# **EXECUTE** OF CONVOPC

# The Windows-based Gateway Software

ipConvOPC is a software package for Microsoft® Windows for universal communication between different standard protocols.

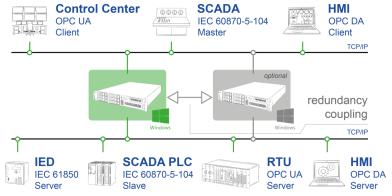
ipConvOPC is based on ipConv and has basically comparable capabilities. In addition, the Windows platform dependent protocols OPC DA and OPC AE are optimally supported.

Established standard protocols are available for the conversion, which can be used flexibly on your own Windows-based hardware. Protocol couplings without OPC protocols are common, as well.

# ipConvOPC also offers:

- Suitable for virtual environments
- Security at the highest level (see Cyber Security)
- Communication between multiple data sources
- Simultaneous use of diverse protocols
- Intelligent information processing
- No programming required for configuration (see Configuration)
- Simple control unit connection
- Redundancy
- Optionally available with soft license



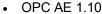


#### SUPPORTED PROTOCOLS

- IEC 60870-5-104
- IEC 60870-5-101
- IEC 60870-5-103
- IEC 61850
- Modbus
- **DNP 3.0**
- TASE.2 / ICCP
- SIMATIC fetch/write
- RP 570/571
- Database client
- MQTT client
- REST
- E-mail client



- **OPC UA 1.02** OPC DA XML 1.1
- **OPC DA 3.0**





Further protocols on request!



# REQUIREMENTS

# Supported Operating Systems

- Windows Vista / 7 / 8 / 8.1 / 10
- Windows Server 2003 / 2008 (R2) / 2012 (R2)
- Windows Server 2016

#### **Minimum Hardware Requirements**

Required interfaces must be available (incl. installed drivers).

#### **FUNCTIONAL RANGE**

### Configuration

Configuration and maintenance of the system is conducted through the integrated web interface, which provides central access to all settings and services. Microsoft® Excel templates are provided to simplify data point configuration. In addition, the web interface enables the import of files and updates, such as

- Excel configuration spreadsheet (signal table)
- X.509 certificates
- License files

#### Data Processing

- All data is broken down into individual information (single indications, measured values, counter values, etc.) and processed accordingly. A quality identifier and - if necessary - a time stamp is associated with each information item.
- Namespace and data model can be changed as desired.
- Powerful functions for data processing, such as type conversion, scaling, grouping, etc.
- Data reduction / regulation of bandwidth, required on secondary side, via update intervals, threshold values, old/new comparison, collective messages, selection of data points, etc.

# **Cyber Security**

- Secure access to all administrative services (HTTPS)
- Crypto Store for certificate management
- Creation of self-signed certificates and Certificate Signing Requests (CSRs)
- Import and export of certificates
- Safety according to IEC 62351-3 (TLS according to RFC5246) for TCP/IP based connections





#### VIRTUALIZATION

*ipConvOPC* can also be used in a Windows guest system in a virtual machine such as Hyper-V, VirtualBox and VMware if the required interfaces are available and the USB dongle can be passed through accordingly. Optionally *ipConvOPC* is also available with a soft license, which does not require a dongle.

### INTEROPERABILITY

Being a member of the OPC Foundation, we are constantly striving to ensure compatibility of our product with the OPC standard and products or protocols of other manufacturers.



# TYPICAL PROTOCOL COUPLINGS

You will receive a non-binding offer for the typical protocol pairings from our product assistant via QR code.



OPC DA Server IEC 60870-5-101 Master



OPC UA Server Modbus TCP/RTU Master



TASE.2 Server IEC 60870-5-104 Client



DNP3 Server IEC 61850 Client

In addition, all protocol combinations that are supported by *ipConvOPC* can be queried with the product wizard at the following URL:

https://prowiz.ipcomm.de

More information about *ipConvOPC* can be found at: https://www.ipcomm.de/product/ipConvOPC/en/sheet.html



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#### REDUNDANCY

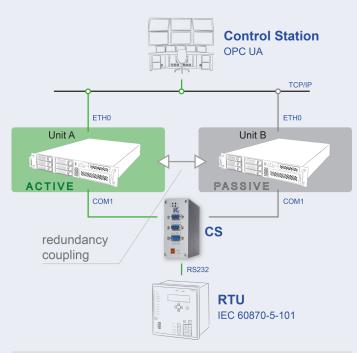
To comply with even increased security requirements, *ipConvOPC* is fully capable of redundancy in combination with a second device.

- Line redundancy (hot-standby)
- Information redundancy
- Device redundancy (parallel operation)

With redundant protocol converters, reliability can be ensured, based on the "hot standby" principle. At any one time only one device assumes the active role, while the passive device monitors the active one and takes the initiative if it fails.

This minimizes downtimes due to maintenance work or component and interface outages, for example.

The redundancy coupling can be realized via Ethernet as well as over serial connections. If separate serial communication connections must be connected to both redundant devices, the channel switch (CS) will be applied.



Example of a redundant solution with ipConvOPC.



