



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](#).

Performance

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

Options

The runtime package can be extended by the following products:

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

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

Communication

- CODESYS BACnet SL
- CODESYS IIoT Libraries SL
- CODESYS KNX SL
- CODESYS OPC UA Server SL
- CODESYS OPC UA Client SL
- CODESYS OPC UA PubSub SL
- CODESYS DNP3

Motion

- CODESYS SoftMotion SL
- CODESYS SoftMotion CNC+Robotics SL
- CODESYS SoftMotion Light SL

Redundancy

- CODESYS Redundancy SL

Visualization

- CODESYS WebVisu SL

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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

Programming System	CODESYS Development System V3.5.17.0 or higher
Supported platforms and devices	<ul style="list-style-type: none"> • OS: Debian-based Linux (32/64-bit) • CPU: ARMv7, ARMv8 <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>
Additional requirements	<ul style="list-style-type: none"> • A SSH server must be running on the Linux system, to install the CODESYS runtime with the CODESYS Development System. • Dynamic libraries needed by the CODESYS Control Runtime binary: <ul style="list-style-type: none"> ◦ libm.so.6 ◦ libpthread.so.0

- libdl.so.2
- librt.so.1
- libc.so.6
- libgcc_s.so.1

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

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)!

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.

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