of communication channels.

The Operator server exists in five versions differing from each other by the number of process variables allowed in applications, namely 64 / 128 / 256 / 512 / 1024 / 4069 variables and without limit on number of variables (i.e. 2^{32} variables).

Network terminal is a license dedicated for applications executed basing on data available on the network and (only) with check-up mode of alarm servicing. However possibility to run DDE/OLE/OPC/.NET server and data export to other Windows applications is allowed. Network terminal does not limit the number of process variables.

Operator terminal has similar features like the network terminal; the difference consists in possibility of current alarm processing in real time in network mode (information on current alarm status is received on-line). Thanks to this feature, it can be used in control room as operator station, without direct links to the PLC's.

Asix4Internet is a license dedicated for installation on **asix** server to support WWW applications. It allows to connect a dedicated number of client stations at the same time. Asix4Internet includes **AsPortal, As2HTML, As2WWW** – a set of tools for access to process information from Internet Explorer 6 browser:

- **AsPortal** – Portal of Process Information, ready for immediate use when connected to **asix** application. AsPortal displays application process database, current process values, current and historical alarms as well as data trends either in tables or grahic charts, presented in Internet browser window (demo: http://asport.askom.com.pl/asport/);
- **As2HTML** – library of scripts and CSS style sheets which supports design of process visualization for Internet browser window; -
- **As2WWW** – set of tools for automatic conversion of **asix** application into IE 6 browser visualization.

AsAlert is a license of alert server used for remote notification of selected persons about important events and alarms. The messages can reach the addressees by means of e-mails or SMS messages sent through a GSM network, either using Internet or mobile network. AsAlert server license allows sending alarms from **asix** application that operates on the same station. To enable sending of alarms by AsAlert server from a remote station, the AsAlert Client license should be additionally installed on the remote station.

AsAudit ensures integrated support of users' authorizations and control of performed operations. AsAudit module realizes the following functions:

- Handling the database of users and their authorizations, common for all **asix** system modules. Except authorizations available in **asix** v. 4, AsAudit enables protection of access to any file included in application (that means, among other things, it is possible to block for the user the right of command calling, in effect, the right to display specified process screens) and protection of control operations related to individual process variables. All user log-in operations and also all events of attempted unauthorized access to application elements are registered in a database.
- Application file integrity control. This functionality consists in verification whether the contents of the vars database and the application files have been changed in an unauthorized way (i.e. whether user-made modifications were not confirmed through registration in AsAudit database). Each event of files modification is logged in the database.
- Logging control operations performed on selected process variables. AsAudit registers the following data: time of control execution, name of machine performing the control, ID of the logged-in user, value of process variable before the control operation and the control value .
- Logging the operator's actions. It is possible to register which masks (screens) , tables of variables, trends were opened and closed by operator on the selected **asix** system stations.
- System of entering and registering the user notes (it replaces the Notepad module available in **asix** v. 4).

Functionality of AsAudit module in the field of application integrity control and registration of system operation history enables to realize system validation in accordance with **FDA 21 CFR Part 11 / GAMP4** regulations, applied in pharmaceutical and food processing industry.

Functions in the range of support of users and their authorizations as well as registration of user's notes are available in each engineering station, operator station, operator server and terminal license of **asix** system at no additional charge.
To use the functions of integrity control, logging the control operations and logging the operator's actions, the additional *AsAudit* or *AsAudit – Lite* license need to be bought for the mentioned above **asix** system licenses. Type of required AsAudit license depends on the basic **asix** system license used as follows:

WDUW local engineering station – no additional AsAudit license is needed
WDUN network engineering station – *AsAudit – Lite* license is needed
WATW, WAEW, WALW, WABW operator station– *AsAudit – Lite* license is needed
WACW, WAAW, WAUW operator station – *AsAudit* license is needed
Operator server – *AsAudit* license is needed
Terminal – *AsAudit – Lite* license is needed

.NET/OLE Automation/OPC/DDE server – AsixConnect4

AsixConnect4 package includes servers that make **asix** application data available to MS Windows programs. In particular, OPC, Automation, .NET and DDE servers enable current data exchange, .NET and OLE DB servers – archived data exchange, and .NET server - alarm data available to the programs.

Any MS Windows program based on Automation, OPC, .NET or DDE protocols may co-operate with **asix** application by AsixConnect4 servers. Using servers, one can read / write data for process supervisory control and parametrization. Thanks to such solution current process variables as well as their archived values (registered trend of process variables) are accessible on-line in Windows system environment. Examples of software, basing on Automation and DDE server, for data exchange are Microsoft Office programs: Excel, Access, Word and PowerPoint. The applications created by use of these products and AsixConnect4 may efficiently enrich functionality of SCADA systems. These applications may be used for data analysis and visualization, model studies, specialized reports generation and designing databases of process variables.

AsixConnect4 is an integral part of **asix** package, but it may be also delivered as an independent module to be used on PC stations of within computer networks containing **asix** operator servers. In such a case, AsixConnect4 makes available to Windows software the process data accessed from remote computer stations connected directly to PLC's.

Extension to multi-monitor operation

makes possible to create applications on multi-monitor PC stations. It expands **asix** features by automatic recognition of location of new opened windows without the need to declare their coordinates directly as well as changes active set of keyboard shortcuts choosing the one, which is associated to the screen with active mouse cursor. This improves ergonomic of operation and of design.

Additional information

Method of variables counting for purpose of asix licenses

Licenses of **asix** packages differ by their functionality (operator station, operator server, engineering station, terminal) and limit of variables serviced. Below one can find information how to determine the number of variables allowed within a license:

- one analog measurement = one variable within license limit,
- one 8,16 or 32 bit register = one variable within license limit,
- one table element (8,16 or 32 bit) = one variable within license limit,
- one internal (local) variable = one variable within license limit,
- one internal (local) table variable = one variable within license limit,
- variable form NONE channel, not archived = does not apply to license limit,

New

- variable in network channel = does not apply to license limit *.

*) *It doesn't apply to operator station with 32 variable limit as well as computers that make data available with use of GATEWAY function.*

ATTENTION: one 8, 16 or 32 bit register can transfer information about 8, 16 or 32 digital signals. The register could be split into separate signals at the level of visualization dynamic objects. Using such approach, 32 digital signals will occupy only one variable within the license limit.

Version update and upgrade

The versions of **asix** are numbered by ***x.yy.zzz***, where ***x.yy*** is the main number of the version, digits ***zzz*** describe modifications of the main version. When only the digits ***yy.zzz*** are different when version changes, it's called an **update** - ASKOM ensures **free update of system version**. If the main number ***x*** changes for new version, it is called an **upgrade** and it follows against payment according to the current price list.

Communication modules

Each **asix** package includes, **at no additional cost**, a large set of communication drivers, which allow data exchange with measurement devices and most common PLC's of worldwide manufacturers. Apart from dedicated drivers for specific PLC's, **asix** includes open communication interfaces:

- OPC client,
- DE/OLE Automation client,
- MODBUS RTU,
- MODBUS TCP,
- PROFIBUS DP,
- CANBUS,

matching the standards of Windows environment and allowing connection of almost any PLC or measurement device, delivered by the manufacturers with appropriate data servers.

MODBUS RTU and GazModem drivers are adapted for data exchange on dial-up links by means of AsComm module. Other drivers may be also adapted for operation on dial-up links based on Customer request. ☎

Additionally, a special BUFOR driver (including full protocol specification) is delivered, which makes available an universal interface for data exchange with Customer's drivers.

The current price list includes a list of special drivers available at extra fee.

Apart from above possibilities, which are included in every package, ASKOM offers (against payment) a development of special communication drivers for any device of the Customer, when data transfer protocol specification is delivered and, for non typical solutions, also a testing device.

4-day training

Fast mastering of basic skills required to develop and run an application is possible by 4-day training at ASKOM company site. Every Participant has his personal computer for training purposes, with latest versions of **asix** installed, and is learned how to develop the application from the very beginning. We make also our knowledge available about various non-typical solutions which make development works faster and easier, we share our knowledge of so-called "tricks" improving maintenance of the software and development of the applications. Part of information presented during the training is not included in any manual. Achieved knowledge and skills are tested by the users in their own original applications developed at training course.

SOFTWARE

Package name	Type	Price
Educational package New	**asix**-EDUS	**€ 200,-**
Local engineering station	**asix**-WDUW	**€ 140,-**
Network engineering station	**asix**-WDUN	**€ 450,-**
Operator station, 32 variables limit	**asix**-WATW	**€ 330,-**
Operator station, 64 variables limit	**asix**-WAEW	**€ 530,-**
Operator station, 128 variables limit	**asix**-WALW	**€ 860,-**
Operator station, 256 variables limit	**asix**-WABW	**€ 1150,-**
Operator station, 512 variables limit	**asix**-WACW	**€ 1740,-**
Operator station, 1024 variables limit	**asix**-WAAW	**€ 2000,-**
Operator station, 4096 variables limit New	**asix**-WAFW	**€ 2330,-**
Operator station, “unlimited”, limit: 2^{32} variables	**asix**-WAUW	**€ 2620,-**
Operator server, 64 variables limit	**asix**-WAES	**€ 650,-**
Operator server, 128 variables limit	**asix**-WALS	**€ 1150,-**
Operator server, 256 variables limit	**asix**-WABS	**€ 1390,-**
Operator server, 512 variables limit	**asix**-WACS	**€ 2240,-**
Operator server, 1024 variables limit	**asix**-WAAS	**€ 2560,-**
Operator server, 4096 variables limit New	**asix**-WAFS	**€ 2920,-**
Operator server, “unlimited”, limit: 2^{32} variables	**asix**-WAUS	**€ 4000,-**
Network terminal	**asix**-WAUT	**€ 530,-**
Network terminal, „site license”		☎
Operator terminal	**asix**-WAUO	**€ 710,-**
OPC/DDE/OLE /.NET server	**asix**-Connect5	**€ 210,-**
Portal/ WWW Server for simultaneous operation of 1 client	**asix**-4Internet	**€ 330,-**
Portal/ WWW Server license extension - next 5 clients		**€ 890,-**
AsAlert Server	AsAlert	**€ 270,-**
AsAlert Client, license for remote access to AsAlert Server		**€ 150 ,-**
AsAudit, license for operator servers and WACW, WAAW, WAUW operator stations New	AsAudit	**€ 1030 ,-**
AsAudit – Lite, license for WDUN network engineering station, WATW, WAEW, WALW, WABW operator stations and terminals New	AsAudit - Lite	**€ 300 ,-**
Station/server extension to multi-monitor operation		**€ 740,-**
HASP key exchange		**€ 70,-**

Every asix pack includes development, run time, DDE/OLE/OPC/.NET server and electronic documentation

ADDITIONAL INFORMATION	
Trial pack (demo) including full electronic documentation (on CD)	free of charge
Upgrade form **asix** for MS DOS to **asix** for Windows NT/98/2000/XP	☎
License change	difference in licenses price
Update	free of charge
Upgrade from version 2.xx to version 5.xx	60% of specific license price
Upgrade from version 3.xx to version 5.xx	45% of specific license price
Upgrade from version 4.xx to version 5.xx	30% of specific license price
Communication modules with exclusion of special modules	included in package price
Implementation of any communication protocol, not included on the list of available communication drives	☎
4 days training	**€ 330,-**

ORDERS
Order in writing shall include full company name, address, V.A.T identification number and permission to issue invoices without customer's signature.
Payments shall be made in cash or by bank transfer to following account:
ASKOM Sp. z o.o. Gliwice, POLAND Józefa Sowińskiego 13
Bank PKO SA o/ Gliwice **94124013431111000023375352**
Prices specified are net value and do not include V.A.T.
Orders should specify type of hardware dongle - CENTRONICS or USB version.
Ordering by e-mail: office@askom.com.pl

CONTACTS			
Technical information, documentation and examples are available in INTERNET - www.asix.com.pl			
Favorable discounts for authorized Asix System Integrators and OEM's			
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	Marian Strzałkowski:	asix@askom.com.pl	Tel. (32) 30 18 152

COMMUNICATION DRIVES INCLUDED IN THE PRICE

Protocol	Driver	Use
COMMUNICATION STANDARDS		
BAZA	**BAZA**	Communication protocol allows to import data into **asix** system from databases. Access to database is realized based on ADO technology
BUFOR	**BUFOR**	Communication protocol using memory buffer, data exchange with driver developed by user
CANBUS	**CAN_OPEN**	CANBUS network protocol based on PCI_712 NT card by SELECTRON LYSS AG
CANBUS	**CAN_AC_PCI**	CAN network protocol based on CAN_AC1_PCI and CAN_AC2_PCI cards by Softing GmbH
CANBUS	**GFCAN**	CANBUS network protocol based on CanCard by Garz&Fricke Industrieautomation GmbH
COMLI	**COMLI**	COMmunication LInk protocol allowing communication with AC800C, AC800M and AC250 PLCs from ABB as well as SattCon PLC. Data exchange takes place over RS-232 or RS-485 serial link.
DDE KLIENT	**DDE**	DDE protocol of WINDOWS system, communication with any PLC using its DDE server
FILE2ASIX	**FILE2ASIX**	Communication protocol used for importing data into **asix** system from the text files of the specified structure
M-BUS	**MBUS**	Serial bus protocol according to EN 1434-3, frequently implemented within heat meters (eq. MULTICAL by KAMSTRUP). Data exchange over RS-232 serial links, (attention: third-party master station of M-Bus network required)
MODBUS RTU	**MODBUS**	Serial bus protocol for MODBUS/RTU, **asix** as a MASTER
MODBUS SLAVE	**MODBUSSLV**	MODBUS protocol, **asix** in SLAVE mode
MODBUS TCP	**MODBUS_TCP/IP**	MODBUS network protocol based on TCP/IP, according to OPEN MODBUS/TCP specification by Schneider Electric
OPC KLIENT	**OPC**	OPC (OLE for Process Control) protocol, communication with any PLC using its OPC server, according to OPC 2.04 specification
PROFIBUS DP	**DP**	PROFIBUS DP network protocol, based on PROFIboard card by Softing GmbH
PROFIBUS DP	**DP5412**	PROFIBUS DP network protocol, based on CP5412 (A2) or CP5613 by Siemens
SIMATIC S5 (Siemens)		
AS511	**AS511**	Protocol using programming device interface of SIMATIC S5 PLC
AS512	**AS512**	Protocol of CP524/525/544 communication processors
SINEC L2	**SINECL2**	Protocol of PROFIBUS network with SEND/RECEIVE (FDL) interface for SIMATIC S5
SINEC H1	**SINECH1**	Protocol of Ethernet industry network for SIMATIC S5 PLC's, SEND/RECEIVE interface, based on CP1413
SIMATIC S7 (Siemens)		
AS512	**AS512S7**	AS512 protocol for SIMATIC S7 PLC's, based on CP300 processor
Ethernet	**SAPIS7**	S7 protocol for Ethernet network
MPI (converter)	**MPI**	Protocol of MPI network for SIMATIC S7 PLC's, based on PC/MPI converter
MPI (CP5611/SOFTNET)	**SAPIS7**	Protocol of MPI network for SIMATIC S7 PLC's , based on CP5611/SOFTNET
PPI	**PPI**	Protocol of PPI interface for SIMATIC S7 series 200 PLC's, based on PC/PPI converter
PROFIBUS / MPI	**NetLink**	S7 protocol of PROFIBUS network using NetLink Lite module of SYSTEME HELMHOLZ
PROFIBUS / MPI	**NetLinkPro** *New*	Protocol for exchanging data with S7 PLCs with use of NETLink PRO (gateway Ethernet <-> MPI/Profibus) manufactured by SYSTEME HELMHOLZ
PROFIBUS	**SAPIS7**	S7 protocol of PROFIBUS network, based on CP5412 (A2) or CP5613

COMMUNICATION MODULES INCLUDED IN THE PRICE

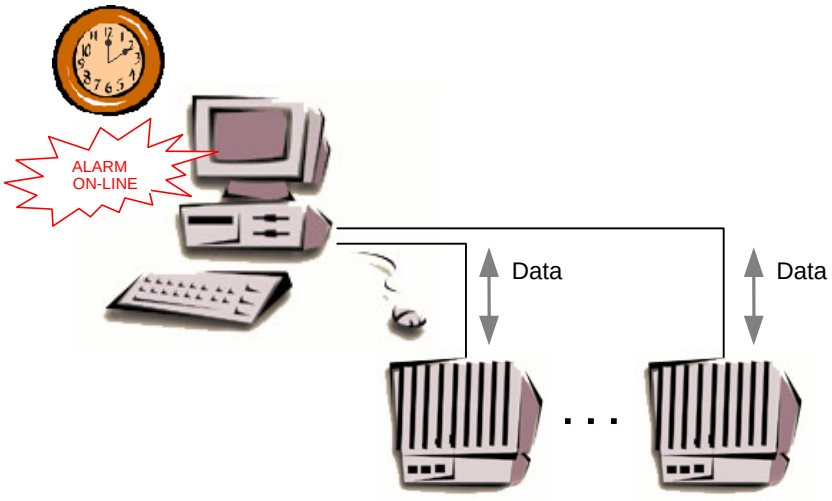
Protocol	Driver	Use
SIMATIC S7 (Siemens)		
S7_Ethernet	**S7_TCPIP** New	Used for data exchange with SIMATIC S7 PLC's through Ethernet connection with use of standard computer network card; the product does not require the installation of SIEMENS SIMATIC NET software on **asix** system PC as well as the adaptation of PLC software for data exchange purposes
BECKHOFF		
Ethernet	**CtTwinCAT**	Data exchange between **asix** and PLC's of Beckhoff Industrie Elektronik: BC series, CX1000 and TwinCAT PLC (PC based control system). Communication is based on Ethernet network using ADS interface
GE FANUC (General Electric)		
SNPX	**CtSNPX**	Serial communication via SNPX protocol with Series 90 and VersaMax PLCs
SRTP	**SRTP**	SRTP protocol allowing communication over TCP/IP with VersaMax Nano/Micro PLC's (based on IC200SET001 converter) and VersaMax or Series 90 PLC's over TCP/IP (based on IC 693 CMM321)
LG controllers		
LG proprietary protocol	**CtLG**	Serial communication via dedicated protocol with Master-K and Glofa GM PLCs
MITSUBISHI		
A1SJ71C24-R2	**MELSECA**	Serial bus protocol for MELSEC-A and FX2n PLC's, format 1 dedicated
MODICON (AEG, Schneider Electric)		
MODBUS PLUS	**AM_SA85**	MODBUS PLUS network protocol, based on Schneider Electric AM-SA85-000 card
SYSMAC (Omron)		
HOSTLINK	**OMRON**	Serial bus protocol for SYSMAC series PLC's
FESTO		
FESTO Command Interpreter	**FESTO**	Serial bus protocol for FESTO PLC's , using diagnostic interface
ADAM (Advantech)		
ADAM 4000	**ADAM**	RS485 serial bus protocol for ADAM 4000 series modules
SAIA		
Ethernet S-Bus	**CtSbusTcpip**	Protocol used for data exchange between **asix** system and PLCs of PCD SAIA-Burgess family by means of TCP/IP
S-Bus	**S-BUS**	Protocol of programmer unit interface and S-Bus network for SAIA Burgess Electronics PLC's
DIGITAL PROTECTION DEVICES		
AREVA	**AREVA** New	Protocol for digital protection devices MiCOM of AREVA; the list of serviced devices includes MiCOM P127 and MiCOM P34x series
CZAZ	**CZAZ** New	Protocol for digital protection devices CZAZ-U and CZAZ-UM of ZEG-Energetyka
MUPASZ	**MUPASZ**	Serial bus protocol for universal microprocessor MUPASZ PLC for power industry protection devices - Institute of Telecommunication and Radio Engineering in Warsaw
MUZ	**MUZ**	Protocol of MUZ microprocessor PLC for power industry protection devices
SPA	**SPA**	SPA bus protocol for protection of switching stations manufactured by ABB
SOCOMEC	**MODBUS** New	Modbus RTU protocol for communication with devices for measurement and registration of electrical values in 1-, 2- and 3-phase nets of low and high voltage – DIRIS A10, A20, A40/A41 of SOCOMEC

COMMUNICATION MODULES INCLUDED IN THE PRICE

Protocol	Driver	Use
METERS, REGULATORS I OTHERS		
AK	**CtAK**	Protocol for data exchange between **asix** system and Emerson MLT2 analyzers
AK	**S700**	Protocol for gas analyzers by MAIHAK
BASKI	**CtBaski**	Protocol for data exchange between **asix** system and BASKI system
CALEC MCP	**CtCalec**	Communication with CALEC MCP devices by Aquametro
COMPOWAY/F	**K3N**	Universal OMRON meters protocol
DataPAF	**DataPAF**	Communication protocol for energy meters DataPAF
DMS500	**DMS500**	Serial bus protocol for DURAG D-MS 500 pollution emission analyzers
DMS285	**DMS285**	Serial bus protocol for DURAG D-MS 285 pollution emission analyzers
DSC	**DSC**	DSC PLC protocol (analyzers for chlorine ion content in water)
DXF351	**DXF351**	Communication protocol for Compart DXF351 devices by Endress+Hauser
EcoMUZ	**CtEcoMUZ**	Protocol for data exchange between **asix** and Microprocessor Protecting ecoMUZ Devices made by JM Tronik
FP1001	**FP1001**	Serial bus protocol for heat and steam flow meters by METRONIC Kraków
GAZ_MODEM	**MACMAT**	Serial bus protocol for gas flow correctors MACMAT and COMMON
IEC 61107	**CtZxD400**	CtZxD400 driver is used for data exchange between **asix** and electric energy counters of ZxD400 type, manufactured by Landys & Gyr, via RS-485 interface;
K-Bus	**K-Bus**	Communication protocol implemented within DECAMATIC regulators of VIESSMAN boilers
Logo	**CtLogo** New	Used to exchange data between **asix** system and Logo OBA5 controller from SIEMENS with use of programmer interface of the controller
LUMBUS	**LUMBUS**	Communication protocol for meters manufactured by LUMEL
M200	**CtM200**	Communication protocol for data exchange between **asix** and M210G Spirax Sarco stations
MEC	**MEC**	Proprietary protocol allowing communication with heat meters MEC07 and MEC08 manufactured by ITC Łódź.
MEVAS	**MEVAS**	Serial bus protocol for MEVAS pollution emission analyzers
MicroSmart	**MicroSmart** New	Used for exchanging data with MicroSmart controllers of IDEC
MN_Invensys	**CtNCP** New	Used to exchange data between **asix** system and MN-series controllers from Invensys (former Satchwell)
MPS	**MPS**	Serial bus protocol for MPS power network parameter meters MPS by OBR Metrologii Elektrycznej in Zielona Góra
MSP1X	**MSP1X**	Serial bus protocol for MSP-1x PLC's by ELMONTEX
MUS	**CtMus04** New	Used to exchange data between **asix** system and microprocessor-based control devices MUS-04 manufactured by ELEKTROMETAL S.A. from Cieszyn
Pa5	**CtPa5**	Communication protocol for data exchange between **asix** and PA-5 converters of POWOGAZ S.A. Poznan
PMC-4000	**CtPmc4000**	Communication protocol for data exchange between **asix** and POLON 4800 fire alarm control panel; data are transferred via serial interface RS-232
PROTHERM	**CtProtherm**	Serial bus protocol for Protherm 300 DIFF controller by Process-Electronic GmbH
PROTRONICPS	**PROTRONICPS**	Communication protocol for PROTRONIC PS regulators by Hartmann & Braun
SINTONY SI	**CtSi400**	Communication protocol for alarm exchanges with Sintony SI 400 of SIEMENS
TALAS	**TALAS**	Serial bus protocol for TALAS pollution emission analyzers according to the TALAS 2.3 (007)22 specification

LICENSES CHARACTERISTIC

1. Standalone engineering station asix-WDUW



Data

No possibility to access network data.

Number of variables

Unlimited.

Alarms

Alarm servicing in local mode.

Archive

Local archive.

Time

Application run-time limited to 2 hours.

DDE/OLE/OPC/.NET server

Yes – for local data.

2. Network engineering station asix-WDUN

Data

Possibility to use all types of data.
Possibility of remote control via operator server.

Number of variables

Unlimited.

Alarms

Alarm servicing in the following modes:

- local;
- check-up - review of historic alarms from other stations.

Archive

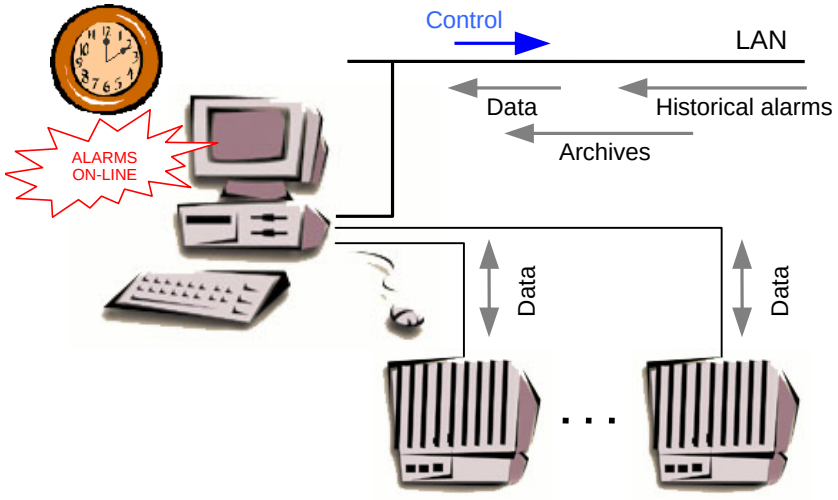
- Local archive.
- Possibility to use remote archives.

Time

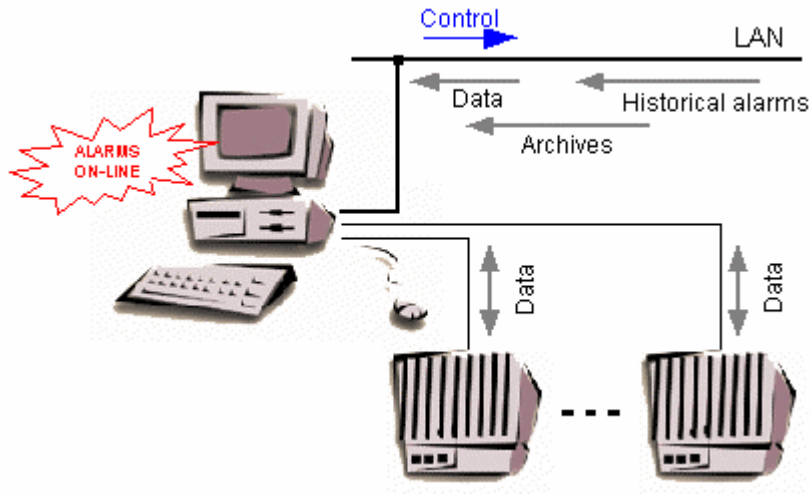
Application run-time limited to 2 hours.

DDE/OLE/OPC/.NET server

Yes.



3. Operator station asix -WATW; WAEW; WALW; WABW; WACW; WAAW; WAFW; WAUW



Data

Possibility to use all data types.
Possibility of remote control via Operator server.

Number of variables /from physical and virtual channels/:

- adequately: 32, 64, 128, 256, 512, 1024, 4096 or unlimited;
- number of variables from network channels is unlimited (exception: WATW - without variables form network channels).

Alarms

Alarm servicing in the following modes:

- local;
- check-up - review of historic alarm from other stations.

Archive

- local archive;
- possibility to use remote archives.

Functions of engineering station

Yes - application development.

DDE/OLE/OPC/.NET server

Yes.

4. Network terminal asix-WAUT

Data

Possibility to use only remote data.
Remote control possible via Operator server.

Number of variables

Unlimited.

Alarms

Alarm servicing **only** in check-up mode -review of historic alarms from other stations.

Archive

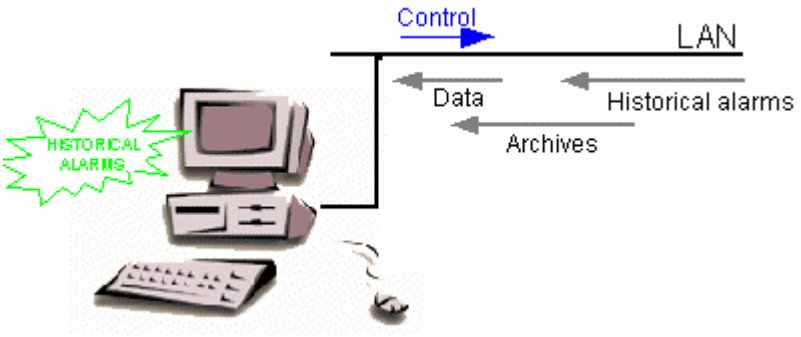
Possibility to use remote archives.

Functions of engineering station

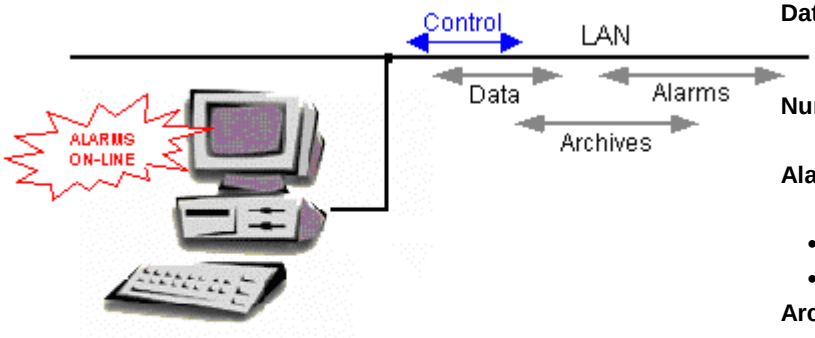
Yes - application development.

DDE/OLE/OPC/.NET server

Yes.



5. Operator terminal asix-WAUO



Data

Possibility to use only remote data.
Remote control possible via Operator server.

Number of variables

Unlimited.

Alarms

Alarm servicing in the following modes:

- check-up - review of historic alarm from other stations;
- network - synchronized service of alarms from many stations.

Archive

Possibility to use remote archives.

Functions of engineering stations

Yes - application development.

DDE/OLE/OPC/.NET server

Yes.

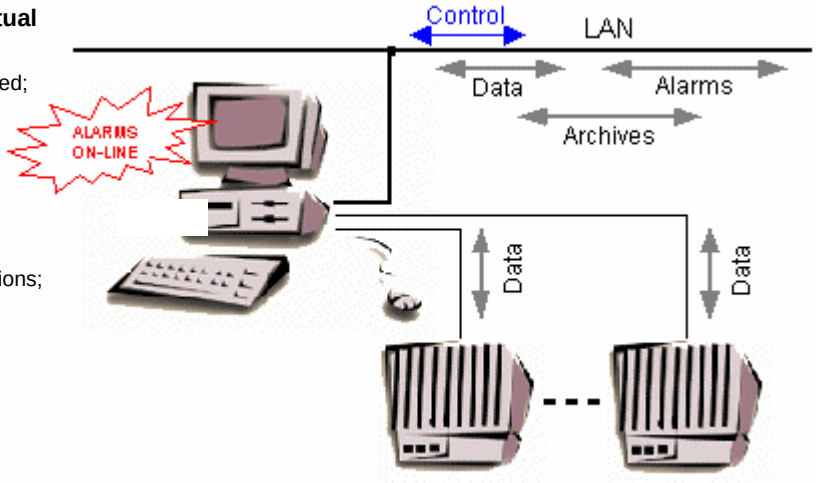
6. Operator server asix-WAES; WALS; WABS; WACS; WAAS; WAFS; WAUS

Data

Possibility to use all types of data.
Remote control execution.
Possibility of remote control via other Operator server.

NUMBER OF VARIABLES /from physical and virtual channels/

- Adequately: 64, 128, 256, 512, 1024, 4096 or unlimited;
- Number of variables from network channels is not limited.



Alarms

Alarm servicing in the following modes:

- local;
- check-up - review of historical alarms from other stations;
- network - synchronized service of alarms from many stations;
- server of historic alarms.

Archive

- archive server;
- local archive;
- possibility to use remote archive.

Functions of engineering station

Yes - application development.

DDE/OLE/OPC server

Yes.

Hot-redundancy operating mode

- Synchronization of alarm log;
- Synchronization of data archive;
- Redundant communication channels.

7. Portal/ WWW server Asix4Internet

Data:

- ***AsPortal*** – access to current variables in tables;
- ***As2WWW*** – access to variables (the same as on operator station).

Number of variables / from physical and virtual channels/:

- Unlimited.

Number of simultaneously operating users:

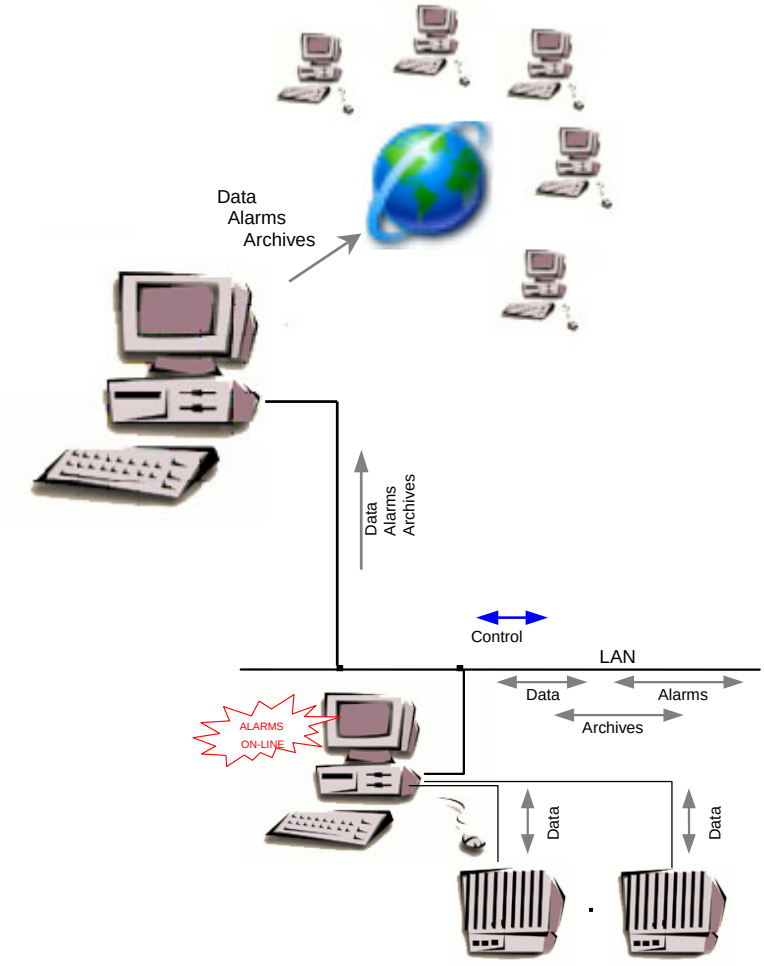
- 1 user;
- extension to any number of users.

Alarms

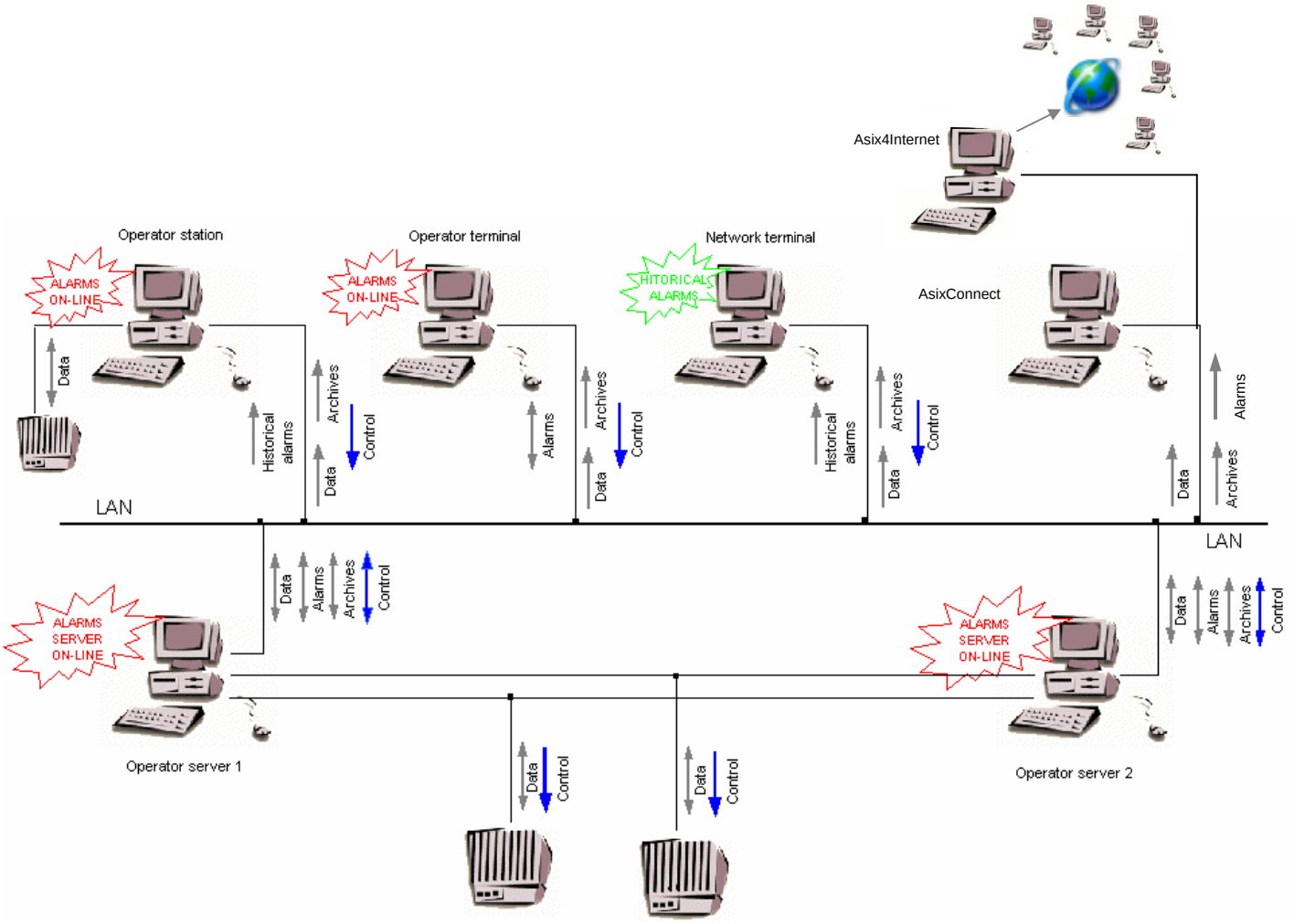
- ***AsPortal*** – access to current and historical alarms;
- ***As2WWW*** – access to operator station alarms.

Archives

- ***AsPortal*** – access to archival variables in tables or graphic charts;
- ***As2WWW*** – access to archives like on operator station.



8. Sample system configuration



Computers configured as above have the following properties:

Operator server 1	- monitoring of current data, execution of local control, alarm and current event monitoring, data archiving, alarm/event log archiving, making current and archive data and alarms/events available within LAN, remote control possibility.
Operator server 2	- a twin station for the Operator server 1 with a capability of full redundancy.
Operator station	- monitoring of current data, execution of local control, alarm and current event monitoring, data archiving, alarm/event log archiving, **no data are made available** within LAN, possibility to use data and alarm/events of Operator servers, remote control possibility via Operator server.
Operator terminal	- access to current and historical data and alarm/events of operator servers, remote control possibility via Operator servers.
Network terminal	- access to current and historical data and historical alarm/events of Operator servers, remote control possibility via Operator servers.
AsixConnect4	- access to current and historical data of Operator servers, remote control possibility via Operator servers.
Asix4Internet	- access to process data on Internet.