



Vuniq – SCADA/HMI Software

Vuniq offers you a complete SCADA solution, whether you are a process engineer, systems integrator, or operator. Vuniq features unparalleled ease of use, advanced graphics capabilities and zero maintenance data logging, together with a proven high-performance communications engine to deliver a affordable, superior SCADA experience.

Vuniq is an integrated development and operation environment. Switching between designer mode and operator mode in screens is a matter of a single keystroke. Definitions are always accessible and can be changed without restarting Vuniq. Access to the design features can be easily hidden to prevent operators from making changes to the project.

Simple to Setup

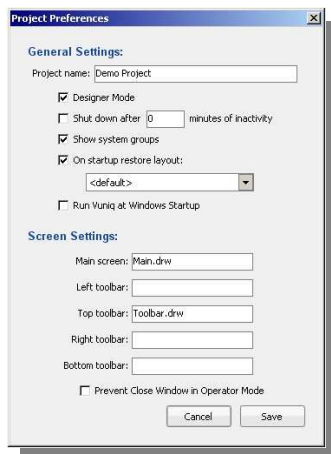
Vuniq projects do not require hours of work to setup. All definitions, such as aliases, alarms, or trend variables are done in simple to use tables, allowing you to export and import data, search and replace values, sort through the definitions or make global changes using the Express Edit feature.

Ease of Use

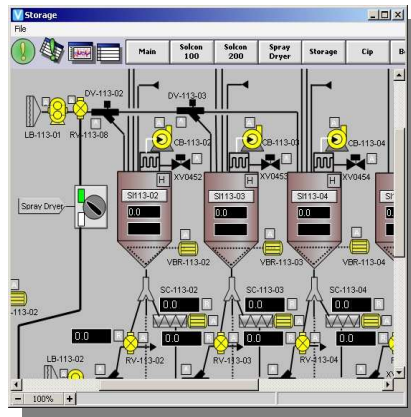
Vuniq was designed from the ground up to facilitate all tasks involved in creating and designing projects. Vuniq always stays responsive, even while performing lengthy tasks such as fetching records or searching for data, and the streamlined, clean interface helps you stay focused on your work. In fact, Vuniq is so easy to use that most of our users have never bothered to look at the documentation.

Hassle Free Project Work Flow

Vuniq provides a simple and easy way to manage even large projects. The project window includes integrated search, making it easy to find a specific screen or table among hundreds of items. In addition, items can be assigned to user-defined groups, each with its own window layout, that can be recalled with a mouse-click.



Simple, easy to understand settings make project configuration a breeze



Operator screens deliver an stunning impact

Zero Maintenance Database Tables

Vuniq can log data such as reports, trends, or other history to an external database system via ODBC, or to local tables using its internal fast and reliable SQLite database engine, and in addition lets you export data in csv (Excel) format. Database setup is completely automatic, relieving users of the complications of setting up files, user accounts or queries. Vuniq automatically maintains data integrity and the customizable data archiver feature moves old records to separate archives, thus preventing the hard disk from becoming fragmented or full. All this is achieved without any user intervention whatsoever.

Affordable, Scalable Solution

Vuniq can be suited to different needs and can grow with your plant. Vuniq does not limit, either by license or by technology, any aspect of your project. It has been field-tested and proven in installations using tens of thousands of I/O points, hundreds of reports and trends, and thousands of alarms. The license you buy gives you unlimited power, and each system includes all development tools you need, just a mouse-click away.

What Makes Vuniq Different?

- A single program takes care of all SCADA functions. There's no need to get stuck in your computer's Start Menu, helplessly deciphering meaningless icons. Just call up the project window and go from there.
- Take your project with you on a Disk on Key (DOK). Use **Vuniq To Go** to run your project on any computer on your intranet. No need to install files.
- Vuniq is clean software. The entire installation takes up less than 20MB of hard disk space, and Vuniq does not install any device drivers in your operating system.
- ODBC connectivity lets you log data to any ODBC-compliant database server, such as Microsoft SQL Server, MySql or Oracle.

Operator Screens

Vuniq offers the visual quality to be expected from today's PC's. Based on high-quality vector-graphics, Vuniq screens achieve visual impact and are also easy on the eyes. Line-smoothing, transparency, smooth gradients and true zooming let you incorporate hundreds of elements and labels in a single screen while maintaining legibility. Layer support lets you separate different kinds of elements into separate graphic layers, each of which can be hidden or disabled.

Live Graphics

In Vuniq you can link real-time values to any element attribute to create stunning animations, dynamically changing colors, placement, rotation, visibility, text, level-fill or any other attribute. You can also select actions to perform upon mouse-clicks, such as changing values, switching screens or loading floating screens, or running custom scripts. In addition, a value inspector allows an engineer to quickly inspect and change any of the values displayed on-screen.

Total Integration

With Vuniq it's easy to integrate real-time and historical values in a single user interface using operator screens. Apart from the normal way of displaying tables, alarms or charts, you can also visualize this data in operator screens. Report data can be replayed in screens, instead of real-time values, thus providing an easy way to audit processes. Trend views can be integrated into operator screens for displaying real-time or historical trends. Recipes can also be displayed and loaded through operator screens.

Secure Operation

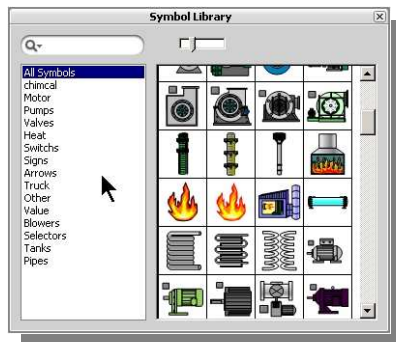
VunIQ always makes sure only authorized users are able to perform actions such as changing values or acknowledging alarms. Screen actions can be configured to display a confirmation box first or ask for a minimal user-level. Operator actions can be logged to a user-actions database table.

Screen Design

VunIQ includes an integrated screen designer for rapidly designing and editing screens. Screens can be edited any time with a single keystroke. There's no need to switch to a different application or even a different window. An extensive, customizable symbol library gives you a head start with hundreds of elements from standard plant equipment such as valves, pumps and motors to schematic symbols and text boxes. All symbols come with links included, so the only thing you need to provide is a variable address. To add these symbols to your screen, simply drag & drop them in the desired location.

State of the Art Drawing Tools

The vector-graphics based screen designer lets you draw anything from rectangles, ellipses or bezier curves to complex, multi-colored symbols comprised of hundreds of shapes. The concise, easy to use appearance and property panels let you make changes to visual appearance, and see those changes immediately reflected in your screen, without needing to hit an OK or Apply button. Unlimited undo/redo with a detailed history panel lets you revert any changes. The screen designer includes tools to align, rotate, group, flip, duplicate and otherwise arrange elements with ease. You can also use bitmap images in your screens and create layout guides for aligning elements.



The comprehensive symbol library lets you create stunning screens in minutes

Easy Animation

In VunIQ, links are the glue that connects real-time values to screen elements, letting you create rich animations to reflect the process as it unfolds. With VunIQ links you are not limited to changing colors or texts. By tying values to specific properties, links let you change any attribute of any element in any way you wish, and you can use as many links as you'd like on each element. You can also specify actions to be performed on mouse-clicks or keystrokes, such as changing values, switching screens, opening floating panels or performing complex scripts.

Straight-Forward Addressing

VunIQ lets you reference any valid item in the PLC address space, without having to define it in advance. A simple, easy to use aliases table lets you separate the screen addressing from the PLC. You can also specify complex expressions and formulae to further facilitate the visualization of complex calculations.

Maximum Object Reuse

VunIQ takes the concept of object reuse to the maximum. With relative addresses you can define complex object behavior and then reuse objects with only a single change of address for each object. This concept can be taken further by designing detail screens for each kind of element in your process, for example pumps, or valves, and then reusing these as floating

panels, entering addresses only once for each instance.

Instant Search & Replace

The property panel lets you find any address, element name or value by simply entering the search term in the search box. You are immediately presented with a list of all objects containing the search term. To replace all instance of the term, just click the Replace button and enter the replacement string.

Alarms

VunIQ provides a straight-forward system for monitoring process alarms. Alarms are organized by groups, and alarm conditions are constantly evaluated against static or dynamic set-points. Alarm groups can be assigned colors to provide further visual cues on the nature of alarms. Each alarm point can be individually configured to perform different actions, such as popping-up the alarm summary window, toggling a flag in the PLC, playing an audio file, or sending out an SMS message.

Current Alarms

When a new alarm occurs, the alarm summary window pops up. If the alarm window is in the way, the pop up feature can be disabled by a single click. You can sort the

Name	Status	Started	Description	Group	Group Description
Alarmtag5	new	04/05/2005 12:16:49	Alarm only PopUp	Group2	Ann
Alarmtag1	new	04/05/2005 12:16:47	Alarm without Ack.	Group2	Ann
Alarmtag3	new	04/05/2005 12:16:44	Normal alarm val.	Group3	Event
Alarmtag2	new	04/05/2005 12:16:42	Normal alarm Value	Group3	Event
Alarmtag1	new	04/05/2005 12:16:12	Normal alarm for BR	Group1	Normal

Current alarms can be dismissed or acknowledged with ease

start time, alarm name, alarm group, status, or description. In addition, you can use the relax feature to get rid of alarms which are of no interest at the moment. Clicking the Refresh button will restore all active alarms to the list. Acknowledging alarms can be done for all active alarms or for individual alarms.

Unlimited History

Alarms can also be logged to the alarm log, a database table automatically maintained by VunIQ. The alarm log maintains information such as alarm start and end times, the process value, acknowledge time and the duration of the alarm in seconds. The alarm log table uses alarm colors for displays and lets you export the data to .csv files, filter the data by date or quickly search for a specific alarm or value.

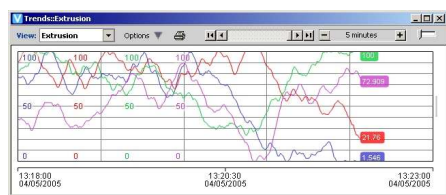
Trends

VunIQ can handle literally thousands of trend variables, and offers a sampling resolution of up to 100 samples per second. Trends are logged to regular database tables and can be displayed in tabular view. You can sample anything from analog or discrete digital values to complex expressions or formulae. Just like reports, trends are automatically archived to conserve hard disk space and relieve the user of having to perform complex database maintenance. Ad Hoc charts can be generated on the fly for arbitrary variables by making simple selections in operator screens.

Simple, Effective Visualization

Charts let you watch up to 8 values together in a single graph. For each pen you can define a color, a scale and units to be displayed. Charts can be integrated into operator screens and offer the same high-quality

graphics. The customizable charts can be configured to display a grid, a legend, or scale values. Moving along the time axis or zooming in and out can be done by direct manipulation with the mouse, simply dragging to expose time.



Charts can be easily customized and manipulated

Lightning Fast Display

In Vuniq you never have to wait for data to appear. Vuniq can fetch tens of thousands of samples per second and draw them quickly, allowing you to view time-based trends in scales of months or even years. Unlike other SCADA programs, Vuniq doesn't hang while fetching data. Even if reading trend points takes a while, you can perform any action such as jumping to a different time, zooming in or out, or closing the window.

Reports

Vuniq places no limit on the amount of variables you can put in a single report, or on the conditions for logging. A simple table view lets you add variables to a table, and you can also use expressions like anywhere else in Vuniq. Reports can be logged according to a time schedule or by event or condition. The logging times are automatically normalized so that for example reports taken once an hour will be taken on the hour.

User-Friendly Tables

The table windows in Vuniq give you all the power you needed without any fuss. Quickly sort your information any way you want, search for a specific value or filter your records by time. You can also export records to a .csv file for use in Microsoft Excel, Microsoft Access, or any other database software.

Time	Value1	Value2	Value3	Boolean1
04/05/2005 13:25:00	13	24	59	<input type="checkbox"/>
04/05/2005 13:24:59	13	24	59	<input type="checkbox"/>
04/05/2005 13:24:58	13	24	57	<input type="checkbox"/>
04/05/2005 13:24:57	13	24	56	<input type="checkbox"/>
04/05/2005 13:24:56	13	24	55	<input type="checkbox"/>
04/05/2005 13:24:55	13	24	54	<input type="checkbox"/>
04/05/2005 13:24:54	13	24	53	<input type="checkbox"/>
04/05/2005 13:24:53	13	24	52	<input type="checkbox"/>
04/05/2005 13:24:52	13	24	51	<input type="checkbox"/>
04/05/2005 13:24:51	13	24	50	<input type="checkbox"/>
04/05/2005 13:24:50	13	24	49	<input type="checkbox"/>
04/05/2005 13:24:49	13	24	48	<input type="checkbox"/>
04/05/2005 13:24:48	13	24	47	<input type="checkbox"/>
04/05/2005 13:24:47	13	24	46	<input type="checkbox"/>

Tables let you quickly sort, filter or search for data

Replay Historical Data

Vuniq lets you visualize historical data in operator screens to easily and effectively audit past processes. With a single mouse-click you can watch a logged process unfold in animation on your screen, displaying sampled values and animating screen elements. Vuniq also lets you control the speed of animation, making sure you can catch any small detail.

Recipes

Recipes let you download a large quantity of arbitrary values to PLC's. With Vuniq, recipe management is as simple as it gets. Recipe values are stored in database tables, and can be recalled by using a key value. As with reports, Vuniq places no limit on the number of columns in a recipe table.

Recipe Loading

In Vuniq, recipes can be managed using the intuitive, easy to use recipe loader, which lets you edit, download and upload recipes. You can also edit recipes in tabular view, for performing global changes, search & replace values and perform other common editing operations including exporting and importing records. Recipes can also be visualized and downloaded/uploaded from screens, in a similar fashion to report replay.

Parameter	Description	Source	Value
Var1	Variable1	99;1;N103	1
Var2	Variable2	99;1;N104	11
Var3	On/Off	99;1;F10.13	True
Var4	String	99;1;S1	Recipe No 1

Recipe management made simple

Data Acquisition

Fetch Data. Fast.

Vuniq features an industry leading high-performance communications engine, and includes an extensive collection of drivers for PLC's. Vuniq performs data requests to different PLC's simultaneously using multi-threading in order to ensure that you'll get your data as fast as possible. There's no need to predefine data blocks. Just reference the data and Vuniq does all the rest.

Data Integrity

Vuniq makes sure your data is always up-to-date. In the case of communications error or a timeout, your data is immediately updated to reflect the problem. When changing values, Vuniq does not update the read values until the next time they are fetched from the PLC.

Transparent Distributed Communications

Vuniq stations can easily share real-time information with minimal configuration effort. Information is sent only when needed, or only upon change of value, thus minimizing network traffic. You can design your network to work in peer-to-peer fashion or in server-client mode. Vuniq network communication can also be configured for redundancy.

Complex Expressions

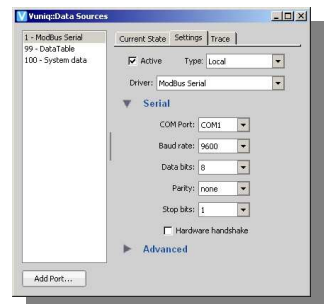
In addition to letting you define aliases to use instead of addresses, Vuniq lets you use complex expressions and formulae incorporating multiple variables, constants or functions. Vuniq includes a rich set of mathematical and string functions that let you perform useful transformations on your data before it is displayed or stored.

Setup and Go

Communication setup is as simple as selecting a driver and a handful of communication parameters. There's no need to restart Vuniq for changes to take effect. In fact, you don't even have to click an OK button. Changes you make to communication ports are immediately reflected. The settings pane in the data sources window also lets you further customize the behavior of ports, such as balancing write and read operations, block fragmentation or automatically disabling communication to problematic stations on multi-drop connections.

Up-to-Date Statistics

The data sources window also provides a host of statistical information about communications to let you fine-tune performance, or isolate communication problems. The information displayed includes the update rate, the number of read blocks, read rate, write rate, throughput and response time.



Changes to setup are reflected instantly

Specifications

Operator Screens

- High-quality screen display with support for anti-aliasing (line smoothing) and smooth gradients.
- True zooming.
- Flexible links for connecting any number of variables to any visual aspect.
- Rich interaction functions for changing values, switching screens, or performing complex scripts.
- Support for displaying bitmap images in screens.
- Support for displaying historical data or recipe data in screens.
- Integrated state of the art screen designer:
- Fast switching between design and operator mode in the same window.
- Unlimited undo/redo.
- Support for multiple layers.
- Powerful property editor with instant search & replace facilities.
- Quick duplication of objects in tables, or in rotation.
- Support for bezier curves.
- Support for true rotation (any angle).
- Extensive and customizable symbol library lets reuse symbols. Drag&drop any symbol to your screens.

Alarms

- Alarms can be assigned to groups, each with its own color.
- Each alarm can be configured to trigger different actions.
- Alarm conditions on dynamic set points.
- Alarms can be configured to play audio files or send SMS messages to multiple recipients.
- Alarm log displays historical alarms with alarm colors.

Data Logging

- Zero maintenance SQLite database engine for all history tables.
- ODBC connectivity lets you log data to any ODBC-compliant database.
- Fail-safe database automatically recover from system crashes.
- Customizable archiver automatically removes old records from log tables.
- Unlimited columns in reports and recipes.
- Integrated table display with support for sorting, filtering and instant search & replace.
- Automation for reports and recipes by time or by event.
- Support for exporting to and importing records from .csv files.

Trends

- Unlimited number of trends.
- High-precision sampling for up to 100 samples per second.
- Flexible trend display with up to 8 variables per view.
- Charts can be integrated in operator screens.

Project Management

- Automatic folder and file maintenance for projects.
- All project settings can be changed on the fly without needing to restart the project.
- Project manager window makes managing large projects a breeze.
- User groups for organizing the project by topic.
- All of Vuniq's windows maintain state and position.
- Instant search function for finding screens, tables and other items.

Security

- Unlimited number of user accounts, each with a password and a user level: basic, operator, supervisor, engineer or programmer.
- Actions can be assigned a minimal user level.
- Actions can be logged to a user-actions table, for later auditing.

Tools and Utilities

- Data monitor for quickly looking up and changing values.

- Trace window for monitoring communications.
- Export & import of all project definitions tables.

Communication

- High-performance communication engine with concurrent simultaneous data requests for maximizing data throughput.
- Up to 98 concurrent, logical communication ports.
- Up to 255 stations for multi-drop or TCP/IP connections.
- Connectivity to OPC servers.
- Aliases for simplifying addressing.
- Support for rich expressions with mathematical and string functions.
- Real-time data sharing between Vuniq stations with support for redundancy.
- Detailed statistics for each communication port, and in the case of TCP/IP protocols, each station.
- Extensive library of communication drivers supporting a wide selection of PLC's and controllers, including Siemens S7/SIMATIC NET, Siemens S5, ModBus serial, ModBus over TCP/IP, KOYO, Omron, GE 90-30 Serial, GE RSLinx, Izumi, Taian, Unitronics, Foxboro and others.

Purchasing Vuniq

Try Before You Buy

You can download Vuniq on line and use it for up to 30 days without any limitations. When the evaluation period has passed you will be required to purchase a license in order to continue using Vuniq.

One Size Fits All

Vuniq does not limit you in any way, and can scale without problem as your needs grow. In addition, development and design features are accessible on all computers running Vuniq.

Client/Server Operation

A server license option lets you use one PC for communications, data logging and development and a number of PC's as operator stations. Each of your plant's computers can function as an I/O and data server, with the other computers acting as clients for monitoring and controlling only. The clients do not need a separate license but instead get a temporary license by connecting to the server. Clients can connect to multiple servers simultaneously.

Vuniq To Go

While the normal license is tied to a single PC, Vuniq can also be supplied on a custom built Disk on Key (DOK), containing the Vuniq software and a license, enabling you to take Vuniq with you and use on any PC. The DOK has enough space for a Vuniq project, further facilitating portability. This enables you to take Vuniq with you and use it on any PC without needing to perform any installation. In addition, you can specify where log files are stored: on the flash disk, a specific PC, or on the local PC.

Getting More Information

If you wish to acquire more information about Vuniq, please visit our website:

<http://www.vuniq.co.il>

If you have specific questions we are always at your disposal by phone, fax or email:

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