




Data sheet

Edition
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Communications processor CP 443-1 OPC UA

More independence for your plant network

The growing demands on automation networks make an open and independent data transfer more important than ever. For this, the communications processor CP 443-1 OPC UA delivers a flexible solution. It makes the connection of a SIMATIC S7-400 to an Industrial Ethernet network possible, independent of manufacturer. Data can be quickly and directly exchanged between various components via standardized OPC UA interfaces.

The communications processor can be used as an OPC UA server as well as an OPC UA client. As OPC UA server, it provides data that the OPC UA clients can retrieve via data access. Data access includes reading, writing and monitoring of data.

As an OPC UA client, the CP collects and writes OPC UA data using data access read/write mechanisms from or to an OPC UA server. The communication as OPC UA client takes place via user blocks according to the standards of the PLCopen organization.

OPC UA is a standard for manufacturer-independent communication in the automation industry. The CP supports OPC UA according to the specification 1.02.

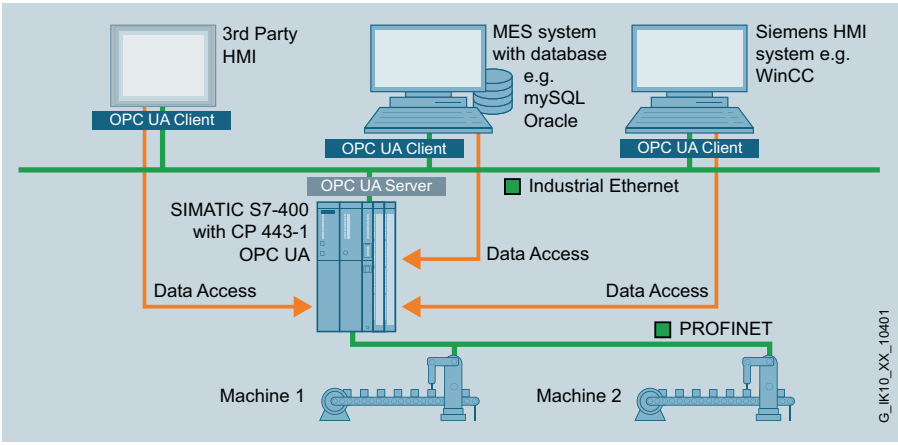
You can find more detailed information at their homepage www.opcfoundation.org

Benefits

- Standardized and manufacturer-independent connection to HMI, SCADA, MES/ERP or 3rd party PLCs
- Direct access to controller data
- Flexible and standardized interface for communication to any OPC UA server
- Protection from unauthorized data access via OPC UA security functions
- Protection of investment with an easy expansion of existing plants
- Can be used in high availability and fail-safe systems
- Configuration with STEP 7 V5.5 or higher / STEP 7 Professional V14 or higher (TIA Portal)



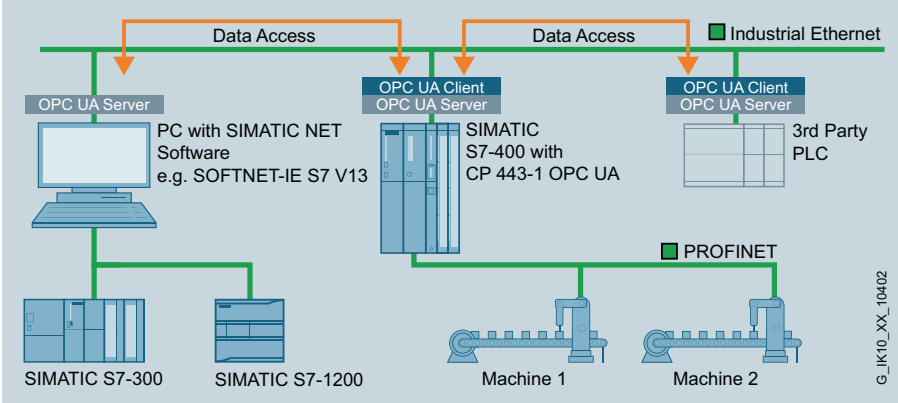
Technical data	
Article number	CP 443-1 OPC UA
Industrial Ethernet interface	6GK7443-1UX00-0XE0
Number of CPs per CPU and Rack	1 x RJ45 (10... 1000 Mbit/s)
Ambient temperature	1
Dimensions (L x W x H)	0° ... +60°C
Configuration with STEP 7	25 x 290 x 210 mm
or STEP 7 Professional (TIA Portal)	V5.5 SP4 or higher
	V14 and higher
Configuration limits as OPC UA server	
Connection to OPC UA Clients	10
Maximum number of tags (items)	64,000
Size of the available memory area for OPC UA tags	64,000 Byte
Configuration limits as OPC UA client	
Number of connections to OPC UA servers	5
Number of tags across all connections, maximum	10,000



Application example

The CP is used as OPC UA server, using OPC UA mechanisms to provide data, is a standard for secure connecting to an OPC UA-capable HMI, SCADA or database system as client.

Data exchange with HMI/SCADA/MES/ERP systems from various manufacturers



Application example

The communications processor as OPC UA server is a standard way of providing for the exchange of data to a 3rd party controller. The CP as OPC UA client can be programmed to simultaneously retrieve the required block data from another OPC server.

Controller – controller communication independent of manufacturer

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