



Data Sheet CODESYS HMI SL

This product allows for the creation of operating interfaces with CODESYS visualization for an HMI device (PC or panel), with data from CODESYS V2, CODESYS V3 and OPC UA controllers. The visualization is created with the CODESYS Development System (V3), the free IEC 61131-3 development system with a full-fledged visualization editor.

Product description

CODESYS HMI SL is a software package that is installed on a remote computer to equip it with a graphical user interface (HMI). This new HMI support allows it to combine and visualize the data of one or more CODESYS V2 and CODESYS V3 controllers (data sources) on one remote HMI device. Since CODESYS V3.5 SP17 controllers with an OPC UA Server can also be visualized. A new datasource with OPC UA Client functionality is provided. The HMI SL can also be operated in conjunction with redundancy. An additional redundancy license is required for this.

Benefits

- Integrated into the CODESYS Development System – for development of the remote HMI
- Development in one project, either independently or with the PLC application
- Scalable projects by unlocking any number of available data points
- Simplified creation of the application by guided project configuration
- Automated display of all available data in the controller network
- Display of all functions and elements that are available with CODESYS Visualization, for example:
 - Alarm management
 - Trace and trend display
 - User management
 - Recipe management
 - Visualization styles
- Download the visualization directly from the development environment to the HMI device

The following functions are available with the CODESYS HMI SL basic license: * 10,000 data source points for linking CODESYS V2 and CODESYS V3 data * 100 data server points for switching the data server product * Symbolic or direct data linking * Processing (read/write) of variable and recipe data * Display of the contents of alarm tables and trend records * Customization of the sampling rate of the visualization to the task cycle of the controller(s) * Automatic management and generation of the required data types and data points * Automatic conversion function for data server projects

Specialized HMI perspectives with typical perspectives – can be switched at any time for application developers

Integrated visualization editor

Extensive library with ready-made elements

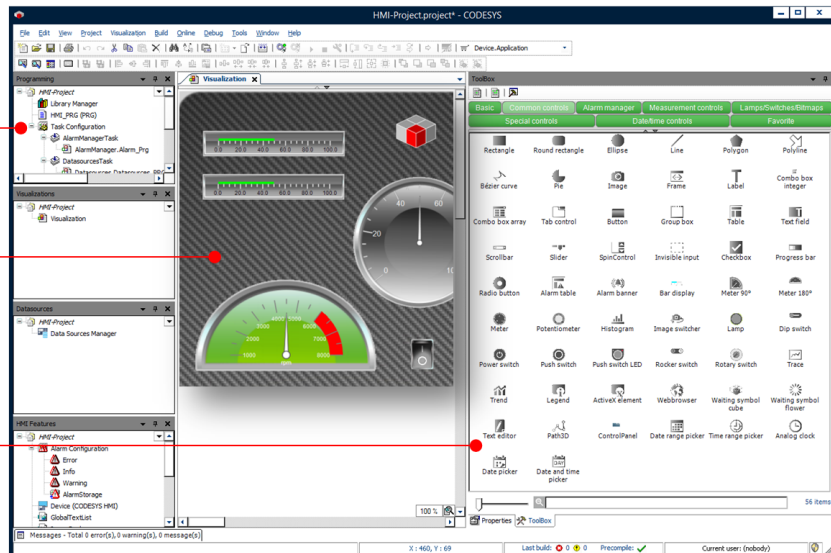


Bild 1: Programming the CODESYS HMI within the CODESYS Development System

Working with data points and data sources of any CODESYS controller

Visualization x Datasource x						
Variables Type Mappings Communication General and Diagnosis						
Update variables						
Local variable	Access Right	Update always	Create or map	Mapping type	Remote variable	
Application				...	Application	
PLC_PRG				...	PLC_PRG	
arr2				...	arr2	
arr		<input checked="" type="checkbox"/>		...	arr	
arrArr1				...	arrArr1	
arrArrStruct				...	arrArrStruct	
[0]				...	[0]	
[1]				...	[1]	
[0]				...	[0]	
a1				INT	a1	
b1		<input checked="" type="checkbox"/>		INT	b1	
c1				REAL	c1	
arrStruct				...	arrStruct	
inst1				...	inst1	
inst2				...	inst2	
inst3				...	inst3	
inst4				...	inst4	
inst5				...	inst5	
a1				INT	a1	

Bild 2: Working with data points and data sources

Nominal

- Extension license for supporting an unlimited number of data points

Functional

- CODESYS WebVisu SL – a CODESYS Store product

General information

Supplier:

CODESYS GmbH
 Memminger Strasse 151
 87439 Kempten
 Germany

Support:

This product includes a free addition to an otherwise paid support entitlement of one hour of support.

The redemption must be made within 1 year from the date of purchase. After this time, the support entitlement expires.

<https://support.codesys.com>

Item:

CODESYS HMI SL

Item number:

2304000009

Sales/Source of supply:

CODESYS Store

<https://store.codesys.com>

Included in delivery:

- Package for the CODESYS Development System including CODESYS Control, license agreement, online help and device description
- License Key

System requirements and restrictions

Programming System	CODESYS Development System V3.5.10.0 or higher
Runtime System	-
Supported Platforms/ Devices	Executable under Windows 8 / 10 / Embedded (32 / 64 Bit)

Since CODESYS HMI V3.5.17.0 the overlay feature is available for the TargetVisu. For the overlay feature a Windows 10/64Bit system is required.

The versions **maintained by Microsoft** are supported.

Note: Use the project “Device Reader” to find out the supported features of your device. “Device Reader” is available for free in the CODESYS Store.

Additional Requirements

See license agreement. After installation, the user is responsible for implementing and checking the functionality of the combination of the software package and hardware according to device specifications.

Runtime with Datasource Manager

Restrictions

-

Licensing


Single device license: The license can be used on the target device/PLC on which the CODESYS runtime system is installed.

Licenses are activated on a software-based license container (soft container), which is permanently connected to the controller. Alternatively, the license can be stored on a CODESYS Key (USB dongle). By replugging the CODESYS Key, the license can be used on any other controller.

Note: In demo mode, the software runs for two hours without a license. After that, a manual restart is required.

Required Accessories

Optional: CODESYS Key

Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.

Creation date: 2025-07-30