

## RSView32 v7.20

### OVERVIEW

RSView32™ is an integrated, component-based HMI software product for industrial automation, process control, and supervisory monitoring. It enables operators to interact with automation machines and processes while providing a flexible, easy-to-use design environment for control engineers to create, test, and deploy HMI solutions for real-world applications.



RSView32 is an open system that allows plant floor data to be shared with other manufacturing systems throughout the enterprise. This provides a vital link to real-time manufacturing information for the enterprise to achieve process optimization and increase productivity. Designed for Microsoft® Windows® environments, RSView32 interacts easily with the Rockwell Software integrated product line, Microsoft products, and other third-party offerings.

You can extend your RSView32 applications with the RSView®32 Active Display System™, a client/server option that allows you to interact with your RSView32 applications remotely – across either a Local Area Network or the Internet.

### RSView32 products include:

- RSView32 Works – includes both the development and runtime software to create, test, and run RSView32 applications.
- RSView32 Runtime – includes the runtime software to deploy and run RSView32 applications.

### Additional RSView32 products:

- RSView32 Active Display System – a client/server application that extends the reach of your HMI application to virtually any computer on a network. (See VW32AD-TD001B-EN-P)
- RSView32 WebServer – allows anyone with a valid RSView32 user account to connect to an RSView32 project over the Internet. (See WEBSRV-TD001B-EN-P)
- RSView32 MessengerPro – provides additional Messenger features that allow you to dial in using a regular phone line to hear and respond to alarms and run RSView32 commands or macros.

### FEATURES

Get started quickly with RSView32's point-and-click access to its editors and many of its functions. An intuitive folder system makes it easy to organize project files. To switch between the development and runtime systems, you simply click the tabs in the convenient Project Manager. It's quick and easy to change your project on the fly during runtime.

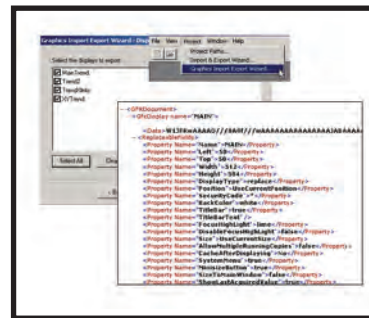
### POWERFUL GRAPHICS EDITOR

Design high-level graphics for even the most complex application using the RSView32 drawing environment. You can also use graphic files from other drawing software, such as AutoCAD®, CorelDRAW®, and PhotoShop®. And you can add animations to vector-based graphic objects.

### Graphic Import/Export Wizard

The new Graphics Import/Export Wizard in RSView32 v7.20 lets you export complete graphic displays as XML (Extensible Markup Language) files. You can edit the elements and attributes you need for your graphic displays using an external programming tool or

XML editor and then import the file back into RSView32 to modify the existing graphic objects or create a new display.



## **Customize the look of graphic displays**

RSView32 offers a full set of display setup features, including background color, highlight color, input field text and fill colors, scaling, window size and position, security code, and startup and shutdown commands. You can also set default values so that all graphic displays in a project share similar characteristics.

Use any of the standard Windows colors for objects in graphic displays, or create your own custom colors. To draw an operator's attention to an object at runtime, animate the object to change color as its value changes, using up to 16 different color options.

## **Copy and paste animations**

After attaching animation to an object, copy the animation and paste it onto another object. If the object has more than one type of animation, all animation is copied and pasted with a single click.

## **Edit objects and properties as a group**

To edit a common property of several objects (for example, their color, size, or orientation), group the objects together and then change all of them with just one click.

## **Simulate runtime with the click of a button**

During development, quickly test the animations in a graphic display by clicking a button on the toolbar. RSView32 immediately simulates run mode from within the graphics editor without starting the runtime software. To continue editing, simply click another toolbar button.

## **Represent multiple machines with a single graphic display**

When you create the graphic objects in a display, assign tag placeholders to the objects instead of tag names, and assign a parameter file to the graphic display. A parameter file defines the tags that the graphic display uses at runtime. To change the tags associated with all of the objects on a graphic display at runtime, simply change the parameter file. A single graphic display can handle information for many similar sources – so you have fewer graphic displays to create, edit, save, and update.

## **Build commands by pointing and clicking**

You don't have to remember complicated command names and syntax; the command wizard in RSView32 steps you through the process with lists, prompts, and check boxes. To run commands quickly during either development or runtime, use the built-in command line.

## **Enter input with an on-screen keyboard**

The on-screen keyboard allows operators of touch-screen terminals to enter input without a keyboard attached to the terminal. When the on-screen keyboard is enabled for a graphic display, a keypad opens when the operator selects an input field. If the operator selects a text input field, a full QWERTY keypad opens. If the operator selects a numeric input field, a numeric keypad opens.

## **Continuously update hidden graphics**

Even when hidden from view, displays can remain actively running or collecting data at the configured scan rate. For example, use this feature to keep an ActiveX® control running continuously or to update real-time trend data, even if the graphic display is closed.

## **Continuously update input fields**

To help you track a tag's value, configure an input field to update continuously with its current value, while pausing when you enter values manually.

## **Resize objects and graphic displays**

RSView32 automatically scales objects on a graphic display to fit the runtime screen resolution. This eliminates the need for configuring separate graphic displays for different display resolutions.

## **Document objects with pop-up tool tips**

Assist runtime operators by adding pop-up tool tips to buttons and other touch-control objects.

## **Animate objects with changing colors**

Edit a common property of several objects (for example, their color, size, or orientation) by grouping the objects and then changing all of the properties with just one click.

## **Animate motion by clicking and dragging**

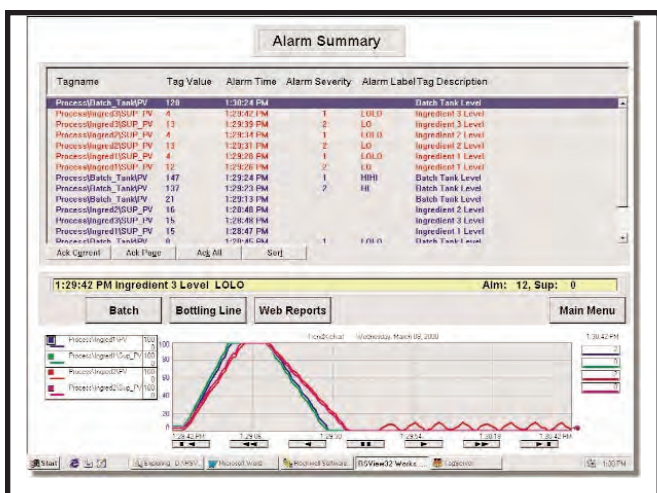
With Object Smart Path™, animate an object's range of motion by simply dragging the object from its starting point to its final position. RSView32 automatically calculates the pixel offset and moves the object through the range at runtime, eliminating counting pixels, taking measurements, and trial and error.

## **Simplify tag replacement by using parameter files**

When you create the graphic objects in a display, assign tag placeholders to the objects instead of tag names, and assign a parameter file to the graphic display. A parameter file defines the tags that the graphic display uses at runtime. To change the tags associated with all of the objects on a graphic display at runtime, simply change the parameter file. A single graphic display can handle information for many similar sources – so you have fewer graphic displays to create, edit, save, and update.

## **Replace tag names and character strings quickly**

Use of tag substitution lets you quickly replace the tag names or placeholders, commands, macros, file names, or command parameters associated with all currently selected graphic objects. This timesaving feature allows you to change quickly a large number of tag names or other character strings associated with multiple objects without editing each object individually.



### Schedule printing of graphic displays

Use a simple command to print any graphic display in the project at any time. You might want to schedule screen prints for auditing purposes or automatically print a graphic display when a particular event (such as a high-priority alarm) occurs. You can print a graphic display even if it is not running.

### Manage screen real estate with display types

Manage your graphic displays at runtime by using one of three display types. The Replace display type opens a new display and automatically closes open displays using a single Display command. The On Top display type keeps a graphic display, such as a pop-up display, on top of other displays already open on the screen. The Overlay display type allows multiple displays to run simultaneously, even if they overlap.

### Display data values in trends

Track plant activity as it happens by dropping the ActiveX control, RSView32 TrendX, into a graphic display. TrendX provides real-time and historical trending for up to 100 tags on a single trend with extensive, flexible runtime capabilities. RSView32 also offers native trending with preconfigured objects available in the graphics library.

## COMPREHENSIVE ALARMS EDITOR

RSView32 offers a complete, flexible alarm system. Display alarm messages on the screen, in an alarm log viewer, or export the .DBF alarm log data to any ODBC-compliant database program.

### RSView32 alarm monitoring allows you to:

- Monitor up to 40,000 tags for alarms.
- Define up to eight severity levels to distinguish alarms visually and audibly.
- Define up to eight alarm thresholds with different levels of alarm severity to indicate an alarm's importance. Attract attention to high-priority alarms with blinking colors in the alarm summary.
- Add user-defined remarks to the alarm log description field.

- Tie alarm thresholds to tags to provide dynamic threshold values that change with a process.
- Filter alarm summaries to display only those alarms you need to monitor.
- Associate a macro with an alarm to provide custom handling. For example, open a display that contains instructions on how to correct the alarm condition.
- Set up global alarm monitoring. Operators can acknowledge an alarm at one station and have it recognized at all stations.
- Notify a programmable controller that RSView32 has recorded an alarm.

Use RSView32 Messenger, an optional software extension, to announce alarms through pagers, faxes, email, telephones, cell phones, or even locally on your computer using a sound card.

## FULL-FEATURED DATA LOG EDITOR

Data logging records specific tag values under conditions defined by up to 20 different log models. Data is stored in .DBF format and can be displayed in trends, archived for future processing or analysis, and displayed or analyzed using third-party software, such as Microsoft Excel, Crystal Reports®, FoxPro®, and RSTrend™. ODBC database support lets you log RSView32 tag data to an ODBC-compliant database, such as Microsoft SQL Server, Oracle® or SyBase®. You can still view the data graphically in a trend. You can specify a secondary path for all logged data. If the primary path becomes full or unavailable, RSView32 can automatically switch to the secondary path without losing any data. RSView32 automatically detects when the primary path is restored and merges the data from the secondary path back to the primary path so that you retain all of your data in one location.

## SOPHISTICATED LOGIC AND CONTROL EDITOR

RSView32 offers derived tags, event control, expressions, macros, and embedded Visual Basic® for Applications. Use these powerful options to customize and automate your RSView32 projects.

### Continuously calculate values with derived tags

A derived tag's value is the result of an expression. The expression can include mathematical operations, tag values from the RSView32 internal value table, if-then-else logic, and other functions. Use derived tags to perform continuous evaluations on a tag or for any loop processing.

### Trigger actions with event expressions

An event is an expression that triggers actions. You might use event detection to respond automatically to an alarm. Or as a tank approaches a specified fill level, it might warn the operator by opening a Web browser and displaying instructions from your company's intranet site.

## Run sequential commands from a macro file

A macro is a series of commands stored in a file. Use the macro file name like a command and enter it anywhere you can use an RSVIEW32 command. Entering a macro file name runs the macro and sequentially executes all the commands in the file.

## SECURITY FEATURES

### Secure RSVIEW32 at the project level

RSVIEW32 provides 16 levels of security to safeguard your system at the project level. Assign levels of security to commands, macros, database tags, graphic displays, and OLE verb control. Assigning combinations of security levels to individuals or to groups of users allows different users access to different sets of features.

### Secure RSVIEW32 at the system level

At the system level, lock users into your RSVIEW32 application so they cannot exit to the Windows operating system during runtime. Enabling Windows security synchronizes the user account list to the user list of one domain controller, providing a means for centralizing security management and allowing users a single logon. Launching RSVIEW32 automatically logs a Windows user into RSVIEW32. Changing the RSVIEW32 password also changes the Windows user password.

## CUSTOMIZE AND EXTEND RSVIEW32

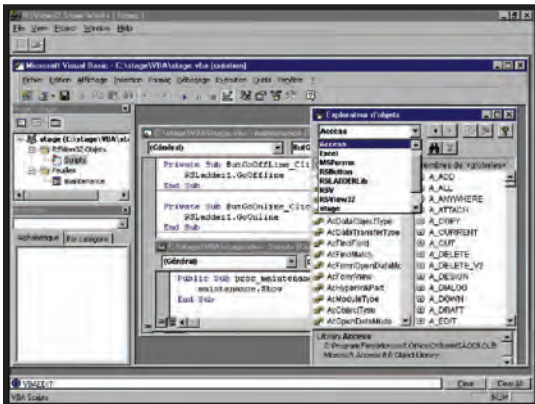
### Customize projects with startup preferences

Use startup preferences to customize how a project looks and operates at runtime. Specify which graphic to display first, which window elements to display, and whether to disable or enable certain accelerator key sequences. You can also specify which subsystems to start automatically, including alarms, data logging, derived tags, and event detector.

### Fully integrated VBA programming language

Microsoft Visual Basic for Applications (VBA) is fully integrated in the RSVIEW32 core product. With the VBA integrated development environment, you can create, test, and debug VBA subroutines, and then run the subroutines from within RSVIEW32.

By writing VBA code that interacts with the extensive Object Model of RSVIEW32, you can manipulate RSVIEW32 programmatically, extend its functionality, and automate processes.



## OPC (OLE for Process Control)

RSVIEW32 can function as both a native OPC client and OPC server. As an OPC server, RSVIEW32 can serve data up to other applications. As an OPC client, RSVIEW32 can communicate with a variety of devices and networks that cover all of your equipment, not just the Allen-Bradley devices.

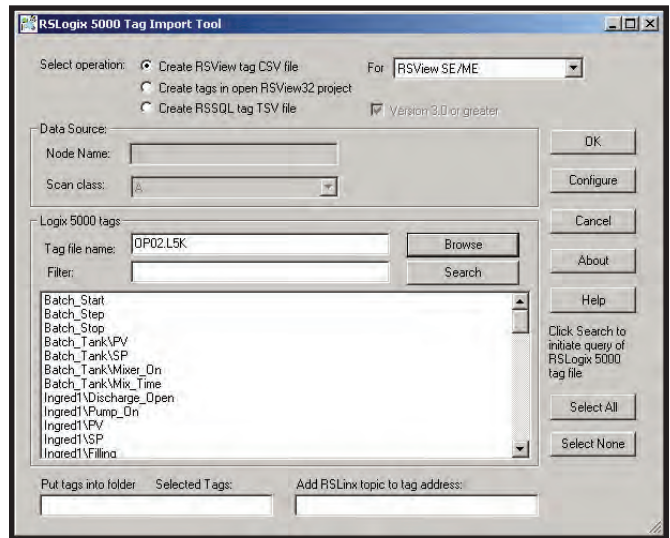
### Customize RSVIEW32 core features with Add-on Architecture

Add-on Architecture technology expands the functionality of RSVIEW32 by integrating new software components directly into its core. Customize the RSVIEW32 feature set by installing only those components you need.

## ADDITIONAL RSVIEW32 FEATURES

### RSLogix 5000 Tag Import utility

The RSLogix 5000 Tag Import utility imports RSLogix 5000 tags into RSVIEW32, RSVIEW Studio and RSSQL™. In RSVIEW32 v7.20, this utility has been enhanced to provide support for all ControlLogix, FlexLogix™, and CompactLogix™ I/O modules. In addition, it provides support for up to 100,000 tags, arrays, user-defined data structures, module tags, and alias tags.



### RSVIEW LogViewer

The RSVIEW LogViewer tool is an ActiveX control for displaying Datalog, Alarm Log, or Activity Log data in a grid format. It allows you to modify filter settings, select log type, display fields, data sort order and time span, or to indicate a specific time.

With RSVIEW32 v7.20, the LogViewer ActiveX is installed as part of the core RSVIEW32 tools.

### Update projects online

RSVIEW32 saves you time with online changes that don't require you to shut down your process. Edit graphic displays online, and the changes will take effect the next time you open the display. When you add or edit tags online, the changes take effect immediately.

## Organize tags in folders

RSView32 uses a convenient, intuitive folder structure to organize tags. For example, you might group all tags for Tank1 in one folder and tags for Tank2 in another folder. Browse for tags anywhere within RSView32 or from within VBA.

## Reuse tag databases

RSView32 can reuse the same tags created in a PLC application. Simply open the tag browser and point and click to select the tags. Import an individual tag or groups of tags from an Allen-Bradley® PLC, SLC, or ControlLogix® database.

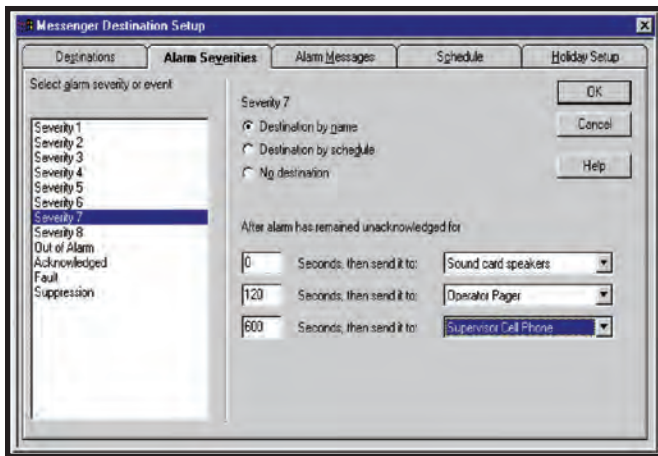
## RSVIEW32 ADD-ONS

At no additional charge, you can install the following RSView32 Add-ons based on your needs:

### RSView32 Messenger

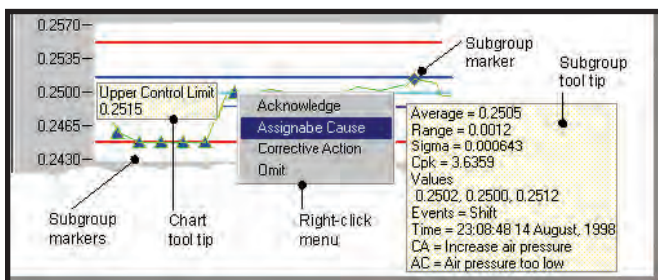
RSView32 Messenger announces alarms and simple reports through pagers, faxes, email, telephones, cell phones, or even locally on your computer using a sound card. With its scheduling capabilities, you can accommodate holidays, weekends, and business trips.

With RSView32 v7.20, Messenger has been enhanced to allow the pager setup to be modified during runtime.



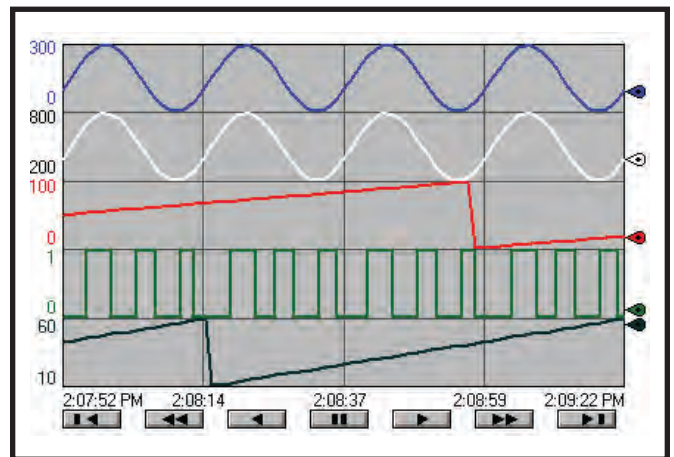
### RSView32 SPC

This Add-on offers an integrated Statistical Process Control solution that provides real-time SPC analysis. SPC provides statistical methods for analyzing and controlling the variation of a process. Controlling a process is essential for producing quality products.



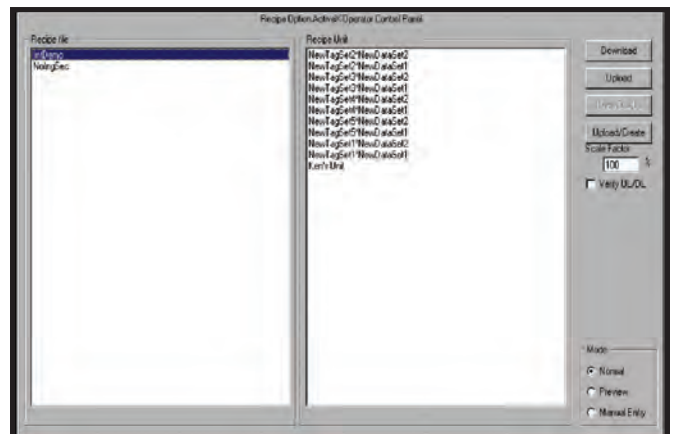
## RSView32 TrendX

TrendX is an ActiveX control that integrates with RSView32 to provide real-time and historical trending from RSView32 data logs. TrendX offers extensive, flexible runtime control. Add up to 100 pens on the fly, toggle between isolated and overlapping trend lines, specify unique pen configurations, and plot one variable against another. Compare data by overlaying multiple trend snapshots, click-and-drag to reposition overlays, and click-and-drag to zoom in and pan through trend data.



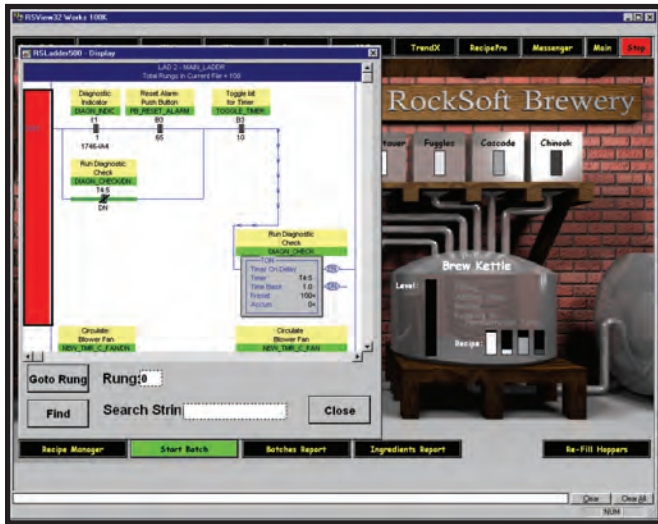
## RSView32 RecipePro

RSView32 RecipePro provides enhanced recipe management capability that allows you to configure multiple recipe project files in each RSView32 project and easily transfer process data requests to and from your automation equipment.



## RSLadder

RSLadder is an ActiveX control that displays ladder logic for the Allen-Bradley SLC™ 500 and PLC-5® families of processors.



## FACTORYTALK INTEGRATION

FactoryTalk® is a manufacturing information platform that integrates plant-wide control systems and connects the enterprise with the production facility. RSView32 v7.20 adopts the following three FactoryTalk technologies:

### FactoryTalk Live Data server

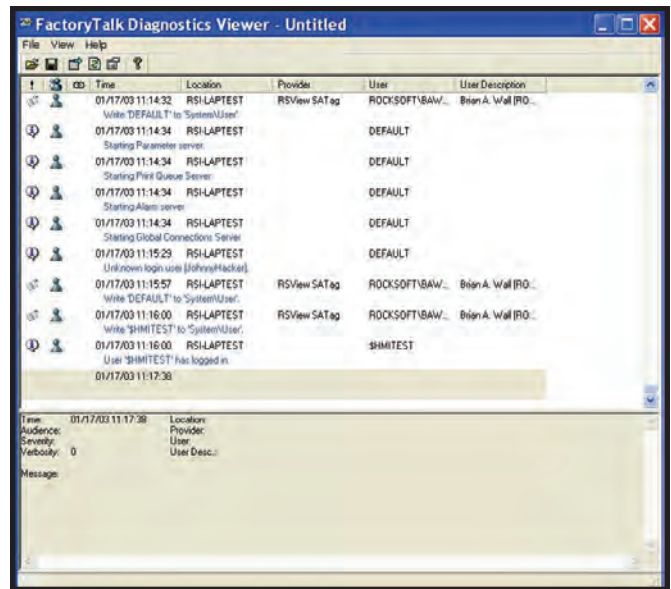
RSView32 is a FactoryTalk® Live Data™ server that provides tags to FactoryTalk clients such as RSView® Supervisory Edition™ and RSBizWare™ software products.

### FactoryTalk Diagnostics

This feature allows RSView32 to log warning, error, and diagnostic messages to a system-wide FactoryTalk® Diagnostics™ destination. The diagnostic messages can be viewed with a FactoryTalk Diagnostics Viewer.

### FactoryTalk Activation

With RSView32 v7.20, the old floppy disk-based activation has been replaced by the new FactoryTalk® Activation™ system that is based on activation files generated by Rockwell Software and distributed over the Internet.



*NOTE: It is not necessary to install FactoryTalk Automation Platform™ (FTAP) for RSView32 to work. If FTAP is not installed, the FactoryTalk Live Data server and Diagnostics functions in RSView32 will be disabled.*

## RECOMMENDED REQUIREMENTS

The hardware and software you need for RSView32 depends on the demands your project places on the system. The following tables use points to rate the demands that various uses place on your system.

Use the first table to find the demand (in total points) your project places on the system. Use the second table to determine the hardware and software you need.

<b>For:</b>	<b>If you are:</b>	<b>RSView32</b>
<b>RSView32 Project</b>	Running displays, or editing your project using RSView32 Works Using more than 30,000 tags Using more than 5,000 tags Changing displays, on average, more than 5 times per minute Using more than 200 objects in displays Using ActiveX controls in displays	Add 2 points Add 2 points Add 1 point Add 1 point Add 2 points Add 2 points
<b>Alarms</b>	Monitoring more than 1,500 tags for alarms Monitoring more than 300 tags for alarms	Add 2 points Add 1 point
<b>Number of Active Clients</b>	Using typically more than 5 active clients Using at least 1 client	Add 2 points Add 1 point
<b>Data Log or Historical Trends</b>	Logging fewer than 100 tags in 1 model Logging between 100 and 1000 tags in 1 model Logging to more than 1 model	Add 1 point Add 2 points Add 2 points
<b>Event Detector, Derived Tags, or Real-time Trends</b>	Using any	Add 1 point
<b>VBA</b>	Using any	Add 2 points
<b>Add-ons</b>	Using any, for each one	Add 1 point
		<b>Total Points:</b>

**Minimum system requirements for RSView32 based on points**

<b>For this number of points:</b>	<b>You need:</b>
8 or more	Pentium® II 400, 128MB RAM. Windows XP Professional* or Windows 2000 Professional** or Windows Server 2003***
6 to 7	Pentium II 300, 128MB RAM. Windows XP Professional* or Windows 2000 Professional** or Windows Server 2003***
3 to 5	Pentium 200, 64MB RAM. Windows XP Professional* or Windows 2000 Professional** or Windows Server 2003***

- \* With Service Pack 1 or later.
- \*\* With Service Pack 3 or later.
- \*\*\* With Service Pack 1.

## CATALOG NUMBERS

### RSView32 Works and Runtime

93012SE2050 – RSView32 Works 75  
93012SE2053 – RSView32 Works 75 with RSLinx  
93012SE2055 – RSView32 Works 75 with KEPServer  
93012SE3050 – RSView32 Runtime 75  
93012SE3053 – RSView32 Runtime 75 with RSLinx  
93012SE3054 – RSView32 Runtime 75 with RSLinx Single Node  
93012SE3055 – RSView32 Runtime 75 with KEPServer  
93012SE2100 – RSView32 Works 150  
93012SE2103 – RSView32 Works 150 with RSLinx  
93012SE2104 – RSView32 Works 150 with RSLinx Single Node  
93012SE3100 – RSView32 Runtime 150  
93012SE3103 – RSView32 Runtime 150 with RSLinx  
93012SE3104 – RSView32 RUN 150 with RSLinx Single Node  
93012SE2200 – RSView32 Works 300  
93012SE2203 – RSView32 Works 300 with RSLinx  
93012SE2204 – RSView32 Works 300 with RSLinx Single Node  
93012SE3200 – RSView32 Runtime 300  
93012SE3203 – RSView32 Runtime 300 with RSLinx  
93012SE3204 – REVIEW32 Runtime 300 with RSLinx Single Node  
93012SE2300 – RSView32 Works 1500  
93012SE2303 – RSView32 Works 1500 with RSLinx  
93012SE2304 – RSView32 Works 1500 with RSLinx Single Node  
93012SE3300 – RSView32 Runtime 1500  
93012SE3303 – RSView32 Runtime 1500 with RSLinx  
93012SE3304 – RSView32 Runtime 1500 with RSLinx Single Node  
93012SE2350 – RSView32 Works 5K  
93012SE2353 – RSView32 Works 5K with RSLinx  
93012SE3350 – RSView32 Runtime 5K  
93012SE3353 – RSView32 Runtime 5K with RSLinx  
93012SE2400 – RSView32 Works 32K  
93012SE2403 – RSView32 Works 32K with RSLinx  
93012SE3400 – RSView32 Runtime 32K  
93012SE3403 – RSView32 Runtime 32K with RSLinx  
93012SE2500 – RSView32 Works 100K  
93012SE2503 – RSView32 Works 100K with RSLinx  
93012SE3500 – RSView32 Runtime 100K  
93012SE3503 – RSView32 Runtime 100K with RSLinx

### RSView32 MessengerPro

9301MSGRPROENE – RSView32 MessengerPro

## ORDERING INFORMATION

For ordering information, contact your local Rockwell Automation sales office or Allen-Bradley distributor.

RSView32, RSView32 Active Display System, RSSql, FlexLogix, CompactLogix, Allen-Bradley SLC, PLC-5, RSView Supervisory Edition, RSBizWare, FactoryTalk, FactoryTalk Activation, FactoryTalk Automation Platform, FactoryTalk Live Data, FactoryTalk Diagnostics are trademarks of Rockwell Automation, Inc. All trademarks and registered trademarks are property of their respective companies.

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