OPC means “OLE for Process Control” and defines the communication between arbitrary Windows 2000/XP applications on the basis of Microsoft DCOM, specialized for the requirements in the field of process automation.

The objective of OPC is the random combination of Windows standard products from the automation and process control area without customization, such as driver development or integration.

An OPC client accesses the data of an OPC-Server via the server tags. With data, which is assigned to these server tags from the process periphery. This technology works network-wide.

Today almost all automation and visualization systems are equipped with an integrated OPC-client-interface, allowing easy connection to a process periphery with OPC-Server technology.

This makes the development of special drivers or integration obsolete. Standard products can be combined arbitrarily.

The COMSOFT OPC-Server is based on the DF boards and supports the protocols SINEC-L1 and PROFIBUS DP/DPV1.

The server was developed according to the latest specifications of the OPC foundation. It supports all interfaces of versions 1.0A and 2.0 and is implemented in the free threading / multi threading model, guaranteeing optimum performance.

A powerful configuration tool is included in the scope of delivery. It can be used for the setting in operation of the connected communication line and for definition of the required server tags.

The integrated test and diagnosis tools allow fast and efficient trouble shooting. Also included is an example of an OPC-client application, in order to test the actual server configuration with regards to functionality.

For the use with safety critical applications the OPC-Server supports PROFIBUS DPV0 Master class 1 redundancy with two pc systems. This feature guarantees a seamless take-over and an uninterrupted continuous processing of the connected DP Slaves by the standby pc system if the operational pc system fails. The DF PROFI/DF PROFI II hardware design allows here simultaneous connection of two DF PROFI/DF PROFI II-boards with identical bus addresses to the PROFIBUS network without any problems.

**Transmission Protocols**
- PROFIBUS DP/DPV1: (Master, Slave)
- SINEC-L1: (Master, Slave)

**OPC Configurator**

**Process Data Routing**
The configuration tool allows an assignment of process data to communication objects (tags) of the OPC-Servers. Since the assignment is realized on a bit level, all data formats are possible (Bit, Byte, Int, Long, Float, BCD etc.). Therefore, the effort on the OPC-Client level for the encoding of special process data is reduced to a minimum.

**Functions: Test and Start-up**
The configuration tools feature complete functions for parameter setting and start-up, as well as for the testing of the connected communication line. If PROFIBUS DP/DPV1 is used, the following additional functions are available:

- Automatic recognition and configuration of the connected bus units
- Interpretation of the respective GSD files, parameterization and configuration of the DP Slaves with the respective data
- Extensive test tools for data exchange with the connected DP-slaves. All DP/DPV1 services are supported. All parameters can be edited separately.
## Order Numbers

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<td>4000-S-L M 3 -3-*</td>
<td>OPC-Server for PROFIBUS DP/DPV1 for Windows 2000/XP with OPC example client and configuration tool for COMSOFT PC boards</td>
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* Please complete the order number either with E for a documentation in English or D for a documentation in German.

## OPC Foundation

The OPC specification is developed and maintained by an independent organization, the OPC Foundation in Boca Raton, Florida. COMSOFT is a full member of the OPC foundation.