

Release Notes

AC500 CPU Firmware

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Important! Temporary changes in CPU Firmware (to be modified back in the following Firmware versions)

Only valid for customers which use plc command sdappl or sdboot to create SD Cards for Boot-Project-Updates

SD-Card creation with Firmware V2.5.1 and PLC browser commands (sdappl or sdclone) / Boot project load for SM560-S Safety CPU and CM574-RS from SD-Card

The PLC browser commands "sdappl" or "sdclone" with the FW V2.5.1 for intelligent couplers like SM560-S (Safety CPU) or CM574-RS generate a slightly different SD-Card structure as created with previous FW version. This creates incompatibility to previous and future SD-card content. This behavior will be modified back in Firmware V2.5.2.



FIRMWARE	01.02.2016 14:15	File folder	
USERDATA	01.02.2016 14:15	File folder	
CM579_21.NXD		NXD File	0 KB
SDCARD.INI		Configuration sett...	6 KB
SM560_11.CHK		Recovered File Fra...	1 KB
SM560_11.PRG		PRG File	28 KB

IMPORTANT!

Boot projects for SM560-S Safety CPU and CM574-RS communication module are stored in the root directory of SD-card instead of (e.g. using PM583-ETH) USERDATA\PM583\USERPRG folder after "sdappl" or "sdclone" PLC browser commands.

During boot project update Firmware V2.5.1 expects the boot projects for SM560-S and CM574-RS also in the root directory and not (e.g. using PM583-ETH) at USERDATA\PM583\USERPRG, as it was in previous and will be in future firmware versions.

The boot project (BOOT.ZIP) for the CPU is as before located in the folder:
USERDATA\PM583\USERPRG

If you are influenced by this change in Firmware V2.5.1, please update your Firmware to V2.5.2.

Improvements in Firmware V2.5.1

PROFINET

PM595-4ETH shows configuration error in case of configuration of PROFINET for internal coupler ETH3 and/or ETH4 and external coupler CM579-PNIO in slot 1 or slot 2 and SM560-S. Fixed

File handling

File handling in RUN mode of PM5xx (e.g. by CAA_File_, write Bootproject, ..) can limit the Ethernet throughput to guarantee volume. This can lead to timeout e.g. in Modbus TCP communication. Fixed

System

Online change + RESET: Project with large structures with REAL/LREAL variables can lead to fault values after Online change and followed by RESET. Fixed

"IEC conversion function LWORD_TO_STR() doesn't work for numbers $> (2^{32})-1$ ". Fixed

Webserver

PM595-4ETH can crash when typing a LREAL Variable in Webvisu. Fixed

Online access

Force will not be released when logged in via Ethernet and connection is broken (no logout). Fixed

Ethernet

IEC60870-5-104: Variable Broadcast Address for General Interrogation FB from AC500 (AC500 IEC60870-104 type C_IC_NA_1).

System

New CPU parameter "Task compatibility mode" with values:

- File Handling prioritized for Idle CPU time (default/same as v2.4.x)
- Balanced Handling of Ethernet and file operations for Idle CPU time
- Ethernet Handling prioritized for Idle CPU time

Support of CM5xx firmware identification and download from Automation Builder (AB)

Support of PM5xx firmware identification and download from Automation Builder (AB)

Display firmware V2.9 - extension for EC58x (Custom specific)

PM59x: For CMS Signal Processing Lib (C-Code) memory is allocated in the HEAP. Increasing the HEAP would give more possibilities for further algorithms.

EtherCAT

Support of EtherCAT slaves with several layers of submodules (e.g. Beckhoff EK1110)

Support of sync units

EtherCAT support on PM595-4ETH, internal couplers ETH3 and ETH4 can now be used as PROFINET master or as EtherCAT master.

Support of new devices

New PROFIBUS DP communication module CM592-DP (as replacement of CM572-DP)

New AC500 CPU PM585-ETH

New AC500-eCo PLC PM566-ETH