Release Notes

PLC500, PLC500ED, PLC500MC, PLC410

SUMMARY OF RELEASES

The information below describes the key features of each firmware version released. The term **PLCX** refers to the WEG PLC models: PLC410, PLC500, PLC500ED and PLC500MC.

FIRMWARE UPDATE PLCX		
Version	**Date**	**Key releases**
1.3.1	01/01/2024	Optimized internal memory usage, Enhanced expansions communication
1.3.0	01/12/2023	CODESYS EtherNet/IP Scanner, CODESYS Soft Container and CODESYS Key (USB dongle)
1.2.1	01/09/2023	Disabled the internal overload watchdog (Overload Exception)
1.2.0	01/03/2023	CODESYS IIoT Libraries, CODESYS EtherCAT Master and FTP/FTPs server
1.1.0	01/09/2022	Function blocks to encoders
1.0.2	01/07/2022	Function blocks to control expansions
1.0.1	01/06/2022	First Edition

1 RELEASES

FIRMWARE UPDATE PLCX 1.3.1 - 01/01/2024

CODESYS RELATED

Improvements:

- Optimized internal memory usage.
- Enhanced expansions communication.
- Factory reset removes additional log files.
- Factory reset can also be executed by the PLC Shell in Codesys.

FIRMWARE UPDATE PLCX 1.3.0 - 01/12/2023

CODESYS RELATED

New features:

- **EtherNet/IP Scanner** available.
- **CODESYS Soft Container** for software licensing.
- **CODESYS Key (USB dongle)** for secure storage of software licenses.
- Implemented automatic scanning and connection of expansions.
- Support for identifying devices with Wink.
- Introduced PLC Shell WEG:
  - weg webpage enable.
  - weg webpage disable.
  - weg webpage status.
  - weg webpage reset (reset credentials).
  - weg hash (technical support).
  - weg reboot (reboot the PLC).

Improvements:

- Memory:
  - Persistent memory expanded from 16 kB to 64 kB.
  - Input size (%I) expanded from 4 kB to 16 kB.
  - Output size (%Q) expanded from 4 kB to 16 kB.
  - Memory size (%M) expanded from 4 kB to 16 kB.
- LEDs:
  - Added orange pattern to show active processes before startup.

Releases

- • Enhanced LED's function blocks.
- • Status LED powers off whenever the application is deleted.
- • Status LED blinks in red when an application is invalid.

- ■ New function blocks:

  - • Read internal memory.
  - • Read network status.
  - • Read internet connection.

- ■ Improved expansions communication.
- ■ Fixed error in RS485 device when no devices are plugged in.
- ■ Enhanced CAN capabilities via function blocks.
- ■ Maximum number of open files in an application set to 300 files.

ADDITIONAL RELEASES

- ■ Support for exFAT format (SD cards and USB devices).
- ■ Webpage updates[1]:

  - • Added Codesys version information.
  - • Added internet connection status.
  - • Added memory usage information.
  - • Added descriptions for several elements.

FIRMWARE UPDATE PLCX 1.2.1 - 01/09/2023

CODESYS RELATED

Improvements:

- ■ Increased the number of Codesys channels from 4 to 16.
- ■ Disabled the internal overload watchdog (Overload Exception).

ADDITIONAL RELEASES

- ■ CODESYS Profinet's demo mode available.

FIRMWARE UPDATE PLCX 1.2.0 - 01/03/2023

CODESYS RELATED

New features:

- ■ **CODESYS IIoT Library** available (MQTT Client, Web Client, etc).
- ■ **EtherCAT Master** available.
- ■ Support to **MOD8.00-SCW** (Control up to four SCW).

Improvements:

- ■ Added expansions function blocks.

ADDITIONAL RELEASES

- Optimized coprocessor communication.
- Webpage updates[1]:
  - Implemented **Login Page** with username and password.
  - Added a **FTP/FTPS server** to easily transfer files.
  - Possibility to download Codesys logs.
  - Included button "Set clock from browser".

FIRMWARE UPDATE PLCX 1.1.0 - 01/09/2022

CODESYS RELATED

New features:

- User can access PLC's logs in "Device → Files".
- New function blocks to set/reset encoders' counter.
- New examples of how to use WEG libraries function blocks.

Improvements:

- SD card will be mounted as $SDcard$ instead of $SD card$.

ADDITIONAL RELEASES

- Removing power for more than 2 seconds will trigger the PLC reboot after next power on.
- Added Boot Application update via Webpage[1].

FIRMWARE UPDATE PLCX 1.0.2 - 01/07/2022

CODESYS RELATED

New features:

- CAN and SERIAL LEDs functionalities can be chosen.
- New function blocks to control expansions' parameters during runtime.
- New function block to disable expansions on the Codesys device tree.
- New function block to identify all connected expansions.
- WEGpackage installs several **.eds** files of WEG products.

Improvements:

- More efficient writing on digital outputs.
- PWM outputs follow "PLC Settings → Behavior for outputs in stop".
- Enhancements in identifying disabled expansions.

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[1]Applicable for PLC410, PLC500 and PLC500MC. PLC500ED uses a different Webpage software (Coreapp).

ADDITIONAL RELEASES

- Increased performance when reading CPU and networks status.

FIRMWARE UPDATE PLCX 1.0.1 - 01/06/2022

CODESYS RELATED

Improvements:

- Recognition of expansions.
- Readout of MOD6 parameters.
- Impossibility of configuring ethernets on the same network.
- Enhancements in the PWM channels.
- Encoder mode settings, functionalities and function blocks.

ADDITIONAL RELEASES

- Scripts for network settings.
- Webpage updates[1]:
    - **Factory reset** erases the application and restores networks.
    - **Date and time settings**.
    - Summary of firmware update versions.

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[1]Applicable for PLC410, PLC500 and PLC500MC. PLC500ED uses a different Webpage software (Coreapp).