

## CPU 9442/3x and PM 9445/3x - Firmware Release Notes

SWU 01.01.06-0008		Release Date	01.08.2024
New Features	ModbusRTU	Replacement for redundant 9440 CPM (use PM redundancy).	
	ProfibusDP	Extended Diagnosis Replacement for redundant 9440 CPM (use PM redundancy)	
	PM	Add new PM firmware, Downgrade to older versions not possible. PM will start even if previous update was interrupted.	
	Webserver	Remove section "SERVICE" Add PM information	
Bugfix	CPU	Configured IS1 modules 9466 with 8 AO + 4 / 8 HV can be replaced by 9468 / 9469 without bus rail errors. PM communicating after update of redundant CPU. In rare cases, start-up problems have occurred after replacing a socket in a system with redundant CPUs	
Known Bugs	--	--	
Remarks	--		

SWU 01.01.05-0000		Release Date	02.04.2024
New Features	--	--	
Bugfix	PROFINET	Add new stack with update for PROFINET S2 redundancy and MRP Modules will be configured if started with signal errors.	
	CPU	Output values are not initialized after receiving new parameters	
Known Bugs	PROFINET	Starting with signal errors will show a global error only, no signal specific information. Use webserver to get error information. If signal error is removed or module is plugged and pulled, system is OK.	
		Module redundancy not working	
	CPU	Configured IS1 modules 9466 with 8 AO + 4 / 8 HV replaced by 9468 / 9469 (see list of compatible modules) will cause bus rail errors. Reconfigure correct modules.	
		No communication with PM after updating redundant CPUs from 01.00.24. Restart CPU.	
Remarks	--		

SWU 01.01.04-0003		Release Date	15.11.2023
Bugfix	Webserver	Show correct information in tab „CPU+PM“ -> „AS Protocol“. ModbusRTU only	
	PROFINET	Fix problem with temperature modules 9482	

SWU 01.01.04-0001		Release Date	17.10.2023
New Features	CPU	Update protocol stacks 2. Ethernet port for Profibus DP and Modbus RTU MAINT LED indicates invalid protocol and servicebus address selection Support of new IS1+ Detect, V3 Supports parameter to disable "plant stop" diagnosis, (default: on) Check device name according to PROFINET / DNS rule (all protocols) Download log files as zip file	
		PROFINET	HART FDI over PROFINET
		ModbusRTU	New protocol, replacement for 9440
Bugfix	CPU	9468/ and 9469/ with 8AO + 4 HV or 8 AO + 8 HV fixed PROFINET S2 redundancy Issue with PROFIBUS DP parameter written twice Configuration of SIL modules 9462 DTM configuration of 9442/32 Zone1 possible	
		PM	No more BPL telegram errors
	PROFINET	MRP handling ARP and UDP bursts crashing stack UDP concatenation Diverse errors in telegram response	
	Webserver	9462: add module 9469: show correct DO value	

<b>Known Bugs</b>	CPU	Start problem could occur after factory reset was performed or with spare parts from factory. Only if new socket and new CPU on slot 1 are powered first time. Replacing single items are not affected.
		Output values are initialized after receiving a new parameter set for that module
	PROFINET	If started with signal errors, module may not receive configuration Temperature modules 9482 do not work properly
	Webserver	PM status and power consumption are sometimes not updated Incorrect information in tab „CPU+PM“ -> „AS Protocol“. ModbusRTU only
<b>Remarks</b>	Add all features and bugfixes made since 01.00.25	

SWU 01.01.03		Release Date	23.05.2023
New Features	--	--	
Bugfix	PM	Correct calculation of current in Zone 1 PM	
Known Bugs	CPU	DTM configuration of 9442/32 Zone1 not possible (IS1 Wizard only)	
		Start problem could occur after factory reset was performed or with spare parts from factory. Only if new socket and new CPU on slot 1 are powered first time. Replacing single items are not affected.	
	PM	Small percentage of BPL telegram errors. Only with some PM, no module failures	
	PROFINET	S2 redundancy not working properly MRP problems	
Remarks	Firmware identical to version SWU 01.00.25, only PM firmware changed		

SWU 01.01.02		Release Date	16.05.2023
New Features	--	--	
Bugfix	PM	Update of all power module firmware versions to this version is possible	
Known Bugs	CPU	Start problem could occur after factory reset was performed or with spare parts from factory.	
		Only if new socket and new CPU on slot 1 are powered first time. Replacing single items are not affected.	
		DTM configuration of 9442/32 Zone1 not possible (IS1 Wizard only)	
	PM	Current of Zone 1 PM not correct. Maintenance LED can be switched on	
Remarks	Firmware identical to version SWU 01.00.25, only PM firmware changed		

SWU 01.01.01		Release Date	03.05.2023
New Features	--	--	
Bugfix	PM	Change FLASH erase. PM will not switch off output during power on. use correct temperature correction in current measurement PM zone 2	
Known Bugs	CPU	Start problem could occur after factory reset was performed or with spare parts from factory. Only if new socket and new CPU on slot 1 are powered first time. Replacing single items are not affected.	
		DTM configuration of 9442/32 Zone1 not possible (IS1 Wizard only)	
	PM	PM with FW < 01.00.25 cannot be updated and will switch of power. restarted using separate power supply (using SWU 99.00.00) updated to 01.00.25 prior If updated once to 01.01.01 or later, any update is possible	
	PROFINET	S2 redundancy not working properly MRP problems	
Remarks	Firmware identical to version SWU 01.00.25, only PM firmware changed		

SWU 01.01.00		Release Date	04.04.2023
<b>New Features</b>	PM	Improved load balancing in redundant mode Switch output off faster if power is disconnected add support for new PM Z1 Use constant output voltage while in boot mode	
<b>Bugfix</b>	PM	Problem with firmware update solved. Some PM got stuck in download mode and switched output off Reduce critical time for power drop	

Known Bugs	CPU	Start problem could occur after factory reset was performed or with spare parts from factory. Only if new socket and new CPU on slot 1 are powered first time. Replacing single items are not affected.
		9468 and 9469: configuration with 8 AO + 4 / 8 HV did not work. Can be solved if configured as 8 AO/AI + HV.
		DTM configuration of 9442/32 Zone1 not possible (IS1 Wizard only)
	PM	PM with a FW < 01.00.25 cannot be updated and will switch of power. restarted using separate power supply (using SWU 99.00.00) updated to 01.00.25 prior Skipped temperature compensation of current measurement PM zone 2, values in webserver too high
Remarks	Firmware identical to version SWU 01.00.25, only PM firmware changed	

SWU 01.00.25		Release Date	23.11.2022
New Features	CPU	Password reset, only with socket HW Rev C or later (HEX decoder) PROFINET: Input Status of readback independent of input status	
	PM	Switch off red. PM while other PM is in update. Serial firmware download of redundant PM	
Bugfix	CPU	Improved redundancy switching Webserver Show DI instead of DO, fix text Correct display of CPU zone 1 Add gateway address to UBOOT environment	
	PM	Fixed power on problem Serial firmware download Switch off PWR OUT LED if power supply of PM is removed Correct display of zone 1 PM in webserver	
Known Bugs	CPU	Start problem could occur after factory reset was performed or with spare parts from factory. Only if new socket and new CPU on slot 1 are powered first time. Replacing single items are not affected.	
		9468 and 9469: configuration with 8 AO + 4 / 8 HV did not work. Can be solved if configured as 8 AO/AI + HV.	
Remarks	--		

SWU 01.00.24		Release Date	28.03.2022
New Features	CPU	HART communication over backup CPU	
		Add support for virtual COM port	
		Add OPC UA demo mode in standard CPU	
		Add NTP support	
		Add global data (field station name, location, comments....) available in both redundant CPU	
		Add support for IOM redundancy	
		Add PROFINET extensions	
		Improved Web diagnostics	
		Licenses loadable via webserver	
Add support for HEX decoders of socket (9496\)			
Bugfix	CPU	Extend PROFINET to 1024 Bytes	
		Boot from sockets from factory (empty sockets)	
	PM	Improve PM redundancy	
Known Bugs	PM	Power on problem may occur	
Remarks	--		

SWU 01.00.23		Release Date	26.10.2020
New Features	--	--	
Bugfix	CPU	Optimize timeout on backplane	
Known Bugs	--	--	
Remarks	--		

SWU 01.00.22		Release Date	22.09.2020
New Features	CPU	Webserver extended history Webserver timesync with PC IS1+ Virtual Com port support	
Bugfix	PM	no maintenance alarm of red. PM, with a switched off PM	
Known Bugs	CPU	Update from SWU 01.00.21 requires a power on to show correct PM information	
Remarks	No official release		

SWU 01.00.21		Release Date	09.07.2020
New Features	CPU	PROFIBUS DP New PROFINET stack	
Bug Fixes	CPU	Webserver	
Known Bugs	--	--	
Remarks	--		

SWU 01.00.18		Release Date	19.03.2020
New Features	CPU	PROFIBUS DP	
Bugfix	CPU	PROFIBUS DP Webserver	
Known Bugs	--	--	
Remarks	--		

SWU 01.00.17		Release Date	11.02.2020
New Features	--	--	
Bugfix	CPU	Synchronization between redundant CPU Webserver	
Known Bugs	--	--	
Remarks	--		

SWU 01.00.16		Release Date	11.09.2019
New Features	--	--	
Bugfix	CPU	Synchronization between redundant CPU	
Known Bugs	CPU	HART over PROFIBUS DP not working	
		No slave startup on PROFIBUS DP	
		RS485 only point to point connection	
Remarks	--		

SWU 01.00.11		Release Date	06.02.2019
New Features	CPU	All protocols implemented	
Bugfix			
Known Bugs	CPU	No HART communication on inactive CPU No update of inactive CPU if other CPU is active RS485 only point to point connection	
Remarks	--		

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