

# S7/S5 OPC Server

Fast and Easy Access to  
S7 and S5 Controllers

## Excellence in OPC

The new version of the S7/S5 OPC Server from Softing is now even more universal in application, higher in performance and easier to use. As a leading supplier of OPC technology, Softing succeeds with the product described below, in clearly distinguishing itself in quality from comparable products in the market:

- Performance: "Best in Class"
- Configuration: Easiest setup and commissioning
- Application possibilities: Suitable for practically all controller types, CPs, PC cards and communication types
- Extremely cost-saving with NETLink PRO and S5-PCLink from Softing

## Your Benefit

- Complete OPC client, OPC ActiveX controls with Excel, HTML and Visual basic examples and OPC Tunnel supplied with the product
- Performance: Best in Class thanks to dynamic throughput optimization
- Parallel communication with up to 256 controllers simultaneously
- Configuration by mouse click through import of symbolic names from STEP7 and Excel
- Web-based diagnosis and mini-visualization via integrated web server
- STEP7 and STEP5 compliant addressing of variables
- Connection via PROFIBUS, Ethernet and serial interface in one server
- Support of PC cards and CPs from various manufacturers
- Security through continuous connection monitoring and connection redundancy
- Secure remote access to control data by user authentication
- Safe, powerful remote access without DCOM with an integrated OPC Tunnel at the server

## Description

With only one component, the S7/S5 OPC Server gives you fast and convenient access to process data in S7-200, S7-300, S7-400 and WinAC controllers, in C7 and M7 units as well as in S5, Pilz, Saia-Burgess or VIPA controllers. The variables are consistently addressed using STEP7 resp. STEP5 semantics.

## Product Information



You can use any OPC compliant client application to read and write all input and output data, data blocks, markers, timers and counters in the controllers. Up to 256 controllers can be accessed simultaneously. The PLC program does not need to be modified for communication with the S7/S5 OPC Server. Access to the controller is available via Ethernet or PROFIBUS, USB or via serial communication with or without a modem. CPs from various manufacturers, gateways and NETLink PRO from Softing are supported for Ethernet communication. Thanks to the intelligent grouping of read and write requests, the data throughput is optimized so efficiently that Softing's S7/S5 OPC Server won the Best in Class award in a practice-related performance comparison of seven S7 OPC servers from renowned manufacturers.

The OPC name space is extremely quick to configure by importing symbolic names from STEP7 projects or Excel files. Existing projects can be exported from software applications like process visualization systems or process control systems to Excel, and are then conveniently loaded into the S7/S5 OPC Server. The OPC server provides a web server for diagnostics and process data visualization. This allows you to display the PLC states and data very quickly on local or remote PCs by simply using any standard web browser.

For safe, powerful remote access without DCOM, the Softing OPC Tunnel has already been integrated in the S7/S5 OPC server. Using the OPC Tunnel eliminates the problems associated with configuration of DCOM security settings and saves significant time and costs. It only takes a few minutes to set up communication for networked applications. The integrated OPC Tunnel makes it possible to demand user authentication from a remote OPC client and prevent unauthorized remote access.

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## Product Information

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## Technical Data

Type of communication	<ul style="list-style-type: none"><li>■ Access to process data of the S7-300 and S7-400 controllers by PROFIBUS, Ethernet or via serial PC interface (MPI protocol)</li><li>■ Access to process data of the S7-200 controller by Ethernet and serial PC interface (PPI protocol)</li><li>■ Access to process data of Siemens S5 controllers resp. S5 compatible PLCs from INAT, VIPA and Saia-Burgess via Ethernet or serial PC interface (AS511)</li></ul>
OPC Specification	Data Access 1.0a, 2.05, 3.0 and OPC XML-DA
OPC interfaces	<ul style="list-style-type: none"><li>■ All mandatory interfaces according to Data Access Specification</li><li>■ Dynamic namespace with STEP7 and STEP5 semantics for OPC item names</li><li>■ Static namespace through import of names from STEP7 or Excel</li></ul>
OPC data types	VARIANT data types UI1, I1, UI2, I2, UI4, I4, R4, R8, BOOL and arrays with these data types, BSTR
S7 data types	BOOL, BYTE, CHAR, WORD, INT, BCD, S5TIME, DATE, DWORD, DINT, REAL, TIME, TIME_OF_DAY, DATE_AND_TIME and arrays with these data types, STRING
S5 data types	KG, KC
Types of implementation	OutProc Server, Service
Hardware requirements	Windows-enabled PC. For communication by: <b>PROFIBUS</b> <ul style="list-style-type: none"><li>■ Softing PROFIBUS PC cards</li><li>■ Softing PROFIBUS/Ethernet gateway series</li><li>■ Siemens CP 5511, CP 5611, CP 5613 (Hardware driver from interface manufacturer required)</li></ul> <b>Ethernet</b> <ul style="list-style-type: none"><li>■ Standard Ethernet card for PC, Siemens CP 343-1 for S7-300, CP 443-1 for S7-400</li><li>■ Softing PROFIBUS/Ethernet gateway series</li><li>■ Softing NETLink PRO/ETH, S5-PCLink</li></ul> <b>Serial MPI resp. PPI</b> <ul style="list-style-type: none"><li>■ MPI or PPI adapter from Softing or Siemens</li></ul> <b>USB</b> <ul style="list-style-type: none"><li>■ NETLink PRO/USB from Softing</li></ul>
Operating systems	Windows 2000/XP/2003/Vista/2008 with current service packs (status August 2008)
Documentation	Online help in German and English
Demo version	Full functionality, one session time limited to 90 minutes, (30-days test version on request at info.automation@softing.com)

## Order number

OPC-S7	S7/S5 OPC Server, software-based copy protection
LIC-USB-1	Option for hardlock USB copy protection

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