



## CODESYS Control for Linux SL

CODESYS Control Linux SL is an IEC 61131-3-compliant SoftPLC for PC-based industrial controllers running on Linux with soft real-time properties.

### Product description

CODESYS Control Linux SL converts an industrial PC into a high-performance PLC – scalable to nearly any degree by the PC performance. The system is suitable for applications without hard demands on the real-time behavior.

### Benefits

The runtime system supports numerous I/O interfaces, such as discrete inputs and outputs or fieldbus adapters, as well as integrated IEC 61131-3 protocol stacks. The fieldbuses are configured directly in the CODESYS Development System without using any additional tools.

- Communication with the CODESYS Development System, also for debugging the running application
- Execution of controller functions and generation of graphical user interfaces
- Operation of I/O systems and fieldbuses

Detailed information can be found in the [CODESYS Online Help](#).

### Interfaces

- CODESYS OPC UA Server, as full version for data exchange.

### Visualization

- CODESYS WebVisu, is included as full version in the delivery of the runtime package.

### SL Extension

The SL Extension Package is included in the Runtime Package and offers additional functions:

- Integration of existing C code
- Implementation of external functions
- Support of start/stop switches
- Usage of local I/Os
- Use of external event tasks
- Connect persistent memories (Retains)

## **Fieldbus support**

With the delivery of the Runtime Package the following fieldbuses are supported:

- CODESYS CANopen Manager / Device
- CODESYS EtherCAT Master
- CODESYS EtherNet/IP Scanner / Adapter
- CODESYS Modbus TCP Master / Slave
- CODESYS Modbus Serial Master / Slave
- CODESYS PROFIBUS Master
- CODESYS PROFINET Controller / Device

## **Product options**

Further products can be licensed for a fee:

- CODESYS BACnet SL
- CODESYS Control for Linux MC SL
- CODESYS KNX SL
- CODESYS Redundancy SL
- CODESYS SoftMotion SL
- CODESYS SoftMotion CNC+Robotics SL
- CODESYS DNP3

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## 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 Control for Linux SL

### Item number:

2302000005

### Sales/Source of supply:

CODESYS Store  
<https://store.codesys.com>

### Included in delivery:

- Setup.deb (64-bit)
- License key

## System requirements and restrictions

<b>Programming System</b>	CODESYS Development System V3.5.17.0 or higher
<b>Supported platforms and devices</b>	<p>Runs on Debian-based Linux (64-bit)</p> <p>Note: Use the tool "Device Reader" to find out the supported features of your device (free of charge component of CODESYS Development System).</p> <p>Supported Hilscher hardware:</p> <ul style="list-style-type: none"> <li>• PROFIBUS Master: Hilscher CIFX or netX 100/500 controller with firmware 2.8.0.0</li> <li>• PROFINET Controller: Hilscher CIFX or netX 100/500 controller with firmware 3.x</li> </ul>

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<b>Additional requirements</b>	<ul style="list-style-type: none"><li>• A SSH server must be running on the Linux system, to install the CODESYS runtime with the CODESYS Development System.</li><li>• Dynamic libraries needed by the CODESYS Control Runtime binary:<ul style="list-style-type: none"><li>◦ libm.so.6</li><li>◦ libpthread.so.0</li><li>◦ libdl.so.2</li><li>◦ librt.so.1</li><li>◦ libc.so.6</li><li>◦ libgcc_s.so.1</li></ul></li><li>• Third-party requirements: - libc &gt;= 2.27 (required by CodeMeter Runtime)</li></ul>
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<b>Restrictions</b>	<p>IEC applications are bound to one CPU core.</p> <p>Other distributions may also be used at your discretion but are not part of the product release and related tests.</p> <p>Not released for use in containers or virtual machines (VMs)!</p>
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**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.

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<b>Required Accessories</b>	Optional: CODESYS Key
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*Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.*

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