

# Industrie 4.0 tools

## Tools around industry 4.0

### products

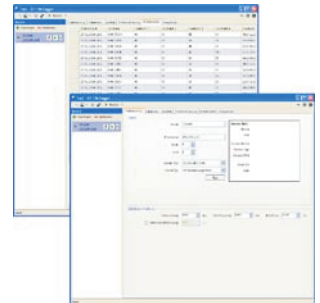
## S7-FileLogger

### Automated writing of data from the PLC to a file

Includes technical-support and bug-fixing for 12 months

- Disorders - Production data - process data - recipes
- Fault diagnostics - Logging - Archiving - Backup
- Easy and comfortable reading of PLC-data cyclically or controlled by PLC and written to a file
- Supported PLC types:
  - Logo
  - S7-200 over CP243-1 or S7-LAN as Multimaster
  - S7-300/400 over CP343-1, CP434-1 or S7-LAN
  - S7-1200
  - S7-1500
  - VIPA S7
- Data types:
  - BOOL
  - INT
  - DINT
  - WORD
  - DWORD
  - REAL
  - TIME
  - DATE
  - TIME\_AND\_DATE
  - STRING
- Output format:
  - Decimal
  - Floating point format (1,22) or scientific (6E+01)
  - Binary
  - Hexadecimal
  - Bool (free text for 0/1)
  - Date (free formatted)
- 3 different stages of development of the software, backward compatible
  - Standard:
    - Up to 4 PLC-connections
    - 100 variables/connection
    - Logging to CSV-file  
File name and destination directory freely selectable (date, time can flow into the file-name and directory-name)
    - Triggers in adjustable time interval (100 ms ... days)
    - The last 500 records/connection immediately visible in the logger
  - Advanced, like as Standard but:
    - 64 PLC-Connections

## Industrie 4.0



- 1000 variables/connection
- By PLC-trigger (for example: flag)
- fixed number of records buffered in PLC
- Start from the Command-Line-Interface
- Logging in XML and/or CSV possible
- Expert, like as Advanced but:
  - 256 PLC-connections
  - 1000 variables/connection
  - Trigger start/stop by condition in the PLC
    - Adjustable trigger duration
    - by flag (bit 0/1)
    - if Variable in certain range of values (<=>)
    - Action to PLC triggered when trigger is active and data stored
  - variable number of records buffered in PLC
    - FIFO implemented via pointers in the PLC, then cycle-accurate data can be recorded

**Commercial data:**

EAN number: 4260363245814

HS-code: 85234999

| article:       |   |
|----------------|---|
| Art. ID.       | name  |
| 9771-DO        | <b>S7-FileLogger license-dongle AddOn</b><br>USB-dongle with license-key instead of software-key<br>Only for Win7/8/8.1 and Win10   |
| 9771-S7L       | S7-FileLogger <b>TCP/IP S7</b><br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>single license (Standard-Version)   |
| 9771-S7L-2     | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>subsequent-license (Standard-Version)  |
| 9771-S7L-3     | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>site-license (Standard-Version)  |
| 9771-S7L-A     | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>single license (Advanced-Version)  |
| 9771-S7L-A-2   | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>subsequent-license (Advanced-Version)  |
| 9771-S7L-A-3   | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>site-license (Advanced-Version)  |
| 9771-S7L-E     | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>single license (Expert-Version)  |
| 9771-S7L-E-2   | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>subsequent-license (Expert-Version)  |
| 9771-S7L-E-3   | S7-FileLogger TCP/IP S7<br>for WIN 32/64 XP/Vista/7/8 (from .Net 3.5)<br>site-license (Expert-Version)  |
| SUP-9771-S7L   | <b>Software Update &amp; Support service</b><br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a single-license.<br>Requirements:<br>single-license S7-FileLogger-standard-version<br>not older than 9 months or together with<br>S7-FileLogger. |
| SUP-9771-S7L-2 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a subsequent-license.<br>Requirements:<br>subsequent-license S7-FileLogger-<br>standard-version not older than 9<br>months or together with S7-FileLogger.   |
| SUP-9771-S7L-3 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a site-license.<br>Requirements:<br>site-license S7-FileLogger-standard-<br>version not older than 9 months or<br>together with S7-FileLogger.               |

| article:         |   |  |
|------------------|---|--|
| Art. ID.         | name  |  |
| SUP-9771-S7L-A   | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a single-license.<br>Requirements:<br>single-license S7-FileLogger-<br>advanced-version not older than<br>9 months or together with S7-FileLogger.         |  |
| SUP-9771-S7L-A-2 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a subsequent-license.<br>Requirements:<br>subsequent-license S7-FileLogger-<br>advanced-version not older than 9<br>months or together with S7-FileLogger. |  |
| SUP-9771-S7L-A-3 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a site-license.<br>Requirements:<br>site-license S7-FileLogger-<br>advanced-version not older than 9<br>months or together with S7-FileLogger.             |  |
| SUP-9771-S7L-E   | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a single-license.<br>Requirements:<br>single-license S7-FileLogger-expert-version<br>not older than 9 months or together with<br>S7-FileLogger.            |  |
| SUP-9771-S7L-E-2 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a subsequent-license.<br>Requirements:<br>subsequent-license S7-FileLogger-<br>expert-version not older than 9<br>months or together with S7-FileLogger.   |  |
| SUP-9771-S7L-E-3 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a site-license.<br>Requirements:<br>site-license S7-FileLogger-<br>expert-version not older than 9<br>months or together with S7-FileLogger.               |  |

## Create with the S7-PLC Excel-files

S7-To-Excel-tool generates from any PLC-variables Excel-files according to your design. You customize the look directly into Excel!

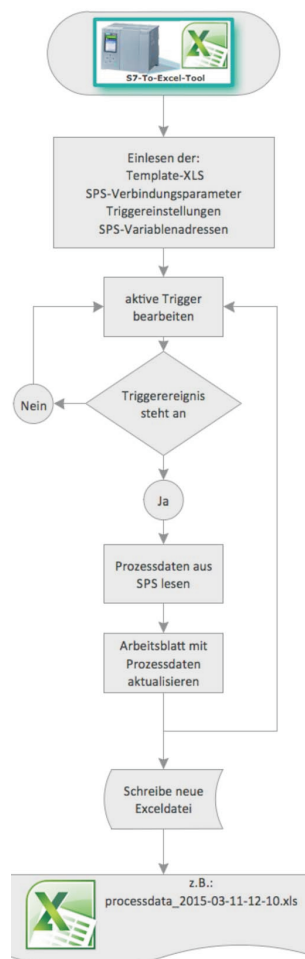
- free create of the Excel-tables with formulas and formats
- Operation without Excel-installation
- event and time controlled writing per worksheet (time-/event-trigger)
- no programm in the PLC necessary
- no limit on the count of variables (for advanced-version)
- file-creation with time-stamp in the file-name
- easy parameterization
- the addresses of the PLC-variables are specified directly in the Excel table (for e.g. PLC\_ADDR,DB10.DBW100,INT)
- supported PLC-types:
  - S7-1500
  - S7-1200
  - S7 300/400
  - S7-200
  - S7-SoftPLC
  - Logo!-SPS
  - VIPA-S7
  - all S7 compatible controls

All parameters are stored directly in the XML-template-file.

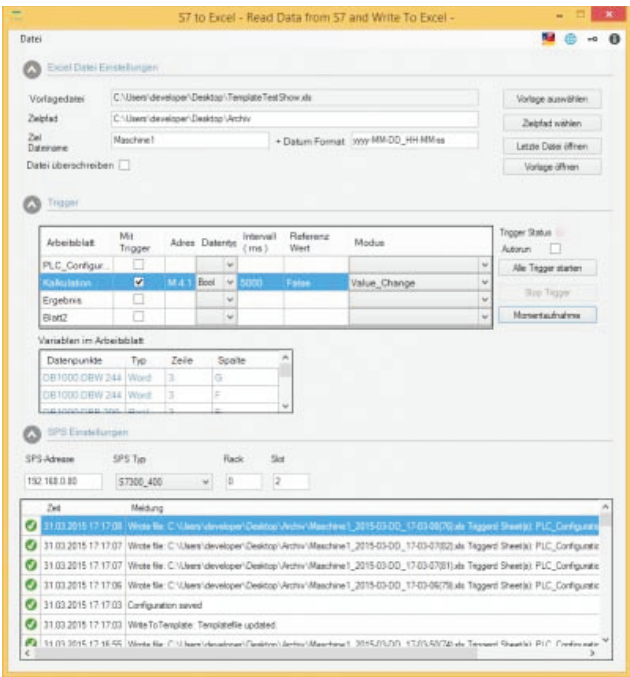
The template includes all information as:

- target directory
- target-file with format-specification for the date and time
- connection-parameters to the PLC (ip-address etc.)
- addresses of the PLC-variables
- condition (trigger) for generating the target file
- This information is indicated with the help of keywords at any position in the Excel worksheet. Variables from the PLC will appear in the target file at the same position (cell), where the relevant variable address has been entered.

program flow







Commercial data:

|             |               |
|-------------|---------------|
| EAN number: | 4260363246323 |
| HS-code:    | 85234999      |

| article:    |  |
|-------------|--|
| Art. ID.    | name   |
| 9773-DO     | <b>S7-To-Excel license-dongle AddOn</b><br>USB-dongle with license-key instead of software-key<br>Only for Win7/8/8.1 and Win10  |
| 9773-S7     | <b>S7-To-Excel-tool, single-license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>limited for 100 variables  |
| 9773-S7-2   | <b>S7-To-Excel-tool, subsequent-license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>limited for 100 variables  |
| 9773-S7-3   | <b>S7-To-Excel-tool, site / company license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>limited for 100 variables  |
| 9773-S7-A   | <b>S7-To-Excel-tool, advanced, single-license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>count of variables unlimited                                   |
| 9773-S7-A-2 | <b>S7-To-Excel-tool, advanced, subsequent-license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>count of variables unlimited                               |
| 9773-S7-A-3 | <b>S7-To-Excel-tool, advanced, state / company license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>count of variables unlimited                          |
| 9773-S7-E   | <b>S7-To-Excel-tool, expert, single-license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by XLS-Template<br>count of variables unlimited<br>all possibilities of enhancement |

| article:        |  |  |
|-----------------|--|--|
| Art. ID.        | name   |  |
| 9773-S7-E-2     | S7-To-Excel-tool, expert, <b>subsequent-license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by<br>XLS-Template<br>count of variables unlimited<br>all possibilities of enhancement      |  |
| 9773-S7-E-3     | S7-To-Excel-tool, expert, <b>state / company license</b><br>for Windows 32/64-bit<br>writing Simatic S7 Processdata to Excel file by<br>XLS-Template<br>count of variables unlimited<br>all possibilities of enhancement |  |
| SUP-9773-S7     | <b>Software Update &amp; Support service</b><br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel standard single-license  |  |
| SUP-9773-S7-2   | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel standard subsequent-license   |  |
| SUP-9773-S7-3   | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel standard site-license   |  |
| SUP-9773-S7-A   | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel advanced single-license   |  |
| SUP-9773-S7-A-2 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel advanced subsequent-license   |  |
| SUP-9773-S7-A-3 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel advanced site-license   |  |
| SUP-9773-S7-E   | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel expert single-license   |  |
| SUP-9773-S7-E-2 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel expert subsequent-license   |  |
| SUP-9773-S7-E-3 | Software Update & Support service<br>Automatical Upgrade for innovations<br>incl. technical support for 12 months<br>for a S7-To-Excel expert site-license   |  |

data recall by OPC-Server

products

## OPC UA client & server SDK for .NET



### Framework Advanced

- So easy - Time saving
- Professionell
- Siemens OPC-UA-Server compatible
- For S7-1500 \* SINUMERIC \* SIMOTION

### Operation / use

With the OPC UA Framework Advanced quickly and easily to your own OPC-UA client/server-application. The structure, which is based on the guidelines for the framework design of Microsoft, allows even new OPC beginners to enter the development from zero to one hundred. The usually complex configuration is almost completely eliminated. The framework extends the Foundation Stack with various features. On the server side, ACLs (Access Control List) are provided to users and certificate-based authentication. The Access Rights (ACEs) can then be used to define the access rights individually. Node management is just as simple, so complex or dozens of lines of configuration code are no longer required. Also on the client side has much to offer. Reading using ReadNode and writing using WriteNode is just as easy as browsing the nodes.

### Features

- Operating system
  - Windows 32 / 64 bit with .NET Framework min. version 3.5
- Languages
  - C#
  - VB.Net
- Configuration
  - XML-based
  - Through external file
  - Directly implemented in the code
- Easy integrated user management
  - User Token Policy configuration over ACL (Access Control Lists)
  - Extensive authentication options
    - User / password
    - Certificate
    - White / Blacklisting of user
  - User-dependent access to the nodes
- Automatic generation of server certificates
- Free choice of certificate store, file system, operating system, application
- "easy to use" Nodemanagement
- Comfort Browsing
- Callbacks / Events for Nodeaccess (read / write / subscribe)
- Unlimited connections
- OPC-features
  - Data Access (DA)
  - Methods
  - Events
  - Alarm & Conditions
  - Historian Data (HDA)

## Evaluation-package

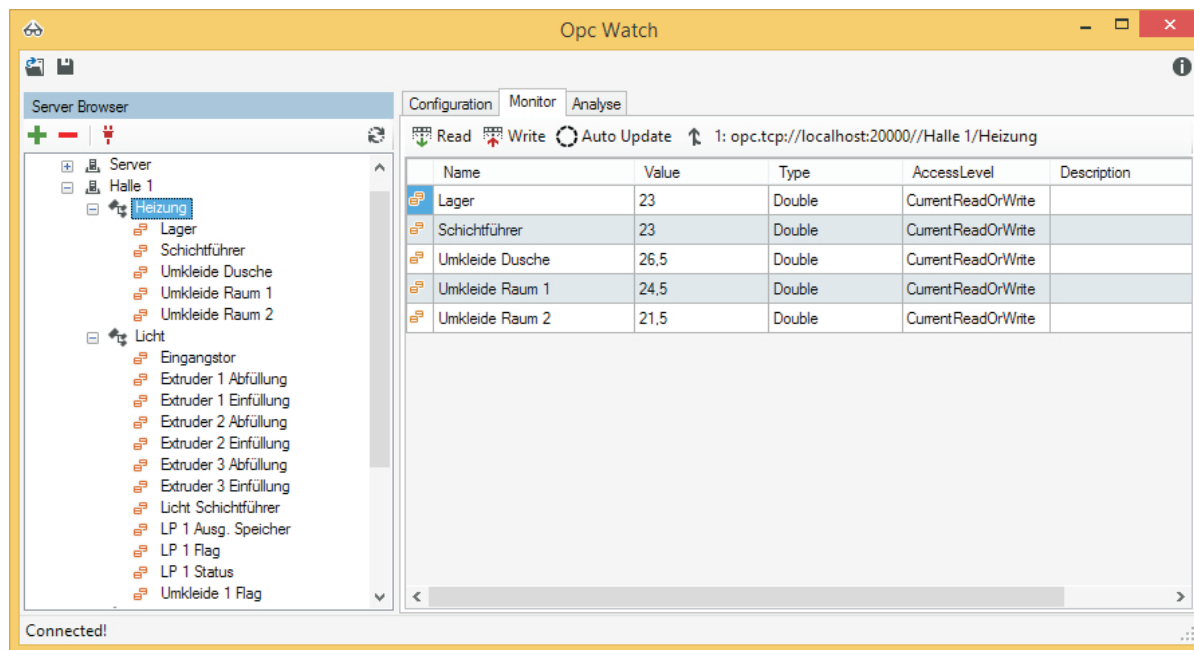
Start immediately and download the evaluation package. You can test for 14 days free of charge. If necessary, please request a test key with a longer runtime.

The package contains extensive samples for the client and server.

## OPC Watch - professional OPC-UA-client with attractive GUI

OPC-Watch, a professional tool in the OPC-UA-world

- Developed with OPC.UAFxAdvanced
- Diagnostics of OPC-UA-servers
- Analysis of the connection possibilities
- Node-browser
- Display Actual values of the nodes by subscription
- Change the values of the nodes
- Save the connection data/project-settings
- Completely free of charge
- Unlimited run
- A valuable tool for the OPC-UA-world



## Example - Server

```
using Opc.UaFx;
using Opc.UaFx.Server;

internal class SampleNodeManager : OpcNodeManager
{
    private OpcDataVariableNode<bool> isStarted;

    public SampleNodeManager()
    {
        : base("http://sampleserver/machines")
    }

    protected override IEnumerable<IOpcNode> CreateNodes(OpcNodeReferenceCollection references)
    {
        OpcFolderNode machineOne = new OpcFolderNode(new OpcName("Machine_1", this.DefaultNamespaceIndex));
        references.Add(machineOne, OpcObjectTypes.ObjectsFolder);

        new OpcMethodNode(machineOne, "StartMachine", new Action<OpcMethodContext>(StartMachine));
        new OpcMethodNode(machineOne, "StopMachine", new Action<OpcMethodContext>(StopMachine));

        this.isStarted = new OpcDataVariableNode<bool>(machineOne, "IsStarted", false);
        return new IOpcNode[] { machineOne };
    }

    private void StartMachine(OpcMethodContext context)
    {
        // The code to start the machine.
        this.isStarted.Value = true;
        this.isStarted.ApplyChanges(context);
    }

    private void StopMachine(OpcMethodContext context)
    {
        // The code to stop the machine.
        this.isStarted.Value = false;
        this.isStarted.ApplyChanges(context);
    }
}

public class Program
{
    {
        new OpcServerApplication("opc.tcp://localhost:12345/SampleServer", new SampleNodeManager()).Run();
        Console.ReadKey();
    }
}
```

Example - Client

```
OpcClient client = new OpcClient("opc.tcp://localhost:4711/MyServer");
client.UserIdentity = new UserIdentity("username", "password");
client.Connect(); // Connect to Server

Read Nodes

To read nodes use one of the ReadNode overloads of the OpcNodeInfo class.

OpcValue value = client.ReadNode("2:Machine_1/IsStarted");

To read a different OpcAttribute as the value attribute specify the attribute to read as follows:

OpcValue description = client.ReadNode("2:Machine_1/IsStarted", OpcAttribute.Description);

Write Nodes

To write nodes use one of the WriteNode overloads of the OpcNodeInfo class.

client.WriteNode("2:Machine_1/IsStarted", true);

To write a different OpcAttribute as the value attribute specify the attribute to write as follows:

client.WriteNode("2:Machine_1/IsStarted", OpcAttribute.Description, "Indicates the started state");

client.WriteNode("2:Machine_1/IsStarted", true);

client.Disconnect();
```

licensing

OPC.UAFx.Advanced can be licensed as a standalone-version, or as a Site/Developer-version. The license is released via a license key. This is directly integrated into the code of the developer. Client and server-framework are licensed separately.

Commercial data:

|             |               |
|-------------|---------------|
| EAN number: | 4260363247405 |
| HS-code:    | 85234999      |

| article:              |  |  |
|-----------------------|--|--|
| Art. ID.              | name   |  |
| 9780.NET-CLIENT       | OPC.UAFx.Advanced Client SDK .net site/dev.license   |  |
| 9780.NET-CLIENT-E     | OPC.UAFx.Advanced Client SDK .net <b>Single license</b><br>Note the licensee agreement.<br>To be used only for one PC.<br>Can be charged with the developer license if it is purchasing within 6 months. |  |
| 9780.NET-CLSV         | OPC.UAFx.Advanced <b>Client/Server</b> SDK .net <b>Site/Dev.L.</b>   |  |
| 9780.NET-SERVER       | OPC.UAFx.Advanced <b>Server</b> SDK .net <b>site/dev.license</b>   |  |
| 9780.NET-SERVER-E     | OPC.UAFx.Advanced Server SDK .net <b>Single license</b><br>Note the licensee agreement.<br>To be used only for one PC.<br>Can be charged with the developer license if it is purchasing within 6 months. |  |
| SUP-9780-CLSV         | <b>Software Update &amp; Support service</b><br>OPC.UAFx.Advanced Client/Server Bundle SDK<br>New features, new versions,<br>12 months support   |  |
| SUP-9780.NET-CLIENT   | Software Update & Support service<br>OPC.UAFx.Advanced Client SDK<br>New features, new versions,<br>12 months support  |  |
| SUP-9780.NET-CLIENT-E | Software Update & Support service<br>OPC.UAFx.Advanced Client SDK<br>New features, new versions,<br>12 months support  |  |
| SUP-9780.NET-SERVER   | Software Update & Support service<br>OPC.UAFx.Advanced Server SDK<br>New features, new versions,<br>12 months support  |  |
| SUP-9780.NET-SERVER-E | Software Update & Support service<br>OPC.UAFx.Advanced Server SDK<br>New features, new versions,<br>12 months support  |  |

## Easy and comfortable UA-server

- WEB-based
- Easy configuration
- Virtually unlimited number of PLC-connections
- Usermanagement
- Authentication with OPC-UA-server by user/password or certificate
- Certificate management
- WEB-HMI for Smart-Devices and WEB-browser (tablet/smartphone)
- Integrated recipe-manager
- Scalable licensing-model
- PLC-types:
  - S7-1500
  - S7-1200
  - S7-200 / S7-300 / S7-400
  - WinAC RTX
  - !Logo
  - S7-LAN
  - S5-LAN++
- Provided operating-systems: Windows 7/8/10, Windows Server
- Modular licensing-system:
  - Single-license
  - Subsequent-license (additional work-place)
  - Site-license (as many work-places as in the location existend)

### Commercial data:

|             |               |
|-------------|---------------|
| EAN number: | 4260363247054 |
| HS-code:    | 85234999      |

| article:       |   |
|----------------|---|
| Art. ID.       | name  |
| 9770-MH-S7     | <b>S7-Mobile HMI</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Site-license                   |
| 9770-MH-S7-E   | <b>S7-Mobile HMI</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Single-license                 |
| 9770-UA-S7     | <b>S7-OPC-UA-Server</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Site-license                |
| 9770-UA-S7-E   | <b>S7-OPC-UA-Server</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Single-license              |
| 9770-UAMH-S7   | <b>S7-OPC-UA-Server / Mobile HMI</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Site-license   |
| 9770-UAMH-S7-E | <b>S7-OPC-UA-Server / Mobile HMI</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Single-license |
| 9774-S7        | <b>S7-RecipeManager (inclusive MobileHMI)</b><br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Recipemanagement for SIMATIC S7                                      |

| article:           |  |  |
|--------------------|--|--|
| Art. ID.           | name   |  |
|                    | Inclusive technical support und bug-fixing<br>for 12 months<br>Site-license  |  |
| 9774-S7-E          | S7-RecipeManager (inclusive MobileHMI)<br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Recipemanagement for SIMATIC S7<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Single-license     |  |
| 9774-S7-E2         | S7-RecipeManager (inclusive MobileHMI)<br>for Windows 7/8/10 and Windows Server<br>2008/2008 R2/2012/2012 R2<br>Recipemanagement for SIMATIC S7<br>Inclusive technical support und bug-fixing<br>for 12 months<br>Subsequent-license |  |
| SUP-9770-MH-S7     | <b>S7-Mobile HMI software update and supportservice</b><br>Inclusive new functions and technical<br>support for 12 months<br>Site-license  |  |
| SUP-9770-MH-S7-E   | S7-Mobile HMI software update and supportservice<br>Inclusive new functions and technical<br>support for 12 months<br>Single-license   |  |
| SUP-9770-UA-S7     | <b>S7-OPC-UA-Server software update and supportservice</b><br>Inclusive new functions and technical<br>support for 12 months<br>Site-license   |  |
| SUP-9770-UA-S7-E   | S7-OPC-UA-Server software update and supportservice<br>Inclusive new functions and technical<br>support for 12 months<br>Single-license  |  |
| SUP-9770-UAMH-S7   | <b>S7-OPC-UA / Mobile HMI softw upd and supportservice</b><br>Inclusive new functions and technical<br>support for 12 months<br>Site-license   |  |
| SUP-9770-UAMH-S7-E | S7-OPC-UA / Mobile HMI softw upd and supportservice<br>Inclusive new functions and technical<br>support for 12 months<br>Single-license  |  |



# OPC-manager



## Data exchange between OPC-Clients and PLC's

- OPC-Clients due to specification 1.0 / 2.0
- Provided protocols:
  - S7 TCP/IP (RFC1006, CP343-1, CP443-1, S7-LAN, MPI-LAN)
  - S7 MPI / PPI (MPI/PPI-Kabel, MPI-II, MPI-USB, S7-USB)
  - S5 TCP/IP – H1 (RFC1006, CP143-TCP, S5-LAN++, VIPA-CP)
  - S5 AS512 (RK511)
  - S5 3964R (RK512)
  - Moeller PS4/PS416
  - AEGA 120/A250 (KS-functions)
  - Modbus RTU/ASCII serial, TCP/IP, remote data transmission
  - IBH softec SoftPLC
  - WAGO Ethernet TCP/IP FPC
  - SAIA PLC (S-Comm)
- Clearly arranged listing of links with status display
- Four serial ports (COM1 – COM4)
- Low CPU stress
- Unlimited number of connections
- Manually creation of items as well as possible by OPC clients
- Display of actual and nominal value
- Recording of the linked communication modules in real time
- Each configured control can be switched into simulation mode
- For Win2000, XP, Server2003, Vista and Win7 (32-/64-bit)

**Commercial data:**

|             |               |
|-------------|---------------|
| EAN number: | 4260363240611 |
| HS-code:    | 85234999      |

| article:       |   |
|----------------|---|
| Art. ID.       | name  |
| 9760           | OPC-Manager lite  |
| 9760-004       | OPC XML-DA-package  |
| 9760-012       | OPC WAGO on TCP<br>Single license   |
| 9760-022       | OPC S5 H1 on ISO  |
| 9760-09        | OPC Klöckner Moeller on TCP   |
| 9760-10        | OPC AEG 120/250 KS-Fct. serial  |
| 9760-100       | OPC-Manager S7 TCP/IP RFC1006<br>+ OPC S7 MPI/PPI<br>+ OPC S7 PPI S7-200<br>+ OPC S5 AS511 serial<br>+ OPC S5 H1 on TCP |
| 9760-100-USB   | USB-Dongle for OPC-Manager<br>at licensing  |
| 9760-100-USB-N | USB-Dongle for OPC-Manager<br>past licensing  |
| 9760-110       | OPC-Manager (like 9760-100)<br>company license per protocol   |
| 9760-19        | OPC Modbus Slave seriell on TCP   |
| 9769-23        | OPC 3964R<br>with RK512 serial  |
| 9769-24        | OPC 3964R<br>with RK512 TCP/IP with 3964R LAN   |



## Communication Data Bridge Industrie 4.0

- OPC-UA server/client
- REST/JSON-interface
- SIMATIC-S7, CSV, SQL
- Historical database

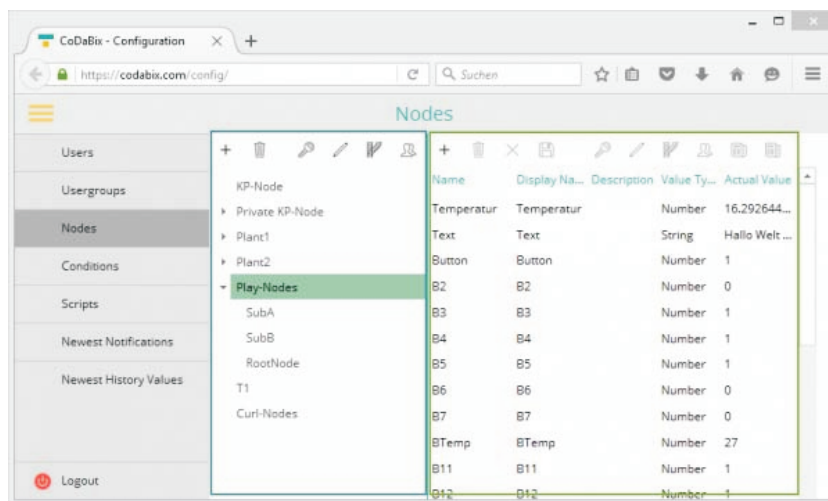
### Functionality / deployment

For the realization of industrial 4.0-implementations must existing heterogeneous machines be networked. CoDaBix® is the right solution here. Industry 4.0 lives from flexible communications in both the horizontal (PLC / Control-level) as well as in the vertical direction (MES / PPS / SCADA). A connection between man, machines and objects requires a network to a large extent. Most of the machines, and even the latest, however, are often designed as "point solutions" or series machines. Each application, each PLC, each device has its own structure. The supplier provides according to their own specifications data and control options via different routes.

In the first step this heterogeneous machines must be "harmonized into" a common system. So is a central access to process data and machine information possible. CoDaBix® provides the ideal solution for this task.

CoDaBix® integrates OPC-UA, WEB services and database in a single system. The base is a SQL database (MySQL or SQLite). Historical values are stored in the database with timestamp. Above OPC UA, REST-JSON-service can be read or written to the defined variables and historical data.

### Configuration



Above the Web-based-Configuration-GUI, the structure of the machine is defined in a tree-shape.

Here were set variables etc. The variables are connected via the plugins directly to the machine. All nodes can be centrally accessed, read and written via OPC-UA / REST-JSON. Access will be controlled via the user administration. So the names in the PLC are decoupled to terms in the operator's installation. The data will be "harmonized".

CoDaBix® There are two variants: Compact and Server. Compact is intended for use directly on machines network, "Server" is designed for use on servers / Internet. CoDaBix® is installed on a Windows desktop (Win 7/8/10) or server (from 2008 R). Set up as a service performs CoDaBix® runs silently in the background.

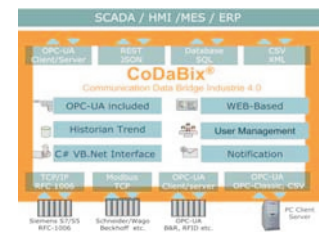
### Features

CoDaBix® Features CoDaBix®-installations can be mutually linked, and communicate so hierarchically. CoDaBix® has integrated all important interfaces to PLC and MES, these can be in any way linked:

- Windows 7/8/10 desktop/server 32/64 bit with .NET-framework
- OPC-UA-compatible nodemanagement
- OPC-UA (server/client), DA, HDA, event, ...
- Database (SQL) WEB-service (REST) over JSON-protocol (read and write of process-values)
- Historical database, with timestamp from the occurrence of the process value
- CSV/XML-bidirectional interface
- WEB-based configuration
- Communication in horizontal and vertical directions
- Trigger-manager for synchronizing the data-acquisition
- Protocols for connection to the main types of PLCs SIMATIC S7 and S5
- Modbus (Schneider/ WAGO / Beckhoff)
- OPC (UA / classic / client / server)
- Integrated user management
- Modular construction
- Notification-modul (smartphone), email
- Open .NET-(C#)-developer-interface
- Javascript/typescript-plugin (conditionscripts)
- Harmonization of heterogeneous systems
- Individually and as a "royalty free" licensable

### Licensing

CoDaBix® can be licensed as a single-version or as site/developer-version. It is enabled via a license-key. Optionally, a dongle can be used as a license medium.



Commercial data:

|             |               |
|-------------|---------------|
| EAN number: | 4260363246729 |
| HS-code:    | 85234999      |

| article:       |  |  |
|----------------|--|--|
| Art. ID.       | name   |  |
| 9776-C         | <b>CoDaBix Compact, site-license</b><br>OPC-UA-Server, DA, HDA, Filetype<br>REST-JSON<br>5 Client Connections  |  |
| 9776-C-E       | CoDaBix Compact, <b>single-license</b><br>OPC-UA-Server, DA, HDA, Filetype<br>REST-JSON<br>5 Client Connections  |  |
| 9776-CSV       | CoDaBix <b>CSV Plugin, site-license</b>  |  |
| 9776-CSV-E     | CoDaBix CSV Plugin, <b>single-license</b>  |  |
| 9776-DB        | CoDaBix <b>Database Plugin, site-license</b><br>Connect CoDaBix to different DataBases<br>(MSSQL, MySQL etc.)<br>in for writing                                      |  |
| 9776-DB-E      | CoDaBix Database Plugin, <b>single-license</b><br>Connect CoDaBix to different DataBases<br>(MSSQL, MySQL etc.)<br>in for writing                                    |  |
| 9776-RFC1006   | CoDaBix <b>RFC1006 Plugin (IsoOnTCP), site-license</b><br>Client und Server<br>10 Connections included   |  |
| 9776-RFC1006-E | CoDaBix RFC1006 Plugin (IsoOnTCP), <b>single-license</b><br>Client und Server<br>10 Connections included   |  |
| 9776-S         | CoDaBix <b>Server, site-license</b><br>OPC-UA-Server, REST-JSON  |  |
| 9776-S-E       | CoDaBix Server, <b>single-license</b><br>OPC-UA-Server, REST-JSON  |  |
| 9776-S7        | CoDaBix <b>S7-TCP/IP, site-license</b><br>10 PLC Connections included  |  |
| 9776-S7-E      | CoDaBix S7-TCP/IP, <b>single-license</b><br>10 PLC Connections included  |  |
| 9776-SCRIPT    | CoDaBix <b>Scripting-Interface, site-license</b><br>Extends CoDaBix with Type-Script interface for<br>flexible Data-Access<br>100 scripts                            |  |
| 9776-SCRIPT-E  | CoDaBix Scripting-Interface, <b>single-license</b><br>Extends CoDaBix with Type-Script interface for<br>flexible Data-Access<br>100 scripts                          |  |
| 9776-SQL       | CoDaBix <b>SQL DB Plugin, site-license</b><br>Connect CoDaBix to different DataBases<br>(MSSQL, MySQL etc.) in for reading and<br>writing<br>500 Variables include   |  |
| 9776-SQL-E     | CoDaBix SQL <b>DB-Plugin, single-license</b><br>Connect CoDaBix to different DataBases<br>(MSSQL, MySQL etc.) in for reading and<br>writing<br>500 Variables include |  |
| 9776-UA        | CoDaBix <b>OPC-UA-Client Plugin, site-license</b><br>up to 10 OPC-UA-Serverconnections included  |  |
| 9776-UA-E      | CoDaBix OPC-UA-Client Plugin, <b>single-license</b><br>up to 10 OPC-UA-Serverconnections included  |  |
| 9776-UA-E-50   | CoDaBix OPC-UA-Client <b>50 Plugin, single-license</b><br>up to 50 OPC-UA-Serverconnections included   |  |
| SUP-9776-C     | <b>Subscription CoDaBix Compact, site-license</b><br>12 months subscription<br>new features and support included   |  |
| SUP-9776-C-E   | Subscription CoDaBix Compact, <b>single-license</b><br>12 months subscription<br>new features and support included   |  |
| SUP-9776-CSV   | Subscription CoDaBix <b>CSV Plugin, site-license</b><br>12 months subscription<br>new features and support included  |  |

| article:           |   |  |
|--------------------|---|--|
| Art. ID.           | name  |  |
| SUP-9776-CSV-E     | Subscription CoDaBix CSV Plugin, <b>single-license</b><br>12 months subscription<br>new features and support included             |  |
| SUP-9776-DB        | Subscription CoDaBix <b>Database</b> Plugin, <b>site-lizenz</b><br>12 months subscription<br>new features and support included    |  |
| SUP-9776-DB-E      | Subscription CoDaBix Database Plugin, <b>single license</b><br>12 months subscription<br>new features and support included        |  |
| SUP-9776-RFC1006   | Subscription CoDaBix <b>RFC1006</b> Plugin, <b>site-license</b><br>12 months subscription<br>new features and support included    |  |
| SUP-9776-RFC1006-E | Subscription CoDaBix RFC 1006 Plugin, <b>single license</b><br>12 months subscription<br>new features and support included        |  |
| SUP-9776-S7        | Subscription CoDaBix <b>S7-TCPIP</b> Plugin, <b>site-license</b><br>12 months subscription<br>new features and support included   |  |
| SUP-9776-S7-E      | Subscription CoDaBix S7-TCPIP Plugin, <b>single license</b><br>12 months subscription<br>new features and support included        |  |
| SUP-9776-SCRIPT    | Subscription CoDaBix <b>Scripting</b> Plugin, <b>site-license</b><br>12 months subscription<br>new features and support included  |  |
| SUP-9776-SCRIPT-E  | Subscription CoDaBix Scripting Plugin, <b>single lic.</b><br>12 months subscription<br>new features and support included          |  |
| SUP-9776-SQL       | Subscription CoDaBix <b>SQL</b> Plugin, <b>site-license</b><br>12 months subscription<br>new features and support included        |  |
| SUP-9776-SQL-E     | Subscription CoDaBix SQL Plugin, <b>single license</b><br>12 months subscription<br>new features and support included             |  |
| SUP-9776-UA        | Subscription CoDaBix <b>OPC-UA-Client</b> Plugin, <b>site-lic.</b><br>12 months subscription<br>new features and support included |  |
| SUP-9776-UA-E      | Subscription CoDaBix OPC-UA-Client Plugin, <b>sin.-lic.</b><br>12 months subscription<br>new features and support included        |  |
| SUP-9776-UA-E-50   | <b>Subscript.</b> CoDaBix OPC-UA-Client <b>50 Plugin, sin.-lic</b><br>12 months subscription<br>new features and support included |  |

# S7TimeServer



## Easy automatic setting of the S7-PLC-time

- Synchronize PLC-time in the SIMATIC S7 with PC-time
- S7-Time-Server synchronizes the time of the PLC automatically with the PC

### Features

- Synchronizes the PLC-time of the S7 based on the PC-time
- No program required in the PLC
- Unlimited number of PLC connections
- Every S7 300/400
- Per PLC freely adjustable interval of synchronization

### Supported PLC systems

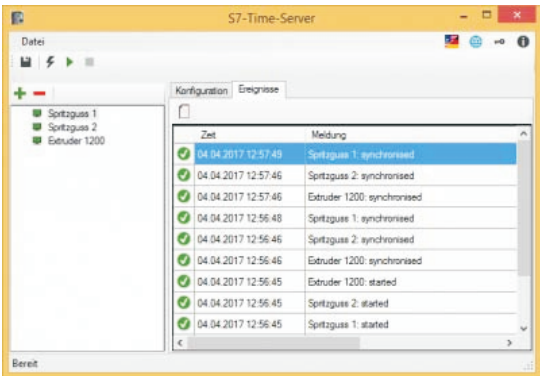
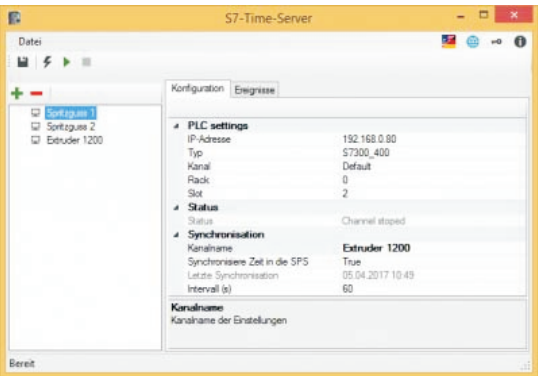
- S7-300 / 400
- VIPA-S7
- All S7-300 / 400 compatible controllers

### Supported Windows-versions

- Windows 7/8/10 32/64 Bit
- Windows Server all versions

### Screenshots

- Settings



#### Commercial data:

|             |               |
|-------------|---------------|
| EAN number: | 4260363247832 |
| HS-code:    | 85234999      |

| article:         |  |
|------------------|--|
| Art. ID.         | name   |
| 9789-DO          | USB-dongle for S7TimeServer<br>Optional instead Software-Key   |
| 9789-S7-TIME     | S7TimeServer, single-license<br>Synchronise Siemens S7 Time  |
| SUP-9789-S7-TIME | Support- and Updateservice S7TimeServer, single-lic.<br>S7-Timer-Server 12 months subscription<br>New features and support included<br>Requires single license not older than 9 months |