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Commercial Information
Products
Price List

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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 supports 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 in the computer network. Every run-time license of Asix allows designing of all system components, therefore *development* is available at no charge.

The main features of **Asix.Evo** package are the following:

- Scalable vector graphics for desktop and web synoptic diagrams
- Fully-featured SCADA applications in web browser, with no need for conversion
- Production information portal available on tablets and smartphones
- Efficient process and production data Historian
- Trends of measurements with millisecond sampling
- Integrated permission management with logging of executed control operations
- Advanced scheduling of operator actions
- Remote messaging on important events by e-mails or sms
- Operation time recording and parameter monitoring of devices
- Recipes and event data registration in MS SQL database
- Possibility of application development by C# and Visual Basic .NET languages, in particular to create one's own visualization objects
- Easy reporting based on Microsoft Reporting Services
- Implementation of system validation procedures according to FDA 21 CRF 11 / GAMP4 regulations
- No language barriers: Unicode opens the way to projects in any language
- Tools for multidimensional analysis of historical alarms in accordance with the EEMUA guidelines
- Multiterminal operator station redundancy
- Ability to run application in remote desktop mode of Microsoft RDS
- Ability to convert automatically the classic Asix application to Evo version
- BMS application wizard for WAGO controllers
- Integration with SYDEL energy media consumption and accounting module
- Engineering station integrated in each license
- More than 100 communication drivers to collect process data

Additional merits:

- More than 7000 licenses sold, which verified effectiveness of the system
- Over 50 authorized integrator companies, trained in project implementation

Correct Asix operation is supported for the following operating system software: MS Windows XP SP3, MS Windows 7 SP1, MS Windows 8/8.1, MS Windows 2008 SP2 or MS Windows 2008R2 SP1, MS Windows Server 2012, on hardware equipment which fulfils the operating system requirements. The **Microsoft .NET Framework 4.0 Full** platform is required for proper Asix package operation**.** Run the application in a web browser requires Internet Explorer 8 or later, or Firefox / Opera / Chrome browsers equipped with the IE Tab addition.

When using the Asix package functions that require an SQL database, one need to install the freeware MS SQL Express 2008/ 2012/ 2014 (for database to 10GB) or full servers Microsoft SQL Server 2008 R2, Microsoft SQL Server 2012 or Microsoft SQL Server 2014.

The Asix operates in one of the following language versions:
- Polish,
- English,

independently from the operating system language. Applications can be created in any language and any alphabet because of the Unicode standard support. It is also possible to change on-line program and application language during operation.

Asix system is offered in the following packages:

- Standalone engineering station,
- Network engineering station,
- Operator panel,
- Operator station,
- Operator server,
- Operator terminal,
- Asix4Internet,
- AsAlert,
- AsAudit,
- OPC/DDE/OLE/.NET Server,
- AsAlarm,
- AsService,
- AsLogger.

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 applications to work in multiterminal configurations. Thus it has capabilities, beyond the ones of Standalone engineering station, to access process data through network channels, to use network archives. Run time in application mode is limited to two hours.

Operator panel is a license dedicated for HMI panels at half price of standard 'Operator station' license.
The operator panel allows to use network data (made available by 'Operator servers') as well as makes data available to other **local** applications of MS Windows environment by DDE/OLE/OPC/.NET server. The operator panel supports alarms in local OPERATOR mode without writing the alarms on local disk, and also enables data archiving for 1-day period. Due to specific technical features of operator panels (they do not have hard disc but FLASH memory) it is recommended to archive data either in operating memory on so-called RAM-disk or in USB external memory.
The 'Operator panel' license supports one of the following operating systems: Windows XP Embedded, Windows Embedded Standard 2009, Windows Embedded Standard 7, Windows Embedded 8.

Operator station is a license dedicated for **local operator stations** which allows also to use current and historical 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 mode, collects local data archives.

Operator station exists in eight 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 from 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.

Operator server can work as independent **Historian** (without operator interface), supplying other asix computer stations with historical data and reports.

The Operator server exists in seven versions differing from each other by the number of process variables accessed from physical channels as well as virtual variables (local variables, internal for an individual computer), namely 64 / 128 / 256 / 512 / 1024 / 4069 variables and without limit on number of variables (i.e. 2^{32} variables).

Operator terminal is a license dedicated for application execution basing on data available on the network only, including the possibility of current alarm processing in network mode (information on current alarm status is received on-line). Thanks to this feature, it can be used in expanded control rooms as **an additional operator station without direct links to the PLCs.** Operator terminal gives also the possibility to run DDE/OLE/OPC/.NET servers and data export to other Windows applications that can retrieve data by the mentioned channel types. This terminal does not limit the number of process variables.

@Asix4Internet is a license dedicated for installation of Asix WWW server (to support WWW applications) either on Asix operator server or terminal or on a computer with AsixConnect installed. Asix4Internet license is encoded on the same hardware dongle used to run the Asix servers, terminals or AsixConnect. It allows to connect concurrently one client station by Internet Explorer browser from the version 8.0. There are also acceptable Chrome, Opera, and Firefox with IE Tab plugin installed. To the @Asix4Internet license must be purchased @Asix4InternetCal client licenses in number consistent with the number of expected concurrent users of the application. @Asix4Internet includes the following modules:

- **EvoNet** System for execution Asix.Evo application in web browser in the EvoNet mode; www browser stations are functionally equivalent to operator terminals;
- **AsPortal** Web-based Process Information Portal is ready for immediate use and lets you browse process data from any Asix system application on the Internet. The portal allows you to browse the variables database, read current values, view the active alarms and alarm history, present historical values of process variables in tables or charts. AsPortal is an HTML website compatible with all web browsers and all operating systems;
- **AsTrend** Web-based version of the application for graphical analysis of historical data with features consistent with the Windows version of Asix, particularly highly rated by users;

New

In order to use the Asix system web-based modules one needs to purchase the @Asix4Internet license. This license allows to publish Asix applications on a single IIS Web server. In addition to the basic license you need to purchase the appropriate number of client licenses. The client licenses are **concurrent-user type**, so a single license allows any one user to access the web server at any given time. The literature also refers to this as "per server" client license. There are two types of client licenses:

- @Asix4Internet1Cal-Lite - extension of the Portal/Web Server license by 1 Lite client (per server).
  The Lite licenses are dedicated for viewing the controlled process status. They provide full visualization functionality, access to current and historical data , as well as alarms. They do not feature functions allowing operators to control the process
  The 1Cal-Lite client license is sufficient for most applications that require access to data from the web browser.
- @Asix4Internet1Cal-- extension of the Portal/Web Server license by 1 full client (per server). In addition to all the features of the Lite version the full license also allows the operator to perform typical operations. It is possible to control the process remotely, edit AsBase recipes and archives, and configure the schedules. The full web-based client features all the necessary functions to support the application-controlled process in a manner equivalent to the WAUO operator terminal license.

The @Asix4Internet base license includes a single full client.
You can purchase Lite and full client licenses in packages of 5, 10, 20, 50 with attractive discounts. If you upgrade a client license from a version older than 8, previously sold in 5 license packages, Askom offers by standard the upgrade to the Lite licenses, but the purchaser can change both the client type and the number of client licenses.

AsRaport. Asix package beginning of version 6 has a NEW reporting system integrated with Microsoft Reporting Services. For the user this means an option of freely designing, modifying, browsing and generating reports in Asix environment.

Microsoft® SQL Server™ Reporting Services provides a complete, server-based platform designed to support a wide variety of reporting needs enabling organizations to deliver relevant information where needed across the entire enterprise. By using Reporting Services, which is a component of SQL Server 2008, one can create reports based on different data sources (including ad hoc reporting available through user-friendly interface), manage reporting environment involving planning how and when reports are generated, manage report subscriptions and control access rights, as well as provide users with reports in the appropriate formats (e.g., XLS, PDF, DOC, TIFF) in a convenient way (e.g. electronically by subscription, or by embedding reports in the business applications and portals).

As a part of Asix integration with Reporting Services, the proprietary method for retrieving logged data from an ultra-efficient Asix archive through SQL queries is of key importance. A correct query to retrieve data from the Asix archive is constructed with a user-friendly application supporting drag-and-drop functionality, which does not require the user to have any IT experience. Modules facilitating viewing (AsRapView) and publishing (AsRapDeploy) of reports were developed as a consequence of integration with the Reporting Services.

The Asix system is compatible with both Reporting Services offered by free MS SQL Server Express and the services made available in full MS SQL Server.

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 or using OAP protocol or Kontel protocol dedicated for Ascom notification devices. 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 is a module which ensures additional functions related to the control of the application execution and activity registration:

- 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.
- 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.

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 11 / GAMP5** regulations, applied in pharmaceutical and food processing industry.

To use AsAudit module, 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

Using AsAudit functionality with the license @Asix4Internet or RDS terminal needs one of the following licenses to be bought, regardless of the number of licenses @Asix4Internet or AsixRDS:

- AsAudit-WWW - addition for @Asix4Internet licenses;
- AsAudit-RDS - addition for AsixRDS licenses.

AsAlarm is a completely new application providing tools for detailed analysis of alarms generated by the monitored site and of other data relating to alarm system operation. The application meets the EEMUA (The Engineering Equipment and Materials Users Association) guidelines No. 191. The module allows two-level alarm analysis:

- assessment of the alarm system structure validity for a specific application;
  The application offers specific measures to the system designer, by which it is possible to assess if the system has been designed according to the universal guidelines and takes into account the operator's perception capacity
- In depth statistical and dynamic analysis of alarms registered on site;
  In this scope AsAlarm is an essential tool for maintenance and repair services, both in the aspect of event timeline analysis and statistical analysis to determine trends in system behaviour.

AsAlarm license included in all Asix packages entitles you to analyze systems with a number of alarms limited to 128 (no limit on the analysis time horizon), or restriction of the horizon of analysis to 2 weeks prior to the current date (with no limit on the number of alarms).
AsAlarm-Pro License – has no limit on the number of alarms and the period of analysis - it is offered as a separate item on the price list. Free MS SQL Server Express (with 4GB database size limit) or the full MS SQL Server version (no database size limitations) must be installed in order for AsAlarm-Pro to work.
@AsAlarm-Pro licence - is a web server license and one simultaneous client (only one client at a time can connect to the server). It has no restrictions on the number of alarms and the period of analysis - the licence is offered as a separate item on the price list. Free MS SQL Server Express (with 4GB database size limit) or the full MS SQL Server version (no database size limitations) must be installed in order for @AsAlarm-Pro to work.
@AsAlarm1Cal Licence - a license for one client in addition to @AsAlarm-Pro license - it is offered as a separate item on the price list.

OPC/DDE/OLE Automation/.NET – AsixConnect includes:

- OPC DA 2.0, Automation, .NET and DDE servers for current data exchange,
- OPC HDA, Automation, .NET and OLE DB servers for archived data exchange,
- OPC A&E and .NET server for alarm data available (only for applications developed in classical Asix used till Asix 6 - not in Asix in Evo version).

Any MS Windows program based on Automation, OPC, .NET or DDE protocols may co-operate with Asix application by AsixConnect 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 AsixConnect 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.

AsixConnect 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, AsixConnect makes available to Windows software the process data accessed from remote computer stations connected directly to PLCs.

New AsService is a program dedicated to plant asset maintenance and production resources management. This tool - easy in setup and use - can log the equipment operation times and number of times the devices are switched on-off - all with the use of software counters and based on data collected in Asix application. This makes possible to monitor maintenance and repair operations, to alert user on necessary actions, to report any missed operations as well as to log the related technical and record data for each monitored device. The AsService module operates using database of equipment and machines being under control.

There are two types of installations of AsService:

- server one, which controls license requirements,
- client one, providing interface to the AsService program (with no limit on number of client installations within an AsService license).

The ability to configure interface between AsService and an application developed in Asix.Evo allows for access to status and configuration data of counters, configuration data of devices and last reset data of any counter - all of these directly from the application diagram. It is also possible to configure automatic generation of alarm definition database based on events recorded in the AsService database.

AsService is available in two licenses:

- *AsService - Lite* - up to 30 counters,
- *AsService* - with no limit on number of counters.

AsService requires the full version of Microsoft SQL Server database server (from the version: MS SQL Server 2008 R2). The 'Express' version is not sufficient for proper operation of the program.

AsLogger

AsLogger is a license of fast measurement series, used for recording, archiving and analyzing of measurement series in which samples are stamped with the time stamp up to 1 µs. Measurements can be performed by analog-to-digital cards directly controlled by the Asix application or by automatic measurement / registration devices connected to a PC (including PLCs and electrical protection devices). AsLogger supports analysis of measurement experiments collecting the data series of high resolution. The series data is retrieved from a recording device, pre-processed and stored in an SQL database.

The AsTrend program allows displaying graphs of AsLogger measurement series in charts or tables. It is possible to display simultaneously AsLogger and other data type series supported by AsTrend.

Data analysis can be made on the computer on which data is recorded as well as on network stations. It is also possible to access the AsLogger data from any other programs equipped with ODBC or OLE DB/ADO interfaces.

AsLogger supports retrieving of data from the OPC server, which allows to work with any device meeting requirements of open standards for data exchange. Control & measurement cards and the USB measurement equipment of Advantech, the data of which can be read in 'Fast AI Transferring' (Interrupt Transferring lub DMA Transferring) mode by Advantech ADSAPI library, are also supported. Moreover, AsLogger supports hardware recorders: MUPASZ 2001G, MUPASZ 07, MUPASZ710 and MultiMuz family units.

There is a simulator of analogue input card, among available recording devices supported by AsLogger, which allows to get acquainted with the program functions without connection with a real device.

One of the uses of the AsLogger program is to analyse electrical protection actions - the fast-changing time series (current, voltage, power) and digital signals gathered at the time of protection operation. The internal memory of electrical protections is usually small and allows to store at most a few - and most often only one - the last registration. Analysis of time series requires connection with a computer equipped with appropriate software tools and readout of data series from the device memory. If the protection has acted once more before reading the series, they are irretrievably lost. When using protection systems from different manufacturers, it is necessary to have and learn several different utility programs (mostly with no Polish language support). AsLogger allows to create the station both of automatic readout of the time series recorded by electrical protections and archiving in one database available on Ethernet to any number of users. In addition, hierarchical organization of data structure (switching station - field - protection type - specific device) considerably simplifies later search and analysis of data. All time series are available for analysis purpose in one - easy to use and Polish - software environment, regardless from what device they come from.

ASIX-EDUS educational package

ASIX-EDUS educational package is intended for 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:

- WAUW – unlimited operator station,
- WAUS – unlimited operator server,
- WAUO – operator terminal.

and for each dongle the following additional options are available:

- @Asix4Internet – portal/ WWW server for simultaneous operation of one client,
- AsAudit,

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

Independent access to Asix system data

In the event of a user's own mechanism for accessing Asix system current and archive data from a remote computer without the Asix system license allowing network access to the data, purchase of a separate Asix1Cal license is required for each such computer.

Extension to multi-monitor operation

Every Asix license 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.

Preferential purchase of Microsoft SQL Server license and Windows Remote Desktop Services access licenses

As part of the Microsoft ISV Royalty Licensing, ASKOM offers a purchase of Microsoft software at a very attractive prices (see price list). There are available licenses of database Microsoft SQL Server and Client Access Licences (CAL) for Windows Remote Desktop Services. Embedded Runtime licenses are on sale. These products do not have any functional limitations, but are subject to the following licensing restrictions:

- Purchase of a Microsoft license is only possible in conjunction with the simultaneous acquisition of Asix license. Both licenses are inseparable.
- The end user may use the licensed Microsoft only in conjunction with the Asix application as one integrated solution.
- The end user may not use a licensed Microsoft to run other applications or create new applications, or in any other context that is not associated with the solution based on the Asix application.

Microsoft SQL Server can be licensed on either server-client or per-processor basis. The server-client mode requires the purchase of a license for the server and the appropriate number of CAL access licenses for all potential clients. In the per-processor mode the purchase of a CAL license is not required.

As an additional option one can buy Embedded Maintenance protection that provides updates of the licensed Microsoft the new versions. The right to receive updates only applies to the product versions issued during the validity of the Embedded Maintenance protection (normally one year). Embedded Maintenance protection can be purchased only at the time of license purchase. Protection can be renewed annually during the contract period.

RDS (*Remote Desktop Services*) terminal licenses

Terminal licenses WAUO of RDS type allow to run multiple instances of Asix applications on a single Windows Server 2008. Users have access to applications by remote access system services. The licenses of RDS type allow to reduce costs of application administration – Asix software and Asix application are installed only on a single server computer. The application designer must, however, configure the application so that to guarantee parallel work of multiple instances – working files (eg. log files) have to be created in separate directories for each instance. As RDS terminal can be used any computer or device (tablet / smartphone) provided that the client RDS software appropriate for operating system is installed.

New Asix4WAGO for BMS systems based on WAGO controllers *(in Polish version)*

The Asix4WAGO package has been developed by working closely with WAGO ELWAG — the market leader in building automation. The key idea behind Asix4WAGO is to link the WAGO controller software with the Asix visualization system into a coherent system providing comprehensive control and visualization in intelligent buildings.

On the one hand Asix4WAGO includes a ready-to-use library of program modules dedicated to the WAGO controllers which are used to control devices and instrumentation commonly used in building automation, while on the other hand, it also comprises SCADA BMS Application Wizard.

WAGO library contains software modules to such device groups as:

- HVAC – air handling units component templates,
- Climate – air-conditioning controller templates,
- Lighting – lighting monitoring and control templates,
- Blinds – blinds component control templates,
- Scheduler – scheduling software modules,

that include but are not limited to heat exchangers, heaters, coolers, fans, dampers, pumps, filters, lights and measurements. Thanks to the built-in mechanisms of CODESYS software used for WAGO controller programming, it is possible to export application controller data to Asix.Evo. Based on this, BMS Application Wizard included in Asix4WAGO will automatically generate the SCADA application variables database and create the application framework including the alarm system. Asix4WAGO provides ready-to-use BMS visualization object templates associated with WAGO controller software modules (the controller software module collects data and implements the control algorithms while the associated Asix system graphic object clearly presents all the information to the operator and allows master control). Parameterization of Asix objects required of the designer could not be easier and all it takes to parameterize an object is to select an object and identify whole variables set with one click from the drop down tree. Communication with controllers is performed via WAGO driver, based on Network Variables.

Asix4WAGO is a unique package that facilitates and reduces to a minimum the amount of work associated with the preparation of BMS applications. By automating most of the activities **the time needed to design and run BMS applications and the likelihood of errors are greatly reduced**.

Asix4WAGO license is the only one that allows you to run an application that contains variables definition database generated from CODESYS files. Asix4WAGO licenses are sold by WAGO controller distributor

WAGO ELWAG Sp. z o.o., ul. Piękna 58A, 50-506 WROCŁAW, Poland
tel. 71 360 29 70 , fax 71 360 29 99 , e-mail: wago.elwag@wago.com

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,
- variable form NONE channel, not archived = does not apply to license limit,
- 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.y.z***, where: ***x*** is a major number of the version, digit ***y*** is a minor number of the version and ***z*** is a number of package release. When only the digits ***y.z*** are different when version changes, it's called an **update** - ASKOM ensures **free update of system version**. If the major number ***x*** changes for new version, it is called an **upgrade** and it follows against payment according to the current price list.

ONLY the latest version

ASKOM offers and sells **ONLY** the most recent version of the Asix package. The license allows the user to **install** and **use** previous versions of Asix if it is dictated by the technical requirements of an existing application. **ASKOM has no obligation to provide media, documentation or separate key for previous Asix versions, as well as to provide technical support for them.**

The above rule also applies to the purchase of "license change ". If the Client's version differs from the current version, the upgrade is needed, besides the license change.

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

- OPC DA 1.0, 2.0A , OPC HDA, OPC A&E client
- DDE client
- MODBUS RTU,
- MODBUS TCP/IP
- PROFIBUS
- PROFINET
- CANBUS
- DNP3
- IEC61850
- IEC62056-21
- M-Bus
- SNMP

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 drivers: BUFOR and File2Asix (including full protocol specification) are delivered, which make available an universal interface for data exchange with Customer's drivers. It is also possible to import data into Asix application using the Application Scripts.

All available drivers are included in each Asix license. Using some drivers may require additional hardware or software libraries from the third parties. Detailed information on additional requirements can be found in the description of drivers.

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.

NOTICE: This price list introduces the new prices and way of licensing of web terminals @Asix4Internet. The novelty is the Portal/ Server WWW license extension of next 1 client available in 2 versions: Lite – with visualization functionality and access of reading current and historical data and alarms, with the exception of the ability to remote control, AsBase recipes and archives edition as well as schedules configuration, and a full license, in which the functionality of web terminals is equivalent to WAUO operator terminals.
There is also introduced the possibility of buying client licenses in packages of 5/10/20/50 pcs. with attractive discounts.

To encourage our customers to check functionality of the new AsService program, we introduce the Lite license limited to 30 counters, along with the license with no limit on the number of counters.

Asix engineering stations		
Package name	**Type**	**Price**
Asix.Evo 8, Local engineering station	**ASIX**-WDUW	**€ 120,-**
Asix.Evo 8, Network engineering station	**ASIX**-WDUN	**€ 380,-**

Asix operator panels		
Asix.Evo 8, Operator panel, 32 variables limit	**ASIX**-WATP	**€ 140,-**
Asix.Evo 8, Operator panel, 64 variables limit	**ASIX**-WAEP	**€ 230,-**
Asix.Evo 8, Operator panel, 128 variables limit	**ASIX**-WALP	**€ 370,-**
Asix.Evo 8, Operator panel, 256 variables limit	**ASIX**-WABP	**€ 490,-**
Asix.Evo 8, Operator panel, 512 variables limit	**ASIX**-WACP	**€ 740,-**
Asix.Evo 8, Operator panel, 1024 variables limit	**ASIX**-WAAP	**€ 850,-**
Asix.Evo 8, Operator panel, 4096 variables limit	**ASIX**-WAFP	**€ 990,-**
Asix.Evo 8, Operator panel, “unlimited”, limit: 2^{32} variables	**ASIX**-WAUP	**€ 1 120,-**

Asix operator stations		
Asix.Evo 8, Operator station, 32 variables limit	**ASIX**-WATW	**€ 280,-**
Asix.Evo 8, Operator station, 64 variables limit	**ASIX**-WAEW	**€ 450,-**
Asix.Evo 8, Operator station, 128 variables limit	**ASIX**-WALW	**€ 730,-**
Asix.Evo 8, Operator station, 256 variables limit	**ASIX**-WABW	**€ 980,-**
Asix.Evo 8, Operator station, 512 variables limit	**ASIX**-WACW	**€ 1 480,-**
Asix.Evo 8, Operator station, 1024 variables limit	**ASIX**-WAAW	**€ 1 700,-**
Asix.Evo 8, Operator station, 4096 variables limit	**ASIX**-WAFW	**€ 1 980,-**
Asix.Evo 8, Operator station, “unlimited”, limit: 2^{32} variables	**ASIX**-WAUW	**€ 2 230,-**

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

Asix operator servers		
Package name	**Type**	**Price**
Asix.Evo 8, Operator server, 64 variables limit	**ASIX**-WAES	**€ 650,-**
Asix.Evo 8, Operator server, 128 variables limit	**ASIX**-WALS	**€ 980,-**
Asix.Evo 8, Operator server, 256 variables limit	**ASIX**-WABS	**€ 1 180,-**
Asix.Evo 8, Operator server, 512 variables limit	**ASIX**-WACS	**€ 1 900,-**
Asix.Evo 8, Operator server, 1024 variables limit	**ASIX**-WAAS	**€ 2 180,-**
Asix.Evo 8, Operator server, 4096 variables limit	**ASIX**-WAFS	**€ 2 480,-**
Asix.Evo 8, Operator server, "unlimited", limit: 2^{32} variables	**ASIX**-WAUS	**€ 3 400,-**

Asix operator terminals		
Asix.Evo 8, Operator terminal	**ASIX**-WAUO	**€ 600,-**
Asix.Evo 8, Operator terminal, „site license"	**ASIX**-WAUO/SL	☎

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

Asix4Internet		
Package name	**Type**	**Price**
Portal/ Server WWW for simultaneous operation of 1 client	@Asix4Internet	**€ 600,-**
Portal/ Server WWW license extension - next 1 web client Lite type – with functionality of full visualization and current, archival, alarm data reading, with NO POSSIBILITY of control (see page 5 for details)	Asix4Internet1Cal-Lite	**€ 250,-**
Portal/Server WWW license extension by 5 Lite clients	@Asix4Internet5Cal-Lite	**€ 1 170,-**
Portal/Server WWW license extension by 10 Lite clients 	@Asix4Internet10Cal-Lite	**€ 2 130,-**
Portal/Server WWW license extension by 20 Lite clients	@Asix4Internet20Cal-Lite	**€ 3 900,-**
Portal/Server WWW license extension by 50 Lite clients	@Asix4Internet50Cal-Lite	**€ 8 750,-**
Portal/Server WWW license extension by 1 web client of functionality funkcjonalności in full compliance with WAUO Operator terminal	@Asix4Internet1Cal	**€ 500,-**
Portal/Server WWW license extension by 5 clients	@Asix4Internet5Cal	**€ 2 330,-**
Portal/Server WWW license extension by 10 clients	@Asix4Internet10Cal	**€ 4 250,-**
Portal/Server WWW license extension by 20 clients	@Asix4Internet20Cal	**€ 7 800,-**
Portal/Server WWW license extension by 50 clients	@Asix4Internet50Cal	**€ 17 500,-**

Additional software

Package name	Type	Price
OPC/DDE/OLE /.NET server	AsixConnect	**€ 180,-**
AsAlert Server	AsAlert	**€ 230,-**
AsAlert Client, license for remote access to AsAlert Server	AsAlertClient	**€ 130,-**
AsAudit, license for operator servers and WACW, WAAW, WAFW, WAUW operator stations	AsAudit	**€ 880,-**
Addition for @Asix4Internet license	AsAudit-WWW	**€ 500,-**
Addition for AsixRDS license	AsAudit-RDS	**€ 500,-**
AsAudit – Lite, license for WDUN network engineering station, WATW, WAEW, WALW, WABW operator stations and terminals	AsAudit - Lite	**€ 250,-**
AsAlarm for analysis of alarm/event logs of Asix system application, no-limit license	AsAlarm-Pro	**€ 1 230,-**
@AsAlarm for analysis of alarm/event logs of Asix system application, license for Web Server and for simultaneous operation of 1 client	@AsAlarm-Pro	**€ 1 730,-**
@AsAlarm license extension - next 1 client	@AsAlarm1Cal	**€ 1 230,-**
License for remote access to Asix application data	Asix1Cal	**€ 130,-**
License for RDS terminal access with WAUO authorities for the 1st simultaneous client - standalone license or an addition to operator server license	AsixRDS+1Cal	**€ 1 800,-**
Extension to the license of RDS terminal access with WAUO authorities for another simultaneous client - standalone license or an addition to operator server license	AsixRDS1Cal	**€ 600,-**
AsService for logging operating time / number of switching on-off devices – licence for max. 30 counters	AsService - Lite	**€ 250,-**
AsService for logging operating time / number of switching on-off devices – no limit licence New	AsService	**€ 2 000,-**
IEC1850 Info-Tech library required by Asix IEC61850 driver	IEC61850	☎
HASP key exchange	HASP	**€ 60,-**
Surcharge for MaxMicro HASP key New	MaxMicro HASP	**€ 20,-**
Replacing WAUO licenses by the RDS licenses		☎
Educational Package	ASIX-EDUS	**€ 170,-**

AsLogger

AsLogger Server + OPC DA 2.0 + Advantech driver	AsLoggerServer-Advantech	**€ 500,-**
AsLogger Server + OPC DA 2.0 + Mupasz 2001G driver	AsLoggerServer-Mupasz2001G	**€ 500,-**
AsLogger Server + OPC DA 2.0 + Mupasz07 driver	AsLoggerServer-Mupasz07	**€ 500,-**
AsLogger Server + OPC DA 2.0 + MultiMuz driver	AsLoggerServer-MultiMuz	**€ 500,-**
AsLogger Server + OPC DA 2.0 + Mupasz710 driver	AsLoggerServer-Mupasz710	**€ 500,-**
AsLogger Client	AsLoggerClient	**€ 250,-**
Advantech communication driver for AsLogger Server	AsLogger-Advantech	**€ 130,-**
Mupasz2001G communication driver for AsLogger	AsLogger-Mupasz2001G	**€ 130,-**
Mupasz07 communication driver for AsLogger	AsLogger-Mupasz07	**€ 130,-**
MultiMuz communication driver for AsLogger	AsLogger-MultiMuz	**€ 130,-**
Mupasz710 communication driver for AsLogger	AsLogger-Mupasz710	**€ 130,-**

ISVR Microsoft SQL Server licenses

Package name	Type	Price
Microsoft® SQL Server Standard Edition RUNTIME 2012 All Lng Embedded Microsoft Volume License 1 License 1 Client	E65-00244	**€ 205,-**
Microsoft® SQL CAL RUNTIME 2012 All Lng Embedded Microsoft Volume License 1 License	C30-00376	**€ 128,-**
Microsoft® SQL Server Standard Edition Runtime 2012 All Lng Embedded Maintenance Microsoft Volume License 1 License 1 Client	E65-00245	**€ 26,-**
Microsoft® SQL CAL Runtime 2012 All Lng Embedded Maintenance Microsoft Volume License 1 License	C30-00377	**€ 26,-**
Microsoft® SQL Svr Standard RUNTIME Core 2012 All Lng Embedded Microsoft Volume License 2 Licenses Core License	7RQ-00003	**€ 1 838,-**
Microsoft® SQL Svr Standard Runtime Core 2012 All Lng Embedded Maintenance Microsoft Volume License 2 Licenses Core License	7RQ-00004	**€ 368,-**
Microsoft® SQL Server Standard Edition RUNTIME 2014 AllLng Embedded MVL 1License 1Client	E65-00255	**€ 182,-**
Microsoft® SQL CAL Runtime 2014 All Lng Embedded MVL 1License	C30-00387	**€ 114,-**
Microsoft® SQL Server Standard Edition RUNTIME 2014 All Lng Embedded Maintenance MVL 1License 1Client	E65-00256	**€ 23,-**
Microsoft® SQL CAL Runtime 2014 All Lng Embedded Maintenance MVL 1License	C30-00388	**€ 23,-**
Microsoft® Win Rmt Dsktp Svcs CAL 2012 All Lng Embedded Microsoft Volume License 1 License	6VC-02098	**€ 109,-**
Microsoft® Win Rmt Dsktp Svcs CAL 2012 All Lng Embedded Maintenance Microsoft Volume License 1 License	6VC-02099	**€ 27,-**
Microsoft® Win Rmt Dsktp Svcs CAL 2012 All Lng Embedded Microsoft Volume License 5 Licenses	6VC-02100	**€ 547,-**
Microsoft® Win Rmt Dsktp Svcs CAL 2012 All Lng Embedded Maintenance Microsoft Volume License 5 Licenses	6VC-02101	**€ 137,-**

Asix4WAGO *(in Polish version)*
Distribution: WAGO ELWAG, 50-506 Wrocław , ul. Piękna 58a, Poland, e-mail: wago.elwag@wago.com

Package name	Type
A4W-WACP, Operator panel, 512 variables limit	A4W-WACP
A4W-WAAP, Operator panel, 1024 variables limit	A4W-WAAP
A4W-WAFP, Operator panel, 4096 variables limit	A4W-WAFP
A4W-WAUP, Operator panel "unlimited" (2^{32} variables)	A4W-WAUP
A4W-WACW, Operator station, 512 variables limit	A4W-WACW
A4W-WAAW, Operator station, 1024 variables limit	A4W-WAAW
A4W-WAFW, Operator station, 4096 variables limit	A4W-WAFW
A4W-WAUW, Operator station "unlimited" (2^{32} variables)	A4W-WAUW
A4W-WACS, Operator server, 512 variables limit	A4W-WACS
A4W-WAAS, Operator server, 1024 variables limit	A4W-WAAS
A4W-WAFS, Operator server, 4096 variables limit	A4W-WAFS
A4W-WAUS, Operator server "unlimited" (2^{32} variables)	A4W-WAUS
A4W- Asix-WAUO, Operator terminal	A4W-WAUO
A4W- @Asix4Internet, Server WWW/1 client	A4W-@Asix4Internet
A4W- @Asix4Internet+1 Call, WWW server extension of 1 additional client	A4W-@Asix4Internet+1Cal
A4W- AsAlert, Alarm notification system	A4W-AsAlert
A4W- AsAudit, Audit system	A4W-AsAudit
A4W-AsAudit-Lite – addition for Operator terminal license	A4W-AsAudit-Lite
A4W-AsAudit-www – addition for @Asix4Internet license	A4W-AsAudit-WWW
A4W-WDUW – local engineering station	A4W-WDUW

Each of the above A4W package includes development, run-time, the OPC / DDE / OLE / .NET server and electronic documentation

ADDITIONAL INFORMATION	
Trial pack (demo) including full electronic documentation (on DVD)	free of charge
License change **Notice:** If you change the license type for the package version that differs from the distributed one, you have to upgrade your package to the current version according to the price list (in addition to charge of license type change).	difference in licenses price
Update	free of charge
Upgrade from version 2.yy.zzz to version 8.y.z	90% of specific license price
Upgrade from version 3.yy.zzz to version 8.y.z	90% of specific license price
Upgrade from version 4.yy.zzz to version 8.y.z	90% of specific license price
Upgrade from version 5.yy.zzz to version 8.y.z	80% of specific license price
Upgrade from version 6.yy.zzz to version 8.y.z	50% of specific license price
Upgrade from version 7.yy.zzz to version 8.y.z	35% 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 *In the case of registration of 2 people - 5% discount; more than 2 people - 10% discount	**€ 330,-**

Discount rules

Companies that buy **Asix** package for re-sale get 5% discount of the List Price with each purchase.

Discounts for companies being 'Integrator of Asix Package' are calculated on the basis of total net turnover during preceding 12 months.

Discounts do not apply to purchase of local engineering station license (**ASIX-WDUW**).

ORDERS

Order in writing shall include full company name, address and VAT identification number.

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, SWIFT: PKOPPLPW, account number: **PL83124013431978000023375365**

Prices specified are net value and do not include VAT tax.

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

Commercial information:	Alicja Padak:	Alicja.Padak@askom.com.pl	Tel. +48 32 30 18 198
	Marek Kucera :	Marek.Kucera@askom.com.pl	Tel. +48 32 30 18 180
Technical information:	Wacław Bylina:	support@askom.com.pl	Tel. +48 32 30 18 141
	Marian Strzałkowski:	asix@askom.com.pl	Tel. +48 32 30 18 152

COMMUNICATION DRIVERS INCLUDED IN THE PRICE

Driver	Protocol	Use
ADAM	**ADAM 4000**	RS485 serial bus protocol for ADAM 4000 series modules.
Aggregate	**-**	Driver allows definition of variables the values of which are generated as a result of calculations performed on other variables of the Asix system.
CtAirPointer	**HTTP**	The CtAirPointer is used for data exchange between ASIX and air monitoring station AirPointer developed by Recordum Messtechnik GmbH, Austria. The transmission is performed with use of HTTP protocol using *info.php* and *download.php* websites of monitoring station web server.
CtAK	**AK**	Protocol for data exchange between Asix system and Emerson MLT2 analyzers.
AM_SA85	**MODBUS PLUS**	MODBUS PLUS network protocol, based on Schneider Electric AM-SA85-000 card.
AREVA	**AREVA**	Protocol for digital protection devices MiCOM of AREVA; the list of serviced devices includes MiCOM P127 and MiCOM P34x series.
AS511	**AS511**	Protocol using programming device interface of SIMATIC S5 PLC.
AS512	**AS512**	Protocol of CP524/525/544 communication processors.
AS512S7	**AS512**	AS512 protocol for SIMATIC S7 PLC's, based on CP340 processor.
CtBaski	**BASKI**	Protocol for data exchange between Asix system and BASKI system.
BAZA	**-**	Communication protocol which allows to import database into Asix system. Access to database is realized based on ADO technology.
BUFOR	**BUFOR**	Communication protocol using memory buffer; data exchange with driver developed by user.
CtCalec	**CALEC MCP**	Communication with CALEC MCP devices by Aquametro.
CAN_AC_PCI	**CANBUS**	Protocol of CAN network based on CAN_AC1_PCI and CAN_AC2_PCI cards of Softing GmbH.
CAN_OPEN	**CANBUS**	CANBUS network protocol based on PCI_712 NT card by SELECTRON LYSS AG.
CtCipAB	**EtherNet/IP**	Data exchange between Asix and PLCs of Logix5000 by Allen-Bradley.
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.
CPIII	**CPIII**	Communication protocol for CP-III/E control panels used to control compressors manufactured by MYCOM (MAYEKAWA).
CZAZ	**CZAZ**	Protocol for digital protection devices CZAZ-U and CZAZ-UM of ZEG-Energetyka.
DataPAF	**DataPAF**	Communication protocol for energy meters DataPAF.
DDE	**DDE KLIENT**	DDE protocol of WINDOWS system, communication with any PLC using its DDE server.
Diva	**DIVA**	Protocol for control of industrial DIVA cameras manufactured by VDG Security B.V.
CtDlms	**DLMS**	Protocol to exchange data with electricity meters from ZxD/ZxG/ZxQ family by Landys &Gyr.
DMS285	**DMS285**	Serial bus protocol for DURAG D-MS 285 pollution emission analyzers.
DMS500	**DMS500**	Serial bus protocol for DURAG D-MS 500 pollution emission analyzers.
DNP3	**DNP3**	Driver of Distributed Network Protocol Version 3 for Electrical Power Engineering Control and Supervision Systems.
DP	**PROFIBUS DP**	PROFIBUS DP network protocol, based on PROFIboard card by Softing GmbH.
DP5412	**PROFIBUS DP**	PROFIBUS DP network protocol, based on CP5412 (A2) or CP5613.
DSC	**DSC**	DSC PLC protocol (analysers for chlorine ion content in water).
DXF351	**DXF351**	Communication protocol for Compart DXF351 devices by Endress+Hauser.
CtEcl	**Modbus TCP**	Protocol for Communication with ECL Comfort 210/310 controllers made By Danfoss.

COMMUNICATION MODULES INCLUDED IN THE PRICE

Driver	Protocol	Use
CtEcoMUZ	**EcoMUZ**	Protocol used for data exchange between Asix and Microprocessor Protecting ecoMUZ devices made by JM Tronik.
ecoMuz2	**EcoMUZ**	Protool used for data exchange between Asix and Microprocessor Protecting ecoMUZ-2 devices made by JM Tronik.
CtEQABP	**PN-EN-62056-21**	Protocol used to exchange data with EQABP electricity meters of Pozyton through RS-485 interface.
CtEQM	**PN-EN-62056-21**	Protocol used to exchange data with EQM electricity meters of Pozyton through RS-485 interface.
CtEsser	**Esser**	Protocol fo data exchange with Esser 8008 fire protection by Honeywell.
FESTO	**FESTO Command Interpreter**	Serial bus protocol for FESTO PLC's, using diagnostic interface.
FILE2ASIX	**FILE2ASIX**	Communication protocol used for importing data from the text files of the specified structure into Asix system.
FP1001	**FP1001**	Serial bus protocol for heat and steam flow meters by METRONIC Kraków.
GFCAN	**CANBUS**	CANBUS network protocol based on CanCard by Garz&Fricke Industrieautomation GmbH.
CtGlobal	**-**	Driver used to exchange data between Asix application and so-called exchange file, which is a container for the current parameters of the driver variable (name, status, value, timestamp).
IEC61850	**IEC61850**	Power stations protocol. Requires purchase of INFO-TECH 61850 CCC library.
COMPOWAY/F	**K3N**	Meters protocol of K3N series by OMRON.
K-Bus	**K-Bus**	Communication protocol implemented within DECAMATIC regulators of VIESSMAN boilers.
CtLG	**LG proprietary protocol**	Serial communication via dedicated protocol with Master-K and Glofa GM PLCs.
CtLogo	**LOGO**	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.
CtLzqm	**PN-EN-62056-21**	Protocol for exchange of data with LZQM electricity meters, produced by POZYTON Electronic Measuring Instruments Facility in Częstochowa.
CtM200	**M200**	Communication protocol for data exchange between Asix and M210G Spirax Sarco stations.
MACMAT	**GAZ_MODEM**	Serial bus protocol for gas flow correctors MACMAT and COMMON.
CtMax1000	**MAX-1000**	Protocol to exchange data with MAX 1000 camera managing system of ULTRAK.
M-BUS	**M-BUS**	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).
MEC	**MEC**	Proprietary protocol allowing communication with heat meters MEC07 and MEC08 manufactured by ITC Łódź.
MegaMuz	**Modbus**	Protocol for communication with microprocessor security devices of MegaMuz type by JM-Tronik.
MegaMuz_TCPIP	**Modbus TCP**	Protocol for communication by Ethernet with microprocessor security devices of MegaMuz type by JM-Tronik.
MELSECA	**A1SJ71C24-R2**	Protocol of series link for MELSEC-A and FX2n PLCs, format 1 dedicated.
MEVAS	**MEVAS**	Serial bus protocol for MEVAS pollution emission analyzers.
MicroSmart	**MicroSmart**	Used for exchanging data with MicroSmart controllers of IDEC.
MODBUS	**MODBUS RTU**	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

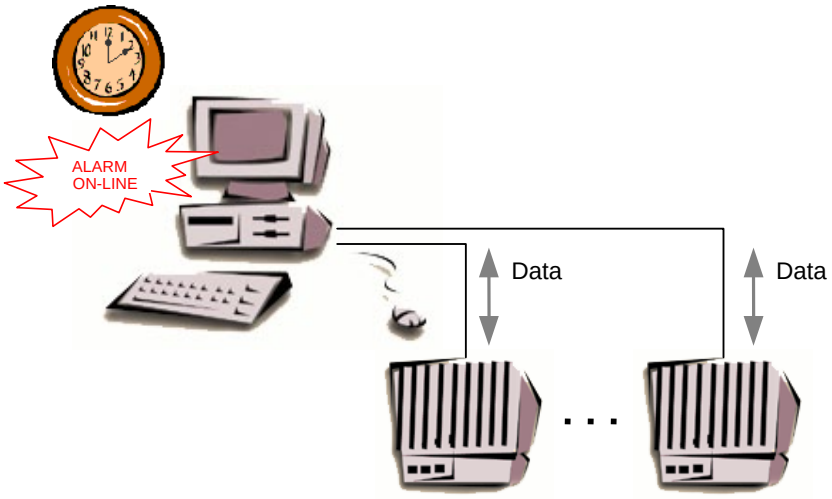
Protocol	Driver	Use
MODBUS_TCP/IP	**MODBUS TCP**	MODBUS network protocol based on TCP/IP, according to OPEN MODBUS/TCP specification by Schneider Electric.
MODBUSSLV	**MODBUS SLAVE**	MODBUS protocol, Asix in SLAVE mode.
MPI	**MPI (converter)**	Protocol of MPI network for SIMATIC S7 PLC's, based on PC/MPI converter.
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.
CtMuel	**MUEL**	Protocol to exchange data between Asix and a MUEL system maintenance computer.
MultiMuz	**Modbus**	RS232/485 serial link protocol for microprocessor devices of MultiMUZ type (manufactured by JM-Tronik)
MultiMuz_tcpip	**MODBUS TCP**	Protocol for data exchange with microprocessor devices of MultiMUZ type (manufactured by JM-Tronik) over Ethernet by means of TCP or UDP.
MultiMuz3	**Modbus**	RS232/485 serial link protocol of microprocessor security devices MultiMUZ3 type, produced by JM-Tronik.
MultiMuz3_tcpip	**MODBUS TCP**	Protocol for data exchange with microprocessor devices of MultiMUZ3 type (manufactured by JM-Tronik). Communication realized in MODBUS RTU mode on TCPIP with the use of Ethernet and 10502 port.
MUPASZ	**Modbus**	Serial bus protocol for universal microprocessor MUPASZ PLC for power industry protection devices - Institute of Telecommunication and Radio Engineering in Warsaw.
Mupasz710_RS	**Modbus**	Protocol for data exchange with microprocessor devices of MUPASZ 710 type made by Institute of Telecommunication and Radio Engineering in Warsaw.
MupaszRtu	**Modbus**	Protocol for data exchange between Asix and Mupasz2001G, Mupasz07, Mupasz Compact G01 devices, produced by ITR Warszawa. Communication is performed via serial links in RS485 standard.
MupaszRtu_TCPIP	**MODBUS TCP**	Protocol for data exchange with microprocessor protecting devices of MUPASZ 710 type, made by Institute of Telecommunication and Radio Engineering in Warsaw. The communication is performed in MODBUS RTU mode via Ethernet link, using port no. 502.
CtMus04	**MUS**	Protocol to exchange data with microprocessor-based control devices MUS-04 manufactured by ELEKTROMETAL S.A. from Cieszyn.
MUZ	**MUZ**	Protocol of MUZ microprocessor PLC for power industry protection devices.
CtNCP	**MN_Invensys**	Protocol to exchange data with MN-series controllers from Invensys (former Satchwell).
NetLink	**PROFIBUS / MPI**	S7 protocol of PROFIBUS network using NetLink Lite module of SYSTEME HELMHOLZ.
NetLinkPro	**PROFIBUS / MPI**	Protocol for exchanging data with S7 PLCs with use of NETLink PRO (gateway Ethernet <-> MPI/Profibus) manufactured by SYSTEME HELMHOLZ.
None	**-**	The None protocol doesn't realize a physical connection with the controller. It may be used for: • application testing in simulation mode, • data exchange between Asix applications by means of process variables.
CtNordicRF	**NordicID protocol**	Protocol to exchange data with Nordic ID RF 601 bar code reader of NordicID.
OMRON	**HOSTLINK**	Serial bus protocol for SYSMAC series PLCs.
CtOmronTcpip	**FINS**	Protocol for data exchange with Omron controllers supporting the FINS/UDP and FINS/TCP protocols.
OPC	**OPC KLIENT**	OPC (OLE for Process Control) protocol, communication with any PLC using its OPC server, according to OPC 2.04 specification.
CtPa5	**Pa5**	Communication protocol for data exchange between Asix and PA-5 converters of POWOGAZ S.A. Poznan.
CtPD21	**LUMBUS**	Protocol for data exchange with PD21 concentrator mabe by LUMEL S.A.
CtPmc4000	**PMC-4000**	Communication protocol for data exchange between Asix and POLON 4800 fire alarm control panel; data are transferred via serial interface RS-232.
PPI	**PPI**	Protocol of PPI interface for SIMATIC S7 series 200 PLC's, based on PC/PPI converter.

COMMUNICATION MODULES INCLUDED IN THE PRICE

Protocol	Driver	Use
CtProtherm300	**PROTHERM**	Protocol of Protherm 300 DIFF PLC of Process-Electronic GmbH (RS-422 serial link).
PROTRONICPS	**PROTRONICPS**	Communication protocol for PROTRONIC PS regulators by Hartmann & Braun.
S700	**AK**	Protocol for gas analyzers by MAIHAK.
S7_TCPIP	**S7_Ethernet**	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.
SAPIS7	**MPI (CP5611/SOFTNET)**	Protocol of MPI network for SIMATIC S7 PLC's , based on CP5611/SOFTNET.
SAPIS7	**PROFIBUS**	S7 protocol of PROFIBUS network based on CP5412 (A2) or CP5613.
S-BUS	**S-Bus**	Protocol of programmer unit interface and S-Bus network for SAIA Burgess Electronics PLCs.
CtSbusTcpip	**Ethernet S-Bus**	Protocol used for data exchange between Asix system and PLCs of PCD SAIA-Burgess family by means of TCP/IP.
SINECH1	**SINEC H1**	Protocol of Ethernet industry network for SIMATIC S5 PLC's, SEND/RECEIVE interface, based on CP1413.
SINECL2	**SINEC L2**	Protocol of PROFIBUS network with SEND/RECEIVE (FDL) interface for SIMATIC S5.
CtSi400	**SINTONY SI**	Communication protocol for alarm exchanges with Sintony SI 400 of SIEMENS.
CtSNG	**SNG-Synergia/IP**	Protocol for data exchange between Asix and SNG systems provided by the Warsaw based Synergia Tech company, via an Ethernet link.
SNMP	**SNMPv1 i SNMPv2c**	SNMPv1 and SNMPv2c protocols – management of various elements of telecommunication networks, such as routers, switches, computers, or telephone switchboards. The driver performs its functions by using the SNMP Management API.
CtSNPX	**SNPX**	Protocol for communication with GE_FANUC 90-30 PLCs as well as GE_FANUC 90 CMM and PCM modules.
CtSp100H	**Manufacturer's protocol**	Protocol for exchanging data between Asix and SP-100H controller of storm water center Aqua Center Industrial 100 H 14-60, produced by MARLEY Polska Sp. z o.o. The transmission is performed via serial links using RS-232 std serial port.
SPA	**SPA**	SPA bus protocol for protection of switching stations manufactured by ABB.
CtSrio	**ANSI X3.28**	Protocol for data exchange with SRIO 500M ABB hub; communication via RS-232 interface; the transport layer based on ANSI X3.28 protocol in full-duplex mode with BCC checksum.
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).
TALAS	**TALAS**	Serial bus protocol for TALAS pollution emission analyzers according to the TALAS 2.3 (007)22 specification.
CtTwinCAT	**(with use of Beckhoff libraries)**	Data exchange between Asix and PLCs of Beckhoff Industrie Elektronik: CX1000, TwinCAT PLC (PC based control system), BC9000, BX9000. Communication is based on Ethernet.
CtTwinCATTcpip	**ADS/AMS over TCPIP (without use of Beckhoff libraries)**	Data exchange between Asix and PLCs of Beckhoff Industrie Elektronik: CX1000, TwinCAT PLC (PC based control system), BC9000, BX9000. Communication is based on Ethernet with the use of ADS interface.
CtWago	**Wago**	Protocol for data exchange with Wago PLCs. Communication realized with the use of Ethernet in UDP mode based on network variable list ("Network Variables").
ZdarzenieZmienna	**-**	The driver is used to generate process variables of WORD types (16-bit word) on the basis of current values of alarm events in the Asix system.
CtZxD400	**IEC 61107**	CtZxD400 driver is used for data exchange between Asix and electric energy counters of ZxD400 type, manufactured by Landys & Gyr, via RS-485 interface.

LICENSES CHARACTERISTIC

1. Local 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

OPC/DDE/OLE/.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
- network - synchronized alarm handling for many stations

Archive

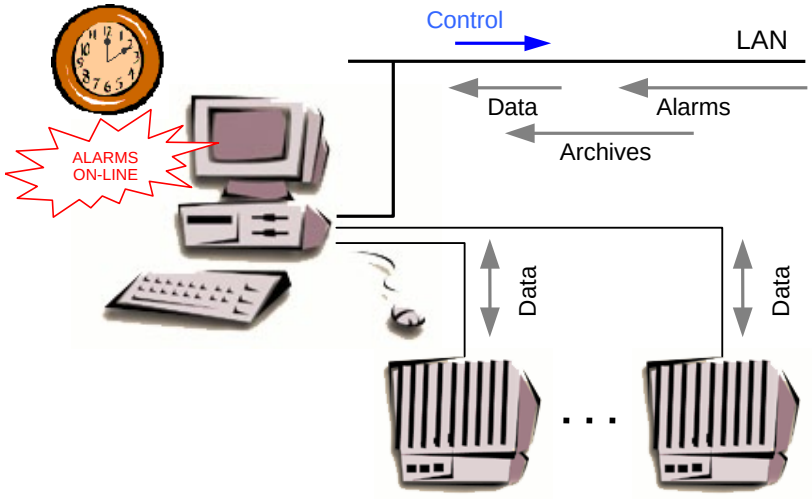
- Local archive
- Possibility to use remote archives

Time

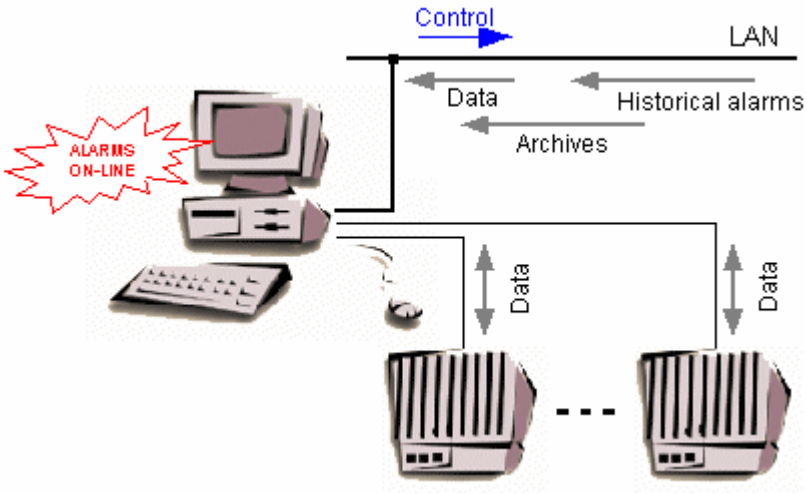
Application run-time limited to 2 hours

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", that is 2^{32} variables
- number of variables from network channels is unlimited (exception: WATW, WAEW - without variables form network channels)

Alarms

Alarm servicing in the following modes:

- local
- network - synchronized alarm handling for many stations, only in client mode

Archive

- local archive
- possibility to use remote archives

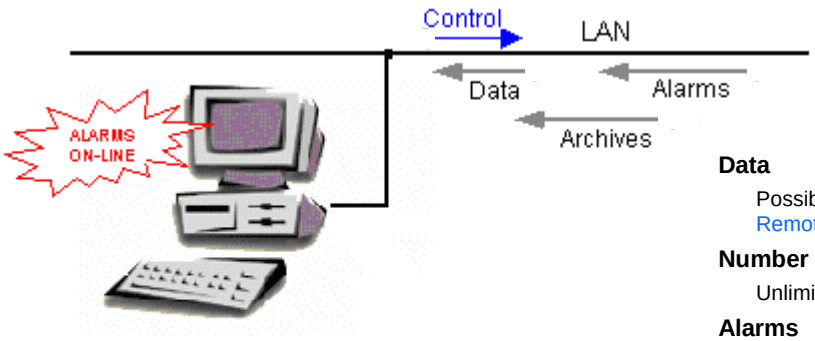
Functions of engineering station

Yes - application development

OPC/DDE/OLE/.NET server

Yes

4. 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, only in client mode

Archive

Possibility to use remote archives

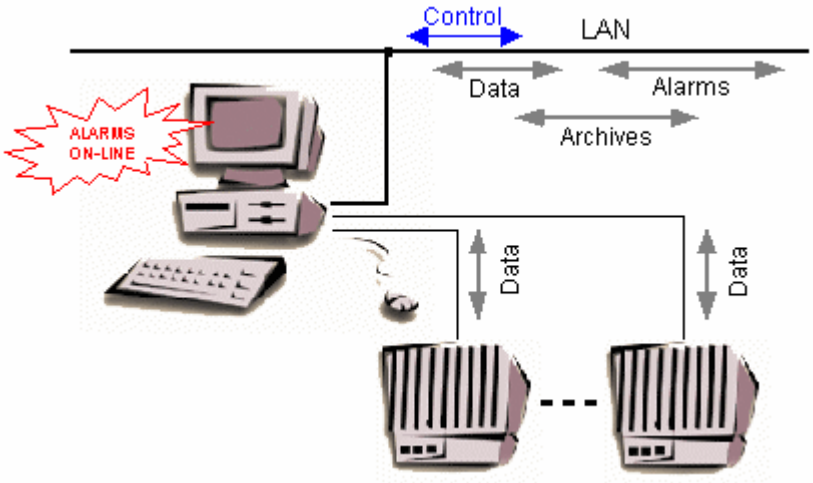
Functions of engineering stations

Yes - application development

OPC/DDE/OLE/.NET server

Yes

5. 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”, that is 2^{32} variables
- Number of variables from network channels is not limited

Alarms

Alarm servicing in the following modes:

- local
- network - synchronized service of alarms from many stations

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

6. Portal/ WWW server Asix4Internet

Data:

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

Number of variables / from physical and virtual channels/:

- Unlimited

Number of simultaneously operating users:

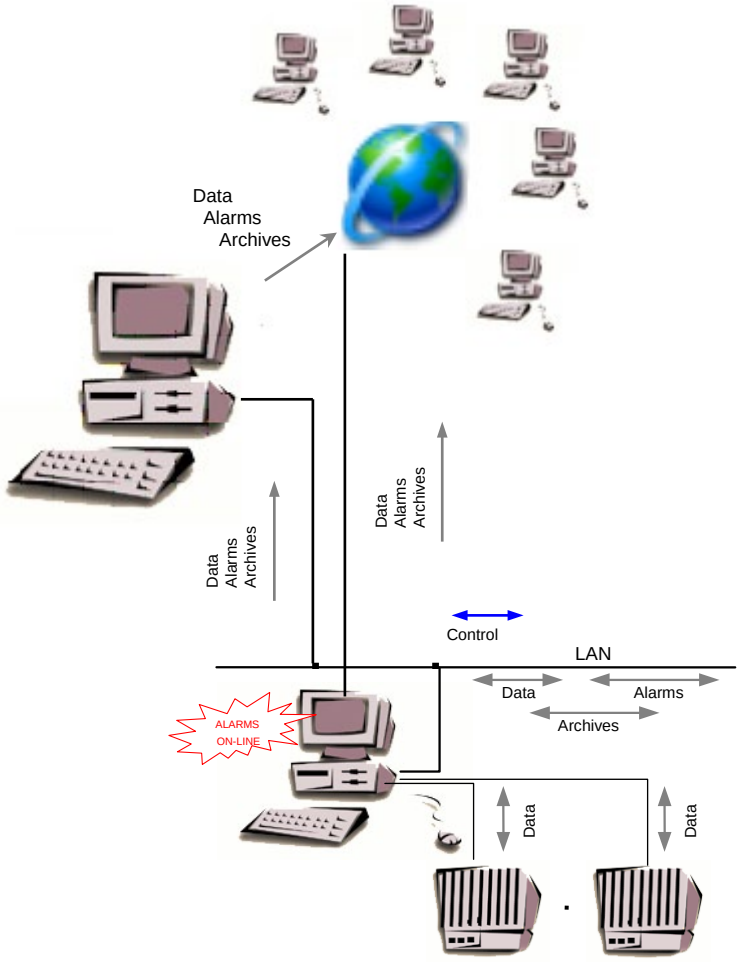
- 1 user in basic Asix4Internet license
- extension to any number of users by purchase of additional Asix4Internet client licenses

Alarms

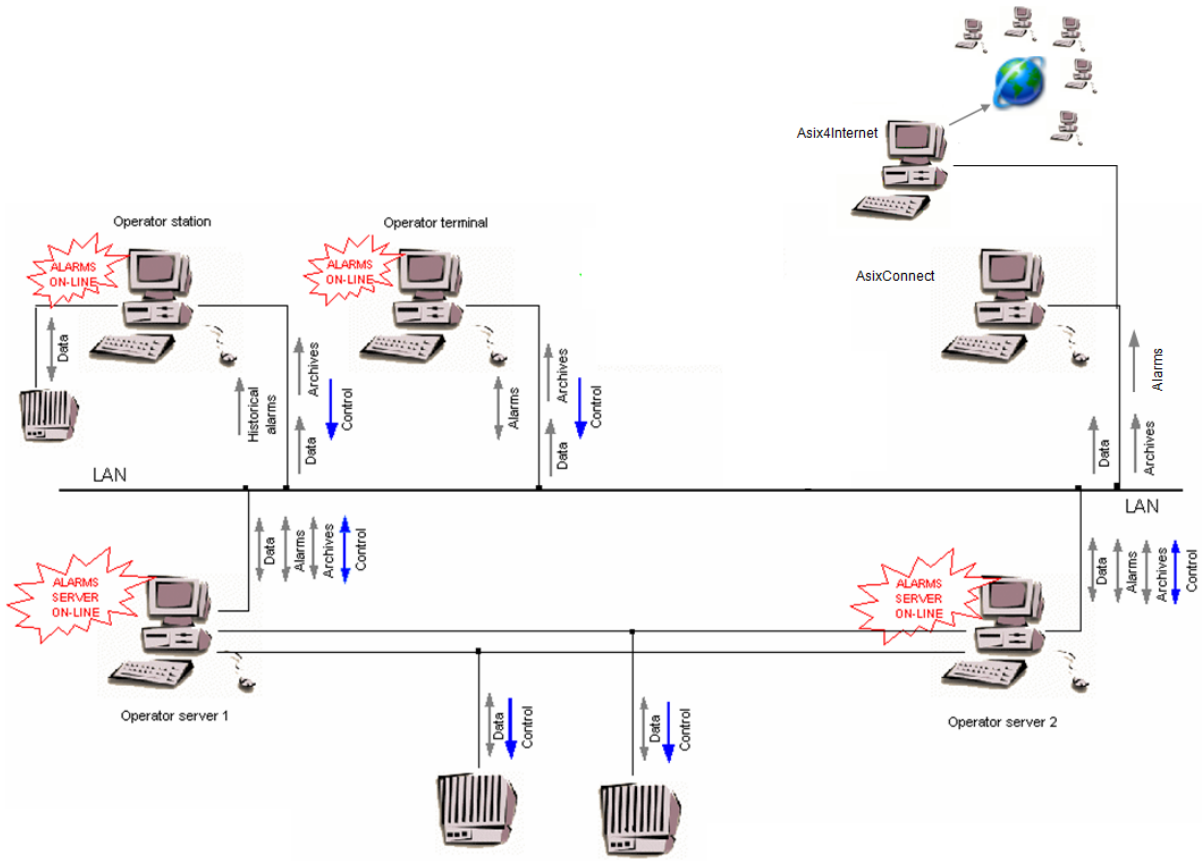
- ***AsPortal*** - access to current and historical alarms
- ***EvoNet*** - access to operator station alarms
- ***AsTrend*** - access to historical alarms

Archives

- ***AsPortal*** – access to archival variables in tables or graphic charts
- ***EvoNet*** – access to archives like on operator station
- ***AsTrend*** - access to archival variables in tables or graphic charts



7. 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.
AsixConnect	- access to current and historical data of Operator servers, remote control possibility via Operator servers.
Asix4Internet	- access to process data on Internet.

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