



## CODESYS Control for Linux ARM SL

An IEC 61131-3-compliant SoftPLC for Linux/ARM-based industrial controllers.

### Product description

The CODESYS Control Linux ARM SL is an adapted CODESYS runtime system for Linux/ARM-based platforms. The performance of the runtime system is almost arbitrarily scalable via the hardware properties of the system.

To install the product on the Linux OS via the CODESYS Development System, use the the included CODESYS Deploy Tool plug-in. After each restart the runtime system will be started automatically. If no valid full license can be found, CODESYS Control runs for two hours without functional limitations before shut down.

After installing the runtime environment, the PLCnext controller can be programmed as a PLC with the CODESYS Development System.

### 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 for programming and debugging of the IEC 61131-3 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, extent of use depends on the application-based license used.

### Visualization

- CODESYS WebVisu, extent of use depends on the application-based license used.

### 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 KNX SL
- CODESYS Redundancy SL
- CODESYS SoftMotion
- CODESYS SoftMotion Light SL
- CODESYS DNP3

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## General information

### Supplier:

CODESYS GmbH  
 Memminger Strasse 151  
 87439 Kempten  
 Germany

### Support:

Technical support is not included with this product. To receive technical support, please purchase a CODESYS Support Ticket.

<https://support.codesys.com>

### Item:

CODESYS Control for Linux ARM SL

### Item number:

2302000039

### Sales/Source of supply:

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

### Included in delivery:

- CODESYS Package incl. debian setup (32/64-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>	<ul style="list-style-type: none"> <li>• OS: Debian-based Linux (32/64-bit)</li> <li>• CPU: ARMv7, ARMv8</li> </ul> <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>
<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> </ul> </li> </ul>

- libdl.so.2
- librt.so.1
- libc.so.6
- libgcc\_s.so.1

- Third-party requirements: - libc >= 2.27 (required by CodeMeter Runtime)

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### Restrictions

- Other Linux distributions may also be used at your discretion but are not part of the product release and related tests.
- Not released for use in containers or virtual machines (VMs)!

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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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### 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.*

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