

CODESYS Depictor

The CODESYS Depictor allows creating and displaying 3D models and linking their geometrical relations (i.e. axis angles) to CODESYS applications. It is possible to display and animate machine parts (e.g. robots) or entire production lines in CODESYS.

(A demo license is available for testing.)

Product description

Licensing:

Workstation License



The CODESYS Depictor is used for the flexible creation, illustration and animation of 3D models. For the creation of the 3D models, poses (geometrical relations / transformations) and elements (3D geometries) can be placed in a tree structure indicating the relation to each other. The pose properties (e.g. rotation angle) can be linked to CODESYS application variables, so that the whole 3D model can be animated.

The CODESYS Depictor is typically used for:

- Support for the preliminary operation of projects by the possibility to visually check the work sequences using the 3 dimensional models
- Realistic graphical visualization of CODESYS-controlled machines, vehicles or facilities, without having the ready-made installation
 - · for presentation to potential customers
 - o as basis for presentations or technical discussions
 - o for teaching and research

having the advantage that the prepared PLC applications can be directly used for controlling the real hardware

For the creation of the 3D models the CODESYS Depictor provides the following features:

- Creation of arbitrary geometrical relations (transformations) within the 3D models
- Linkage of the geometrical relations to online IEC variables (i.e. axial angles) enabling the user to animate the 3D models during runtime
- Basis 3D elements are available in an included library (i.e. box, cylinder, plane)
- Import of .obj-Files (Wavefront), .dae-Files (COLLADA) and .3ds-Files (3D Studio) for the creation of distinct complex 3D elements (restriction: for the usage of the complex formats .dae and .3ds the geometry data has to be included as one single object)
- 3D object library for all kinematic transformations of the CODESYS SoftMotion CNC
- Automatic lighting of the 3D model

Every created CODESYS Depictor 3D model is reusable within any other CODESYS Depictor 3D model.

For the creation of 3D models a license for the CODESYS Depictor is necessary. If there is no license only the viewing of already created 3D models is possible using the CODESYS Depictor (demo mode).

General information

Supplier:

CODESYS GmbH Memminger Strasse 151 87439 Kempten Germany

Support:

https://support.codesys.com

Item:

CODESYS Depictor

Item number:

2101000008

Sales / Source of supply:

CODESYS Store

https://store.codesys.com

Included in delivery:

- Package with:
 - CODESYS Depictor Plug-In
 - Example Project
 - Online Help file
- CODESYS Depictor workstation license

System requirements and restrictions

Programming System	CODESYS Development System V3.5.11.0 or higher
Runtime System	CODESYS Control V3.5.11.0 or higher
Supported Platforms/ Devices	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	-
Restrictions	
Licensing	Workstation License: The license can be used on the workstation on which the CODESYS Development System is installed and executed. Licenses are activated on a software-based license container (soft container), which is permanently connected to the workstation. 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 workstation. The CODESYS Depictor uses the free 3D engine "Irrlicht" (http://irrlicht.sourceforge.net/license/).
Required Accessories	Optional: CODESYS Key

Note: Not all CODESYS features are available in all territories. For more information on geographic restrictions, please contact sales@codesys.com.

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