

# Software

Software is the key to more efficient automation. Software tools from Phoenix Contact guide you through the entire value added process for your automation solution, from configuration to system operation. All products interact perfectly and impress with their innovative functions and intuitive, user-friendly operation. In addition, a wide range of ready-to-use block libraries is also available.

## Programming

Software products for programming, from small to medium-sized applications with small-scale controllers to complex system automation with high-end PLCs.

## Visualization

A good visualization software tool provides the basis for efficient automation, in the control room, production, as well as directly on the machine.

## Device parameterization

Central and efficient – parameterize your field devices from the comfort of your PC.

## Configuration, monitoring, diagnostics

Software tools for fast startup, constant monitoring, and reliable diagnostics.

## Drivers and interfaces

Everything you need to connect additional systems to your automation solution.

## Planning and configuration

Expert support with the planning and configuration of technical components. So that everything works together perfectly.

## Remote control

Flexible solutions for controlling distributed automation units.

## System simulation

Startup and testing made easy – in a completely virtual environment.

## Marking software

Software tools for efficient marking – even in series production.

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# Software

## Product overview

### Programming



PLCnext Engineer – Engineering software platform  
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PC WORX – Software package for conventional programmable logic controllers  
Page 28



PC WORX Target for Simulink – Firmware library  
Page 30



Logic+ – Intuitive programming software for quick and easy configuration  
• See Catalog 5 – relay modules section

**i** Your web code: #1104



SafetyProg – Programming software for PROFIsafe controllers  
Page 280



Functional and industry-specific software and drivers  
Page 55

### Network management



Management software for network components  
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### Visualization



WebVisit – Development software for web-based visualizations  
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Visu+ – SCADA visualization, development and runtime licenses  
Page 32



Visu+ Express – Free development software for HMI visualization  
Page 33

### Device parameterization



Startup+ – Software for wiring checks on Axioline F I/O stations

**i** Your web code: #1164



IOL-CONF – Software for parameterizing IO-Link devices

**i** Your web code: #1164



SAFECONF – Configuration software for PSR-TRISAFE and SafetyBridge modules  
Page 278



PSR-CONF-WIN – Configuration software for PSR-RSM4 with connecting cable  
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**Configuration, monitoring, and diagnostics**



Config+ – Tool for INTERBUS configuration and diagnostics  
Page 34



Diag+ – Diagnostics software for INTERBUS, PROFINET, and Ethernet networks  
Page 34



Diag+ NetScan – Diagnostics software for cyclic INTERBUS diagnostics  
Order No. 2868075

**Drivers and interfaces**



OPC UA – Communication interface for PC Worx programmable controllers  
Page 36



AX OPC server – Communication interface for PC Worx programmable controllers  
Page 37



FL SNMP OPC server – Monitoring/ configuration of SNMP-compatible devices in HMI and SCADA systems  
Page 37

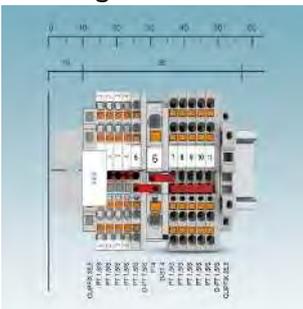
**Planning and configuration**



Project+ – Software for planning the I/O configuration

**i** Your web code: #1161

**Marking**



PROJECT complete – Planning and marking software  
• See Catalog 3 – Marking and labeling section

**i** Your web code: #1093

**Remote control**



VL Portico server ... – Remote control of networked IPCs

Page 38



Resy+ – Function blocks for extending standard control and I/O components with remote control protocols

Page 55

**System simulation**



WinMOD AX ... – System software incl. INTERBUS/PROFINET IO simulation software  
Info: www.winmod.com



IB Emulator – Hardware required to simulate INTERBUS configurations with the WinMOD software  
Order No. 2988638

### PC Worx and PC Worx Express

#### Programming with PC Worx

PC Worx is the consistent programming software tool for conventional programmable logic controllers in accordance with IEC 61131 from Phoenix Contact. PC Worx can be used in all areas of industry.

The software includes all the programming languages defined in IEC 61131-3:

- Instruction List (IL)
- Function Block Diagram (FBD)
- Ladder Diagram (LD)
- Sequential Function Chart (SFC)
- Structured text (ST)

#### Efficient programming

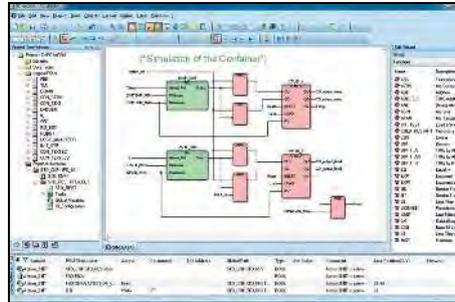
The PC Worx interface can be customized to your individual requirements with clearly arranged workspaces and toolbars. The basic languages of IEC 61131 (LD, FBD, and IL) can be directly and freely cross compiled. Structured text can be converted into any of the three basic languages.

Wizards support and monitor the insertion of data types, function blocks, operator, and variable declarations in all editors. For text editors, another wizard is available for keywords and their command structures.

#### Startup and maintenance

During controller operation, the following functions round off IEC 61131 programming:

- Cross-references for editing
- Online and offline program comparison by all IEC editors and configuration data
- Startup functions
- Debug functions such as:
  - Logic analysis in real time
  - Breakpoints
  - Address debugging
  - Step-by-step mode
  - Overwriting and forcing of variables



In order to test the program code, there is a powerful simulation tool for all Intel®-compatible controllers. This shortens the startup times of the real system.

All data configured in PC Worx can be reused for visualization purposes in an easy manner. This takes place via standard interfaces such as the AX OPC server or an integrated web server. The OPC and web server variables are selected with a mouse click.

#### Worldwide use assured

You can switch between numerous languages in the interface. Program comments can be exported and imported for translation. You can therefore save projects together with their comments in various languages.

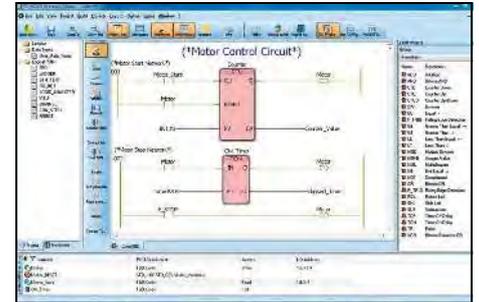
Integrated password handling supports various protection models:

- Securing the project
- Protecting individual program organization units (POUs) against writing or reading – know-how protection
- Blocking of actions, e.g., starting/stopping the controller

#### I/O configuration

Network structures such as PROFINET, INTERBUS, PROFIBUS, and Modbus/TCP can be configured in PC Worx via an integrated bus configurator. A device catalog displays all components in clear groupings; the components can be transferred to the hardware configuration using drag & drop.

In connection view, the program variables are connected to the inputs and outputs of the network components. The variables are addressed automatically.



#### Diagnostics

The integrated Diag+ diagnostics tool is used to handle the diagnostics of all system components in the INTERBUS and PROFINET network. This tool enables precise error localization in the entire system.

Preventive diagnostic functions such as monitoring the transmission quality of fiber optic paths in INTERBUS systems increase system availability. Diagnostic data, causes of malfunctions, and solutions are displayed directly in plain text.

#### Programming environment for small-scale controllers

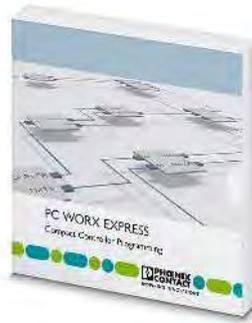
With PC Worx Express, Phoenix Contact provides you with a free software tool that can be used to easily program class 100, class 1000, and PC Worx SRT conventional programmable logic controllers. This is achieved, for example, thanks to the clearer user interface.

PC Worx Express offers numerous proven functions such as project creation, fast application development, plus easy download, monitoring, and startup of the PLC program. Intelligent automated functions speed up programming. These include the automatic insertion of program instances in the task or simplified variable handling.

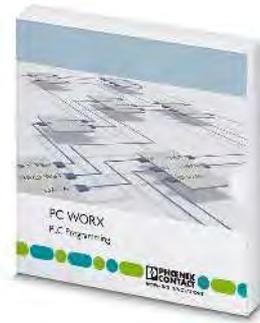
PC Worx Express can be downloaded free of charge:

[phoenixcontact.net/products](http://phoenixcontact.net/products)

If the application requires the enhanced functions of PC Worx, the project created with PC Worx Express can be opened in the standard programming environment. You can transfer the configured data to PC Worx without any loss of data.



Free software tool for class 100 PLCs



Software package for conventional PLCs

	Technical data	Technical data
Hardware requirements		
Processor	min. 2 GHz, x86 architecture	min. 2 GHz, x86 architecture
Main memory (RAM)	min. 2 GByte	min. 2 GByte
Hard disk memory	min. 2 GByte	min. 2 GByte
Optical drive	DVD-ROM	DVD-ROM
Operating equipment	Keyboard, mouse	Keyboard, mouse
Monitor resolution	SXGA (1280 x 1024)	SXGA (1280 x 1024)
Software requirements		
Operating system	Windows® 7 Professional SP1 (32-Bit/64-Bit) Windows® 7 Ultimate SP1 (32-Bit/64-Bit) Windows® 8.1 Professional (32-Bit/64-Bit) Windows® 8.1 Enterprise (32-Bit/64-Bit) Windows® 10 (32-bit/64-bit), as of Build 1511	Windows® 7 Professional SP1 (32-Bit/64-Bit) Windows® 7 Ultimate SP1 (32-Bit/64-Bit) Windows® 8.1 Professional (32-Bit/64-Bit) Windows® 8.1 Enterprise (32-Bit/64-Bit) Windows® 10 (32-bit/64-bit), as of Build 1511
Supported browsers	Internet Explorer Version 8 or later	Internet Explorer Version 8 or later
Basic functions	Configuring an automation system, parameterizing INTERBUS devices, operating INTERBUS, programming an automation system in acc. with IEC 61131-3, communication in acc. with IEC 61131-5  IEC 61131 includes the following programming languages: - Function block diagram (FBD), - Ladder diagram (LD), - Structured text (ST)  Network configuration (functionality of Config+)  Network diagnostics (functionality of Diag+) - -	Planning an automation system, parameterizing the INTERBUS and PROFINET devices, operating INTERBUS and PROFINET, programming an automation system in acc. with IEC 61131-3, communication in acc. with IEC 61131-5  Symbolic flowchart (SFC) Instruction list (IL) Ladder diagram (LD) Structured text (ST)  Network configuration (functionality of Config+)  Network diagnostics (functionality of Diag+) Unlimited amount of input/output data Machine Sequential Function Chart (MSFC) Fixed Format Ladder Editor (FFLD)
Languages supported	German, English, French, Italian, Spanish, Chinese	German, English, French, Italian, Spanish, Chinese

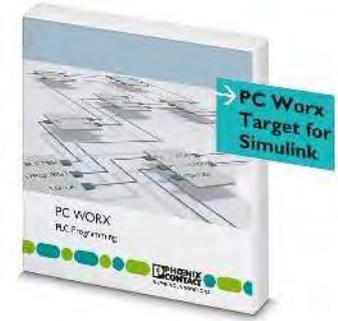
	Ordering data			Ordering data		
Description	Type	Order No.	Pcs./Pkt.	Type	Order No.	Pcs./Pkt.
<b>Free programming version</b> without license mechanism for class 100/1000 controllers and PC WORX SRT, 128 kbytes of I/O data	PC WORX EXPRESS	2988670	1			
<b>Demo software with Quick Start Guide</b> , 16 bytes of I/O data, Diag+ limited to 5 devices				PC WORX DEMO	2985725	1
<b>Basic license</b> with 2048 bytes of I/O data, without MSFC compiler				PC WORX BASIC LIC	2985275	1
<b>Full license</b> with 128 kbytes of I/O data, with MSFC compiler included				PC WORX PRO LIC	2985385	1
<b>Low-cost upgrade</b> of existing basic license to a full license				PC WORX BASIC-PRO LIC	2985259	1

**PC Worx Target for Simulink**

The **PC Worx Target for Simulink** firmware library allows you to integrate the functionalities of MATLAB/Simulink into the PC Worx programming software. Use this firmware library to connect MATLAB/Simulink models to RFC 470 and RFC 470S compact controllers from Phoenix Contact.

**Your advantages:**

- Structured program implementation and simulation/verification in advance, thanks to model-based system design
- Early-stage system simulation and startup by means of "hardware in the loop"
- Quick and easy system testing by means of "Rapid Prototyping"
- Maximized system performance by means of gradual tuning by optimized controls



**Firmware library for integration of Simulink applications**

Software requirements
Software requirements

Description
<b>Firmware library</b> , for connecting MATLAB/Simulink models for RFC 470/RFC 470S Remote Field Controllers

<b>Remote Field Controller</b>
<b>Safety controller</b>

**Technical data**

MATLAB® and Simulink® R2012 and higher  
 MATLAB® and Simulink® Coder  
 Visual Studio 2008 Professional includes Compiler for x86 and Windows® CE, not necessary for PLCnext controllers  
 PC WORX Version 6.30 or later or PC WORX ENGINEER Version 7.2 or later

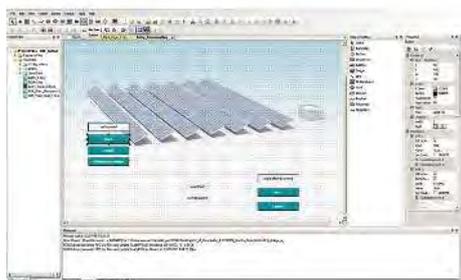
**Ordering data**

Type	Order No.	Pcs./Pkt.
PC WORX TARGET FOR SIMULINK	2400041	1

**Accessories**

RFC 470 PN 3TX	2916600	1
RFC 470S PN 3TX	2916794	1

WebVisit



Development software for web-based visualizations

**WebVisit** is the right solution for implementing your web-based visualization tasks. The software is flexible, inexpensive, and easy to operate. Thanks to HTML5, all you need to display your visualization application is a standard browser. This means that you can operate and monitor your system without having to install additional software.

All Phoenix Contact controllers offer an integrated web server which forwards control data. Use this data and design visualization pages using WebVisit. Your project is then saved directly on the controller.

**Your advantages:**

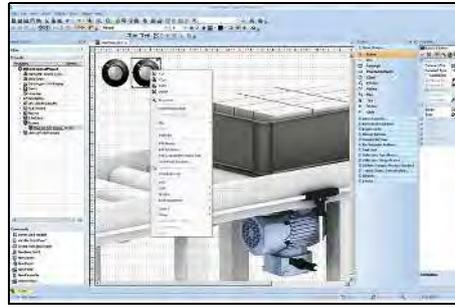
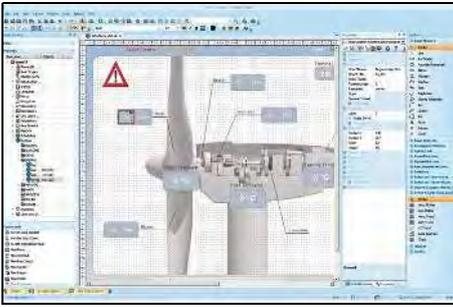
- Intuitive operation: user interfaces can be created quickly
- No programming knowledge is necessary for the creation of visualization pages
- Display of visualization pages in any standard browser, mobile browser, and all our web panels with integrated runtime environment
- Pay once for engineering and create as many pages as you like
- Optimum workflow integration, thanks to data coupling with PC Worx and PC Worx Express

<b>Hardware requirements</b>
Processor
Main memory (RAM)
Hard disk memory
Optical drive
Operating equipment
Monitor resolution
<b>Software requirements</b>
Operating system
<b>Supported browsers</b>
<b>Basic functions</b>
<b>Languages supported</b>

Technical data		
min. Intel® Pentium® 4 / Celeron® 1,6 GHz		
min. 2 GByte		
min. 2 GByte		
DVD-ROM		
Keyboard, mouse		
XGA (1024 x 768)		
Windows® 7 Professional SP1 (32-Bit/64-Bit)		
Windows® 7 Ultimate SP1 (32-Bit/64-Bit)		
Windows® 8.1 Professional (32-Bit/64-Bit)		
Windows® 8.1 Enterprise (32-Bit/64-Bit)		
Windows® 10 (32-Bit/64-Bit)		
Internet Explorer Version 8 or later		
The user interface has a functional design and even the basic version offers numerous graphic basic elements and functions.		
The variables needed for visualization are imported directly from PC Worx.		
German, English, French		

Description	
<b>Development software</b> for web-based visualizations	
<b>Development software</b> for web-based visualizations, with alarming, trending, and voice switchover	
<b>Free development software</b> for up to ten web-based visualization pages	
Upgrade license for upgrading from WEBVISIT 6 BASIC to WEBVISIT 6 PRO	

Ordering data			
Type	Order No.	Pcs./Pkt.	
<b>WEBVISIT 6 BASIC</b>	2700948	1	
<b>WEBVISIT 6 PRO</b>	2700949	1	
<b>WEBVISIT 6 EXPRESS</b>	2700954	1	
Accessories			
<b>WEBVISIT 6 BASIC-PRO</b>	2700950	1	



The **Visu+ 2** visualization software with SCADA functionality is suitable for every application: from a compact touch panel to an industrial PC. In addition to standard functions such as trend and alarm management, Visu+ offers comprehensive functions for alarm distribution and data logging with a link to external databases.

Visu+ 2 runs on Windows PCs as well as embedded platforms (Windows CE). Touch panels from Phoenix Contact are already equipped with the runtime component for embedded devices.

#### Your advantages:

- Intelligent and intuitive editor for shorter development times
- Flexible license model
- Fully scalable process images for using one design on different devices and screen sizes
- Comprehensive graphical object and symbol libraries based on vector graphics
- Connection via OPC Classic interface
- All data comprehensively recorded, archived, and immediately available, thanks to sophisticated data logger concept and connection to relational database systems
- Numerous possibilities for generating reports using a powerful and integrated report designer
- Web access via the Visu+ mobile app
- High availability, thanks to integrated redundancy function
- FDA-validated projects can be implemented easily, thanks to full support for the FDA CFR21 Part 11 specification
- Maximum flexibility, thanks to the wide range of driver interfaces for leading controller manufacturers

A good visualization software tool provides the basis for efficient automation, in production as well as directly on the machine. The free **Visu+ 2 Express** software provides an easy introduction to the visualization of typical operating and monitoring tasks.

#### Your advantages:

- No license fees
- Maximum flexibility, thanks to the wide range of driver interfaces for leading controller manufacturers
- Time and cost savings, thanks to the simplified user interface
- Fully scalable process diagrams for using one design on different devices and monitor sizes
- Web access via the Visu+ mobile app
- Connection via OPC Classic interface
- Scalable and fully upward compatible with Visu+ software
- Ideal for HMI applications

#### Mobile visualization

Extend your system visualization to smartphones or tablets with the **Visu+ mobile** visualization app from Phoenix Contact. You can design flexible operating and monitoring concepts, as the Visu+ mobile app allows you to access your system at any time and from any location.

The Visu+ license option required for the app is already enabled on numerous devices. These include the touch panels from Phoenix Contact.

Industrial PCs with a Visu+ runtime license simply need to be extended by adding the web license option.

#### Your advantages:

- Convenient: simply use smartphones or tablets for the visualization
- SCADA functions such as trend display or alarm handling also available on mobile devices
- Easy installation via Google Play Store or Apple App Store
- High-performance, scalable Visu+ web server: up to 100 clients can be operated simultaneously in its maximum configuration
- Easy handling: configuration only takes place in the Visu+ development environment

**Visu+ 2 – License models**

**Find out more with the web code**

You can find further information about runtime licenses for Visu+ on our website.

Simply enter # and numbers in the search field.

**i** Your web code: #1298



**SCADA visualization, development, and runtime licenses**



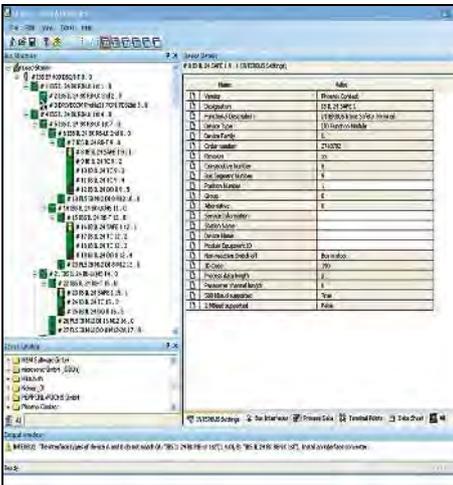
**Free development software for HMI visualization**

Technical data	
Hardware requirements	
Processor	Pentium/Celeron, 1.6 GHz
Main memory (RAM)	min. 512 Mbyte (recommended: 1 GByte)
Hard disk memory	min. 1 GByte (recommended: 2 GB)
Optical drive	DVD-ROM
Operating equipment	Keyboard, mouse
Monitor resolution	XGA (1024 x 768)
Software requirements	
Operating system	Windows® XP (SP3) Windows® Vista Business Windows® 7 Professional SP1 (32-Bit/64-Bit) Windows® 7 Ultimate SP1 (32-Bit/64-Bit) Windows® 8 Professional (32-Bit/64-Bit) Windows® 8 Enterprise (32-Bit/64-Bit) Windows® Server 2003 Windows® Server 2008 Windows® Server 2008 R2 Windows® 10 (32-Bit/64-Bit)
Supported browsers	Internet Explorer 5.5 or higher
Basic functions	Know-How protection and safety through encoding of projects  Real-time database coupling with ODBC to MS ACCESS, MS EXCEL, and SQL server FDA CFR 21 Part 11 compatible
Options	
Languages supported	German, English, French, Italian

Ordering data			
Type	Order No.	Pcs./Pkt.	
Development license for Visu+ projects			
Development environment for all touch panels with integrated runtime of the Visu+ visualization software			
<b>VISU+ 2</b>	<b>2988544</b>	1	

Technical data	
Hardware requirements	
Processor	Pentium/Celeron, 1.6 GHz
Main memory (RAM)	min. 512 Mbyte (recommended: 1 GByte)
Hard disk memory	min. 1 GByte (recommended: 2 GB)
Optical drive	DVD-ROM
Operating equipment	Keyboard, mouse
Monitor resolution	XGA (1024 x 768)
Software requirements	
Operating system	Windows® XP (SP3) Windows® Vista Business Windows® 7 Professional SP1 (32-Bit/64-Bit) Windows® 7 Ultimate SP1 (32-Bit/64-Bit) Windows® 8 Professional (32-Bit/64-Bit) Windows® 8 Enterprise (32-Bit/64-Bit) Windows® Server 2003 Windows® Server 2008 Windows® Server 2008 R2 Windows® 10 (32-Bit/64-Bit)
Supported browsers	Internet Explorer 5.5 or higher
Basic functions	Know-How protection and safety through encoding of projects  FDA CFR 21 Part 11 compatible  OPC Classic Interface and direct drivers
Options	
Languages supported	German, English, French, Italian

Ordering data			
Type	Order No.	Pcs./Pkt.	
Development license for Visu+ projects			
Development environment for all touch panels with integrated runtime of the Visu+ visualization software			
<b>VISU+ 2 EXPRESS</b>	<b>2402774</b>	1	



**Config+** from Phoenix Contact is the ideal software solution for configuring INTERBUS networks.

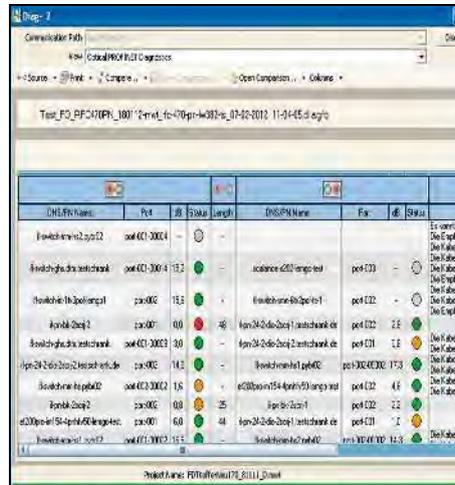
#### Numerous functions for efficient configuration

In Config+, you can use a wide range of functions to efficiently configure systems with INTERBUS networks.

- Reading and comparing real and planned topology
- Parameterization of several master boards and controller boards in one project
- Configuration of subsystems, e.g., lower-level robot systems
- Use of various (e.g., user-defined) device catalogs
- Import and export of device catalogs
- Non-proprietary device parameterization using the FDT (field device technology) concept
- Monitoring function for wiring checks

#### Comprehensive diagnostics for INTERBUS networks

Reliable diagnostics are essential for high system availability. INTERBUS networks can be diagnosed reliably with the Diag+ diagnostics tool integrated in Config+.



#### Comprehensive diagnostics for PROFINET and INTERBUS networks

**Diag+** is a special diagnostic software tool that has been adapted to PROFINET and INTERBUS, which indicates network errors as well as the current states of controllers and devices.

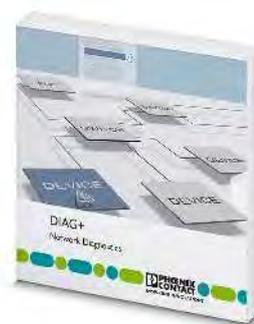
#### Wide range of functions for reliable diagnostics

Status information, operating functions, plain text messages, and overviews ensure fast startup, error localization, and easy orientation in PROFINET and INTERBUS systems.

- Start and stop of INTERBUS data traffic
- Acknowledgment of INTERBUS error messages
- Display of error messages with tips for error removal and detailed information on the device type and device state
- Display of color symbols for errors and device states
- Generation of acceptance reports as PDF files
- Integration in other software tools such as visualizations
- Display of stored messages from the message archive of the controller
- Overview for the topology of Ethernet/PROFINET devices in a 2D graphic
- Specification of the accessibility of Ethernet/PROFINET devices
- Management of individual rights of use for various users



Tool for fieldbus and network configuration



Diagnostics software for INTERBUS, PROFINET and Ethernet networks

	Technical data	Technical data																										
<b>Hardware requirements</b>																												
Processor	min. 2 GHz, x86 architecture	min. 2 GHz, x86 architecture																										
Main memory (RAM)	min. 2 GByte	min. 2 GByte																										
Hard disk memory	min. 2 GByte	min. 2 GByte																										
Optical drive	DVD-ROM	DVD-ROM																										
Interfaces	Serial interface, Ethernet, PCI	Serial interface, Ethernet, PCI																										
Operating equipment	Keyboard, mouse	Keyboard, mouse																										
Monitor resolution	SXGA (1280 x 1024)	SXGA (1280 x 1024)																										
Supported controllers	Further controller boards on request.	INTERBUS generation 4 controller boards, PROFINET controller (Phoenix Contact only)																										
<b>Software requirements</b>																												
Operating system	Windows® 7 Professional SP1 (32-Bit/64-Bit) Windows® 7 Ultimate SP1 (32-Bit/64-Bit) Windows® 8.1 Professional (32-Bit/64-Bit) Windows® 8.1 Enterprise (32-Bit/64-Bit) Windows® 10 (32-bit/64-bit), as of Build 1511	Windows® 7 Professional SP1 (32-Bit/64-Bit) Windows® 7 Ultimate SP1 (32-Bit/64-Bit) Windows® 8.1 Professional (32-Bit/64-Bit) Windows® 8.1 Enterprise (32-Bit/64-Bit) Windows® 10 (32-bit/64-bit), as of Build 1511																										
Supported browsers	Internet Explorer Version 8 or later	Internet Explorer Version 8 or later																										
Termination boards supported	<table border="0"> <tr><td>IBS S7 400 DSC/I-T</td><td>2719962</td></tr> <tr><td>IBS S7 300 DSC-T</td><td>2719975</td></tr> <tr><td>IBS PCI SC/RI/I-T</td><td>2730080</td></tr> <tr><td>IBS PCI SC/RI-LK</td><td>2730187</td></tr> <tr><td>IBS PCI SC/I-T</td><td>2725260</td></tr> <tr><td>IBS PCI SC-LK</td><td>2700318</td></tr> <tr><td>FL IL 24 BK-PAC</td><td>2862314</td></tr> <tr><td>FL IL 24 BK-B-PAC</td><td>2862327</td></tr> <tr><td>FL NP PND-4TX IB</td><td>2985974</td></tr> <tr><td>FL NP PND-4TX IB-LK</td><td>2985929</td></tr> <tr><td>FLM BK ETH M12 DI 8 M12-2TX</td><td>2736916</td></tr> <tr><td>IL ETH BK DI8 DO4 2TX-PAC</td><td>2703981</td></tr> <tr><td>IBS USC4-2</td><td>2812209</td></tr> </table>	IBS S7 400 DSC/I-T	2719962	IBS S7 300 DSC-T	2719975	IBS PCI SC/RI/I-T	2730080	IBS PCI SC/RI-LK	2730187	IBS PCI SC/I-T	2725260	IBS PCI SC-LK	2700318	FL IL 24 BK-PAC	2862314	FL IL 24 BK-B-PAC	2862327	FL NP PND-4TX IB	2985974	FL NP PND-4TX IB-LK	2985929	FLM BK ETH M12 DI 8 M12-2TX	2736916	IL ETH BK DI8 DO4 2TX-PAC	2703981	IBS USC4-2	2812209	
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FL NP PND-4TX IB-LK	2985929																											
FLM BK ETH M12 DI 8 M12-2TX	2736916																											
IL ETH BK DI8 DO4 2TX-PAC	2703981																											
IBS USC4-2	2812209																											
<b>Basic functions</b>	<p>Project planning of Ethernet configurations Planning of the address assignment</p> <p>Comparison between real and planned bus configuration</p> <p>Comprehensive diagnostic functions, including optical diagnostics with Diag+ Network diagnostics (functionality of Diag+)</p>	<p>Reading in the installed bus structure Detecting/representing error states (plain text from knowledge database) Diagnostics of INTERBUS FO paths (transmission quality)</p> <p>Reading out the Controller Diagnose Archive</p> <p>Numerous other diagnostic functions</p>																										
<b>Languages supported</b>	German, English, French, Italian, Spanish, Chinese	German, English, French, Italian, Spanish, Chinese																										
	Ordering data	Ordering data																										
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	Accessories	Accessories																										
<b>Copy license</b> , allows you to install the software multiple times. A full version is also required. Please specify the number of licenses required when ordering.	<table border="1"> <tbody> <tr> <td>CONFIG+ CPY</td> <td>2868062</td> <td>1</td> </tr> </tbody> </table>	CONFIG+ CPY	2868062	1	<table border="1"> <tbody> <tr> <td>DIAG+ CPY</td> <td>2730404</td> <td>1</td> </tr> </tbody> </table>	DIAG+ CPY	2730404	1																				
CONFIG+ CPY	2868062	1																										
DIAG+ CPY	2730404	1																										

OPC server

Implement data exchange quickly and reliably between the following devices using OPC servers:

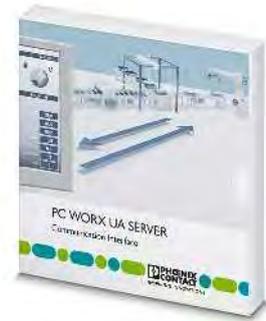
- PC Worx-programmable controllers
- SNMP (Simple Network Management Protocol)-compatible devices

The standardized OPC UA (Unified Architecture) and OPC DA (Data Access) interfaces enable easy integration in OPC-compatible visualization and control systems.

The **PC Worx UA SERVER** supports the PLCopen profile for controllers in accordance with the OPC UA standard. Variables and structures of PC Worx-programmable controllers are provided in a common address area.

The **AX OPC SERVER** operates in accordance with the OPC DA standard and is used for data exchange between control systems, quality management systems or HMI stations with PC Worx-based controllers.

The **SNMP OPC SERVER V3** gathers device and network information which can be read via SNMP. In this way, you can integrate your SNMP-compatible devices into OPC-based process control systems (SCADA) or into HMI systems.



OPC UA – communication interface for PC Worx-programmable controllers

Hardware requirements	
Processor	
Main memory (RAM)	
Hard disk memory	
Optical drive	
Operating equipment	
General requirements	
Operating system	

Software requirements	
Basic functions	

Languages supported	
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Description	
<b>OPC UA server</b> for communication with a maximum of 10 modular small-scale controllers - ILC 1x1, AXC 1xxx	
<b>OPC UA server</b> for communication with a maximum of 25 controllers - ILC 1x1, AXC 1xxx, AXC 3xxx, PC WORX RT BASIC/SRT	
<b>OPC UA server</b> for communication with a maximum of 200 controllers - ILC 1x1, AXC 1xxx, AXC 3xxx, RFC 460R, RFC 480S, PC WORX RT BASIC/SRT	
<b>AX OPC SERVER</b> , communication interface for OPC-compatible visualization with PC Worx-based controllers - ILC 1x1, AXC 1xxx, ILC 3xx, AXC 3xxx, RFC 4xx, PC WORX RT BASIC/SRT	
<b>SNMP OPC server</b> , for monitoring and configuring a maximum of 100 SNMP-compatible devices in HMI and SCADA systems	
Extension license for 100 devices	

Technical data

min. Intel® Core™ i3-2100 (2 GHz)
min. 2 GByte
-
-
-
Windows® 7 (32-Bit/64-Bit)
Windows® 8.1 (32-Bit/64-Bit)
Windows® 10 (32-Bit/64-Bit)
Windows® Server 2012
Windows® Server 2016
PC Worx Version 6 or later
Data exchange in accordance with DA profile spec 1.02 (2012)
Security Policies: None, Basic128RSA15, Basic256
Message Security: Mode none, sign, sign&encrypt
Communication profile in accordance with the PC-based server via binary protocol using TCP/IP
Easy access to arrays and structures
Variable mapping in accordance with PLCopen profile spec 1.00

English
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Ordering data

Type	Order No.	Pcs./Pkt.
PC WORX UA SERVER-PLC 10	2402684	1
PC WORX UA SERVER-PLC 40	2402685	1
PC WORX UA SERVER-PLC 80	2402686	1



**OPC DA – communication interface for PC Worx-programmable controllers**



**Monitoring/configuration of SNMP-compatible devices in HMI and SCADA systems**

Technical data
min. Intel® Core™ i3-2100 (2 GHz)
min. 1 GByte (2 GB for Windows Vista and Windows 7)
min. 2 GByte
-
-
Windows® 7 Professional SP1 (32-Bit/64-Bit)
Windows® 7 Ultimate SP1 (32-Bit/64-Bit)
Windows® 8.1 Professional (32-Bit/64-Bit)
Windows® 8.1 Enterprise (32-Bit/64-Bit)
Windows® 10 (32-bit/64-bit), as of Build 1511
PC WORX Version 3 or later
Supports OPC standard functions and all the optional interfaces (in accordance with OPC spec. DA 1.0a and DA 2.04/2.05)
Simultaneous support to several controllers
Integrated OPC testing and diagnostics client
-
-

Technical data
PC Pentium > 266 MHz
-
min. 20 Mbyte
CD-ROM
Keyboard, mouse recommended
Windows® XP (SP3)
Windows® 7
Windows® 10
Windows® Server 2008
Windows® Server 2003
Windows® Vista Business
-
Monitoring and configuration of 100 SNMP-compatible devices in HMI/SCADA systems
Network monitoring with HMI/SCADA systems
SNMP Version v1 and v2c supported
OPC clients OPC Data Access 1.0A/2.0 or OPC Alarm and Events supported
Integrated MIB browser
Import/export and creation of device profiles supported, online and remote configuration possible via remote PCs

German, English

German, English

Ordering data		
Type	Order No.	Pcs./Pkt.
AX OPC SERVER	2985945	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SNMP OPC SERVER V3	2701139	1
FL SNMP OPC SERVER V3 LIC 100	2701138	1

## Remote control

### Portico

Optimally tailor your operating concept to the requirements of your system. With the Portico software, you can install up to 16 thin clients exactly where you need them. If multiple employees based in various locations need to access the machine, you can design individual solutions in this way.

**Portico** is a remote control software tool that allows you to view and fully interact with the desktop of another industrial PC over a network. The software uses a client/server architecture that either supports point-to-point connection between a server and client or allows communication to be established between a server and multiple clients. Thanks to the unique assignment of access rights, your system is also protected against unauthorized access.

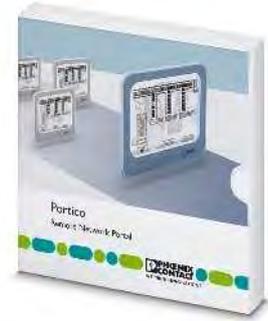
Portico can also be used in a production environment to visualize or control a machine or process at a remote location in the system.

#### Your advantages:

- Individual operation and monitoring concepts with up to 16 clients
- Simultaneous display of IPC screen information at several operating stations without server operating system
- Inexpensive, thanks to the use of thin clients
- Configuration tool for user-friendly management of access rights
- Fast screen and input response, thanks to communication via TCP/IP network protocol
- Low memory usage by server and client

#### System requirements:

- CPU type/class: x86
- Minimum CPU clock rate: 1.0 GHz
- Minimum RAM: 512 MB
- Minimum memory required for server: 100 MB
- Minimum memory required for client: 100 MB
- LAN rate: 100 Mbps
- Graphics requirements: unlimited



Remote control software

<b>Hardware requirements</b>	
Processor	Atom™ or above
Main memory (RAM)	≥ 512 Mbyte (minimum)
Hard disk memory	≥ 100 Mbyte (minimum (client and server))
<b>Software requirements</b>	
Operating system	Windows® 7 Windows® 10
<b>Basic functions</b>	
Remote control software	
<b>Languages supported</b>	
German, English, French, Spanish, Italian	

Technical data		
Atom™ or above		
≥ 512 Mbyte (minimum)		
≥ 100 Mbyte (minimum (client and server))		
Windows® 7 Windows® 10		
Remote control software		
German, English, French, Spanish, Italian		

<b>Description</b>	
<b>Remote control</b>	
- 1 client	
- 4 clients	
- 16 clients	

Ordering data		
Type	Order No.	Pcs./Pkt.
VL PORTICO SERVER 1 CLIENT	2701453	1
VL PORTICO SERVER 4 CLIENT	2701455	1
VL PORTICO SERVER 16 CLIENT	2701456	1