



## 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, with a maximum of 10 poses.)

### Product description

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.

### More information

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
  - as basis for presentations or technical discussions
  - 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

### Manufacturer:

3S-Smart Software Solutions GmbH  
 Memminger Strasse 151  
 87439 Kempten  
 Germany

### Support:

<https://support.codesys.com>

### Item:

CODESYS Depictor

### Item number:

2101000008

### Sales:

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

<b>Programming System</b>	CODESYS Development System V3.5.11.0 or higher
<b>Runtime System</b>	CODESYS Control V3.5.11.0 or higher
<b>Supported Platforms/ Devices</b>	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.
<b>Additional Requirements</b>	-
<b>Restrictions</b>	
<b>Licensing</b>	<ul style="list-style-type: none"> <li>• Soft Key, with CODESYS Development System SP 13            (Workplace-bound licensing, free part of all CODESYS products)</li> <li>• Optional: CODESYS Key            (Increased security against loss of license keys, transferable licensing to other workstations)</li> </ul> <p>The CODESYS Depictor uses the free 3D engine "Irrlicht" (<a href="http://irrlicht.sourceforge.net/license/">http://irrlicht.sourceforge.net/license/</a>).</p>
<b>Required Accessories</b>	Optional: CODESYS Key

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