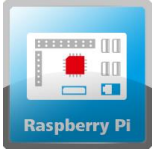


Data Sheet CODESYS Control for Raspberry Pi SL



CODESYS Control for Raspberry Pi SL is an adapted CODESYS Control runtime system for Raspberry Pi (PLC extension).

Product Description

CODESYS Control for Raspberry Pi SL contains a CODESYS Control application for all Raspberry Pi, including the Compute Module (see <http://www.raspberrypi.org/>) as well as the capability to use the extension modules Raspberry PiFace Digital, Raspberry Pi Camera and several devices/breakouts with SPI, I²C or 1-wire communication interface.

This product can be installed with the included CODESYS Deploy Tool plug-in via the CODESYS Development System on a Linux distribution Raspbian. 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.

This product supports the following functionalities:

Produkt	MODBUS-TCP Master / Slave	MODBUS-RTU Master / Slave	EtherNet/IP Scanner / Adapter	PROFINET Controller / Device	EtherCAT Master	CANopen Master/Slave	CAN/CANopen Master / Slave	J1939
Raspberry Pi	✓	✓	✓	✓	✓	✓	✓	✓

This product supports the following additional features:

- CODESYS WebVisu
- CODESYS SoftMotion CNC
- CODESYS OPC/UA Server
- CANopen via EL6751 Gateway

This product consists of:

- Debian package with CODESYS Control for Raspberry Pi
- CODESYS Deploy Tool Plug-in for the CODESYS Development System
- CODESYS device description files for Raspberry Pi, Raspberry PiFace Digital, Raspberry PiFace Control&Display, Raspberry Pi Camera, several devices/breakouts with I²C (SRF02, Adafruit PWM, MPU6050, MPU9150, AK8975), SPI (MCP3008, MCP23S17) or 1-wire (DS18B20) communication interface


The complete installation is described in the document "First Steps" (part of the CODESYS Package). Details to the licensing process is shown on our YouTube channel: <https://www.youtube.com/watch?v=eTr9oO9OAY8>

General Information



Supplier	3S-Smart Software Solutions GmbH Memminger Straße 151 87439 Kempten Deutschland
Support	No support included. Please visit https://support.codesys.com .
Product	CODESYS Control for Raspberry Pi SL
Order Number	2302000009
Sales	CODESYS Store store.codesys.com
Scope of Delivery	<ul style="list-style-type: none"> ▪ Software package for the CODESYS Development System ▪ Runtime extension for the Raspberry Pi ▪ License key

System Requirements and Restrictions

Programming System	CODESYS Development System V3.5.6.0 or later		
Target System	-		
Supported Platforms / Devices		Raspberry Pi	CODESYS
		<ul style="list-style-type: none"> ▪ Pi Model B / B+ ▪ Pi2 Model B 	V3.5.8.0 or later
		<ul style="list-style-type: none"> ▪ Pi3 Model B 	V3.5.9.10 or later
		<ul style="list-style-type: none"> ▪ All Models 	V3.5.11.0 or later
Additional Requirements	<ul style="list-style-type: none"> ▪ The CODESYS Control requires a network interface (LAN, WLAN), especially with the Raspberry Pi Compute Module and the Raspberry Pi ZERO. ▪ If the product is used for industrial purposes, it is the responsibility of the system manufacturer to ensure compliance with the necessary specifications. 		
Restrictions	<ul style="list-style-type: none"> ▪ The combination of Raspberry Pi and a CODESYS Runtime is primarily intended for test and teaching purposes. ▪ The runtime system does not have real-time behavior. Its Jitter depends on many factors, especially on parallel executed Linux applications, and is ideally approximately 50 µs – with maximum values of approximately 400µs. 		
Licensing	<ul style="list-style-type: none"> ▪ Activation on the CODESYS Soft Container (part of this software package) ▪ Optional: CODESYS Runtime Key ▪ If there is no valid license, the runtime system works for two hours without a functional restriction and then terminates automatically (demo). 		
Required Accessory	<ul style="list-style-type: none"> ▪ SD-card (minimum 4GB) ▪ Optional: CODESYS Runtime Key ▪ The operating system "Raspian" (https://www.raspberrypi.org/downloads/) 		