

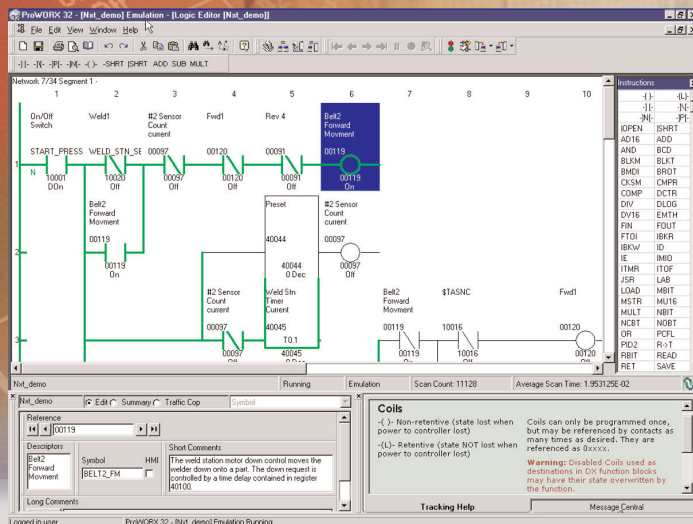
# 984 Ladder Logic programming software

## **ProWORX<sup>32</sup>**

*Supporting the past  
to ensure your future*



Welcome to the world  
of Simply Smart\*  
from Telemecanique



## ProWORX 32 is simply the smart choice in 984 Ladder Logic and cross-platform programming for Modicon PLCs.

Its *intelligent* features not only offer more functionality, they make it *easy* to use. And with the latest 32-bit technology, ProWORX 32 is more *powerful* than ever. Whether online or offline, you can manage I/O subsystems and analyze your plant's activity in real-time, all in a familiar and easy-to-use Windows environment.

### A comprehensive suite of tools

ProWORX 32 provides everything you will need to design, configure, test and complete your 984LL control system – quickly, reliably and professionally. And with its comprehensive suite of standard utilities, ProWORX 32 will meet all your programming needs. No more searching on the web for special features or functions – they're all included to save you time and increase your productivity.

### Product Functions

- Offline/ Online 984 Ladder Logic Development
- Offline/ Online PLC Development
- Read/ Write capabilities
  - Upload PLC resident logic and configuration to the PC (Read)
  - Download developed logic and configuration into a PLC (Write)
- Conversion from other 984 LL programming tools to ProWORX 32

### Supporting your needs now and into the future

ProWORX 32 demonstrates that Schneider Electric is committed to providing the best in 984 Ladder Logic PLC support with the latest state-of-the-art programming tools.

### \*Simply Smart:

Smarter and more intelligent,  
yet even easier to use.





## The intelligent tool for developing your 984LL applications

*ProWORX 32 provides an ingenious set of features and functionality that are designed to maximize the productivity of your development and maintenance resources, as well as the reliability of your control systems.*

### Collaborative Client/ Server tools

ProWORX 32 allows projects to be developed in a collaborative environment without sacrificing control or security by utilizing the ProWORX 32 server as the center of security and communications, and as the central repository for projects.

- The system administrator has total control over user accounts, user groups, passwords, and rights, and can grant access when and where needed.
- The server can be used to keep "Master" versions of PLC projects for editing (subject to rights), while editing is achieved using the client.
- Everything can be done via a standalone PC since both client and server can reside on the same PC.
- The server has the capability to schedule software backups of the controller, detect software modifications, and store multiple versions using either Ethernet TCP/IP or Modbus Plus.

### Intuitive diagnostics

The built-in HMI functionality allows you to create a simple representation of your application to better visualize and control your entire operation.

- With the "Data Watch Window," you can see values in real-time and perform data logging for later data analysis.
- The "Trending" tool is a simple built-in chart recorder to help you visualize performance factors without having to analyze raw data.
- "Diagnostic Trace" lets you easily solve complicated issues such as network element interdependencies.

### Program conversion: from 484 to 984 in a single step

Convert your existing applications and take advantage of the increased functionality and features of ProWORX 32

### Test project compatibility

Save valuable time in the development, testing, and debugging of your applications.

#### Project Emulator


- Test projects on the PC prior to running them in the PLC run-time environment to ensure your system will run at peak efficiency
- Simulate two interdependent control systems offline using the two project emulators and MSTR block communications

#### Multiple Projects

- Test a new project with an existing program with the Multiple Projects function of ProWORX 32, even with two PLCs running simultaneously!
- Perform diagnostic checks to validate interdependencies between your emulated project and your live applications – all in real time – and go live with total confidence.

Original Program	Convert to ProWORX 32
Concept 984	Yes
Modsoft (all versions)	Yes
ProWORX NxT	Yes
ProWORX Plus	Yes
ProWORX 984/584 984 PLC programs	Yes
584 PLC programs	No
ProWORX 884/484 884 PLC programs	Yes
484 PLC programs	Yes
Updoc	No
Norsoft	No
984 P190 Emulator	No

*ingenious*



## Programming made easy

*It's easy to take advantage of all the power and functionality that ProWORX 32 provides.*

### Easier integration

Using standard Microsoft components opens up a wealth of user data.

- Import and export capabilities have been enhanced to provide a variety of integration options for HMI and third party devices
- The built-in "Alliance Tool" allows users to create hardware profiles for newly developed devices

### Simplified usability

For even better usability, take advantage of the customizable interface

- For navigation, a simple click of the mouse gets you from project to project or property to property.
- By using Microsoft "Class Set", ProWORX 32 improves usability even further
- Users can develop and save a wealth of visual information that can be customized to suit their individual needs

### Easy program documentation

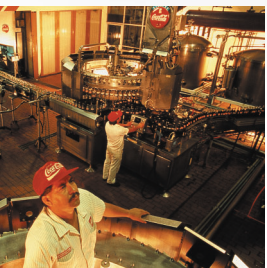
Using any of the standard documentation templates is fast and easy, or for more flexibility, you can assemble your own custom documentation.

- Annotation down to the "Bit" level for better references and easier-to-use documentation
- More lines of text for more complete descriptions
- Use of Windows O/S fonts eliminates printer issues

### Material List Generation

Want a shopping list for your PLC equipment after you are done designing your system? By using the Material List Generation function you save time and ensure that all required components are fully documented and identified.

- Automatically create a materials list for the project
- Performed either in online or offline mode
- List include the contents of the Traffic Cop
- Prices and comments can be added once the list is generated



*simple*



## Powerful performance for greater productivity

*ProWORX 32 has been designed for the power of today's PC's to deliver new capabilities and unrivaled usability. With greater speed and more memory, ProWORX 32 has been re-engineered into a high performance, high productivity tool.*

### High performance

ProWORX 32 is still compatible with the same CPU's as ProWORX Plus and ProWORX NxT. But ProWORX 32 offers something the others didn't: the power, speed and performance of 32-bit processing to utilize today's modern operating systems for optimal development and operational performance.

### Compatible operating systems

**ProWORX 32 is compatible with:**

- Windows 98 (Explorer 5.0 or higher required)
- Windows NT v4.0 or higher (SP6a required) (Explorer 5.0 or higher required)
- Windows 2000 Professional
- Windows XP Professional

### Improved serial communications

Thanks to the 32-bit Windows environment, serial communications are now more reliable than ever. Issues of synchronization when running ProWORX NxT and using serial communication is now a thing of the past, making ProWORX 32 a great performer across Windows 98, NT, 2000 and XP operating systems.



powerful

# Product features and functions

## Features/Advantages Summary

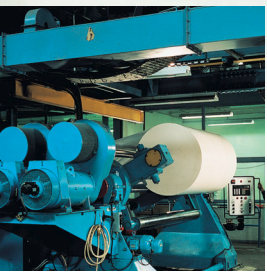
Feature	Advantage
Client/ Server based architecture	Provides security, project storage, audit trails, and a collaborative knowledge base
Offline, Online and Combined mode	Flexible session connections that are programming interrelational
Multiple simultaneous projects	Interdependent development and diagnostics
Project Emulators	Test logic before CPU upload
Configuration "Wizards"	Let ProWORX 32 build your configuration
MODBUS, MODBUS Plus, and Ethernet TCP/IP	Flexible communication support
MODBUS Plus Statistics (WIN MBPSTAT)	Diagnose and measure MODBUS Plus
TCP/IP Ping utility	Test for Ethernet devices
Boot "P" utility	Assign Ethernet addresses
Network Explorer(All three modes of communication)	See what's on your network and go there
BM85 Configurator	Easy file-based configuration
Project Compare	View the differences between two versions
I/O drawing creation and viewing	Eliminate a step in engineering design
Loadable "Wizard"	Easy management of loadables
Exec Loader	Utility for CPU exec download
Parts Generator	Create a parts list in one step
Project/ Database Conversion	Easy project migration from previous versions

## Project Emulator Features

<b>Solve modes</b>	<ul style="list-style-type: none"> <li>- Running</li> <li>- Stopped</li> <li>- Forced states, batch variables, startup values, etc.</li> </ul>
<b>Break Options</b>	<ul style="list-style-type: none"> <li>- Register value</li> <li>- Discrete state</li> <li>- Instruction</li> <li>- Mark</li> <li>- Address</li> </ul>
<b>Data Tracking</b>	<ul style="list-style-type: none"> <li>- Address</li> <li>- Instruction</li> <li>- Network</li> </ul>

## Client Server Functions

<b>User Groups</b>	<ul style="list-style-type: none"> <li>- The administrator can create groups of users with differing rights</li> </ul>
<b>User Rights</b> The administrator can assign various user rights, such as the ability to:	<ul style="list-style-type: none"> <li>- Insert or delete cells, rows, columns and networks</li> <li>- Read or write to the controller</li> <li>- Retrieve or place projects on the server</li> <li>- Change controller configuration</li> </ul>
<b>Audit Trail</b>	<ul style="list-style-type: none"> <li>- The audit trail keeps a record of project transactions between the ProWORX 32 client and the ProWORX 32 server</li> </ul>
<b>Project Status</b>	<ul style="list-style-type: none"> <li>- Keeps track of the client currently logged into the ProWORX server and tracks the type of transfer being performed</li> <li>- Provides descriptions of the file name, lock status and data type</li> <li>- Provides a progress report using a progress number or 'Done'</li> <li>- Displays the number of packets transferred</li> </ul>





## Product References

372 SPU 780 01 PSEV	ProWORX 32 Server
372 SPU 780 01 PSSV	ProWORX 32 Server Suite (includes Client)
372 SPU 780 01 PDEV	ProWORX 32 OFFLINE/ ONLINE Client
372 SPU 781 01 PONL	ProWORX 32 ONLINE Client
372 SPU 710 01 PLDV	ProWORX 32 LITE OFFLINE/ ONLINE Client
372 SPU 784 01 LPUP	Legacy Product Upgrade to ProWORX 32 Client
372 SPU 780 01 PSTH	ProWORX 32 - 3 Multi-User Client License
372 SPU 780 01 PSTE	ProWORX 32 - 10 Multi-User Client License
372 SPU 710 01 PLTH	ProWORX 32 LITE - 3 Multi-User Client License
372 SPU 710 01 PLTE	ProWORX 32 LITE - 10 Multi-User Client License
372 SPU 784 01 LPTH	Legacy Product Upgrade to ProWORX 32 - 3 Multi-User Client License
372 SPU 784 01 LPTE	Legacy Product Upgrade to ProWORX 32 - 10 Multi-User Client License
372 SPU 780 01 SITE	ProWORX 32 Site Client License
372 SPU 780 01 EMAN	ProWORX 32 User Manual - English
372 SPU 780 01 FMAN	ProWORX 32 User Manual - French
372 SPU 780 01 DMAN	ProWORX 32 User Manual - German
372 SPU 780 01 SMAN	ProWORX 32 User Manual - Spanish
372 SPU 780 01 SEAT	Multi-User Incremental Additions

## Minimum system requirements

	Client	Server	Client/ Server
Processor	P III, 650 MHz	P III, 1 GHz	P IV, 1.8 GHz
Memory	256MB	512MB	512MB
Hard disk space (available)	300MB	300MB	300MB
Installation media type	CD	CD	CD
Display	256 color VGA or higher	256 color VGA or higher	256 color VGA or higher

# Choose the efficiency of Telemecanique brand *solutions*

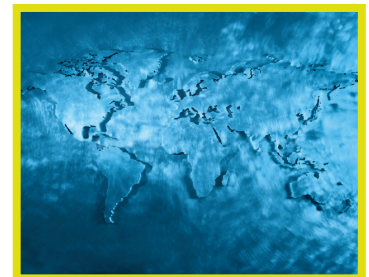
When used together, Telemecanique products offer quality solutions that will meet all your automation and control application requirements.



## A single partner, a global presence

Permanent availability, worldwide. With more than 5000 sales outlets in 130 countries, you will always find a complete range of products to meet your needs that conform to local standards.

Technical support – wherever you are. Schneider Electric provides technical assistance around the world, with experts at your service to help you achieve the optimum solution for your particular application.



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