



News SICAM A8000 and SICAM Device Manager

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VAR Partner Day 2022 | September 12 -14 | Zagreb, Croatia

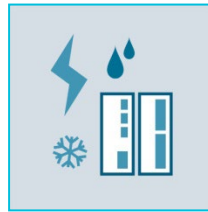
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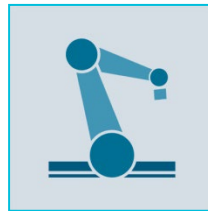
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- SICAM A8000 Hardware News
- SICAM A8000 CP-8031/50 System News
- SICAM Device Manager

SICAM A8000 Series

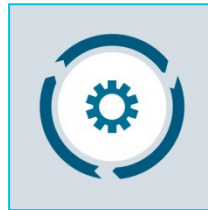
All requirements combined in a single platform



Rough ambient conditions



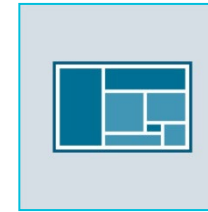
Automation



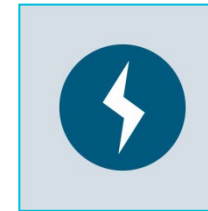
Long product lifecycle



Cybersecurity



Space-saving design



High electric strength



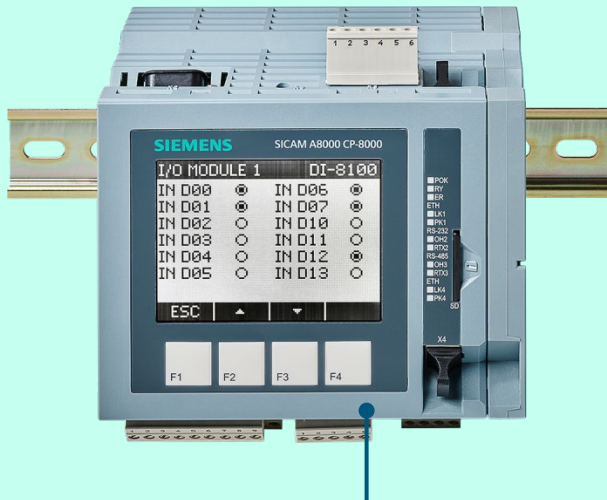
Integrated communication



Scalability

The entire family at a glance

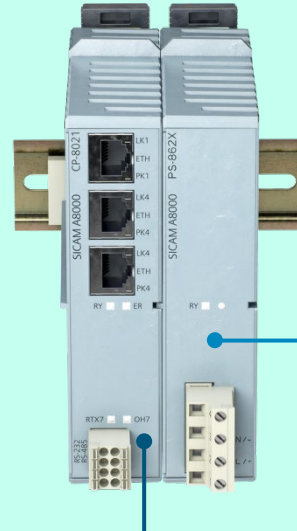
SICAM A8000 - power supply units and processor modules



SICAM CP-8000

Integrated power supply
DC 24 V

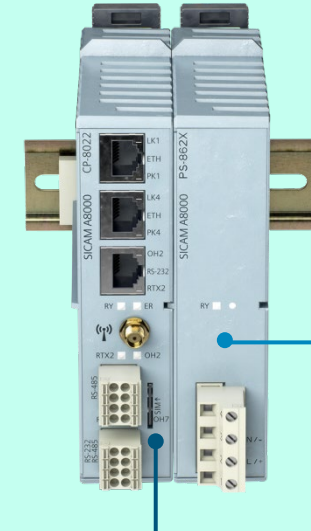
- 12 DI, 8 DO integrated, max. 116 I/O (max. 6 expansion modules)
- Maximum of 4 interfaces
- Integrated function keys and display



SICAM CP-8021

PS-8620 DC 18–78 V, 12 W
PS-8622 DC 82.5–286 V, 12 W

- Maximum of 128 I/O (max. 8 expansion modules)
- Maximum of 4 interfaces



SICAM CP-8022

PS-8620 DC 18–78 V, 12 W
PS-8622 DC 82.5–286 V, 12 W

- Maximum of 128 I/O (max. 8 expansion modules)
- Maximum of 5 interfaces
- Integrated GPRS modem

A strong team

SICAM A8000 - equipped for any task

CI modules



Ethernet
communication module



CP-8050



Modular processor with external
power supply (optional: redundant)



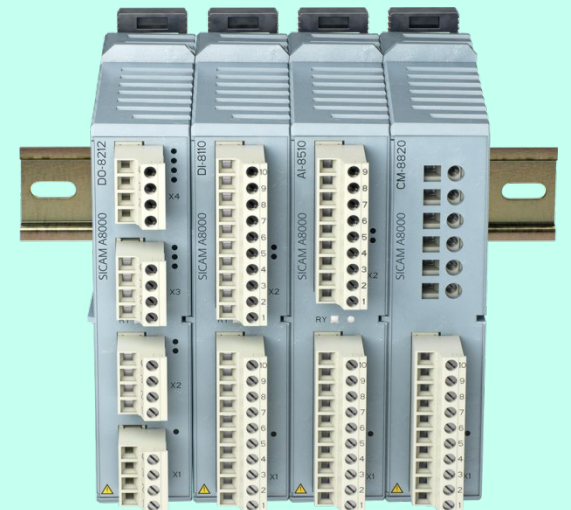
CI modules



Detachable
expansion module



I/O modules



I/O expansion modules
combinable as needed

The entire family at a glance

SICAM A8000 - power supply units and processor modules (Linux based))

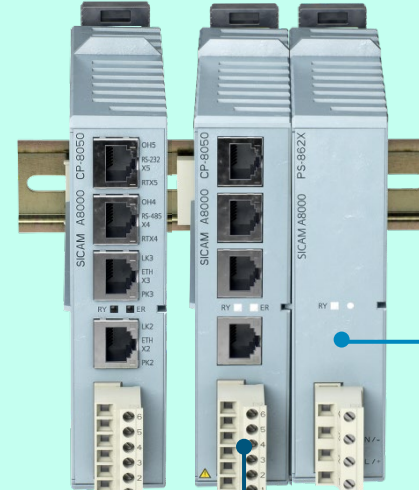


SICAM CP-8031

new!

PS-8620 DC 18–78 V, 12 W
PS-8622 DC 82.5–286 V, 12 W
PS-8640 DC 18–78 V, 45 W
PS-8642 DC 82.5–286 V, AC 230 V, DC 24 V output

- 1 local I/O line (max. 8 expansion modules)
- 4 interfaces (2x Ethernet, 2x serial)



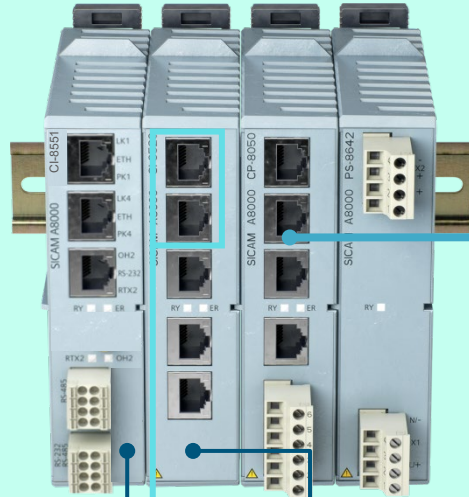
SICAM CP-8050 (optional: redundant)

PS-8620 DC 18–78 V, 12 W
PS-8622 DC 82.5–286 V, 12 W
PS-8640 DC 18–78 V, 45 W
PS-8642 DC 82.5–286 V, AC 230 V, DC 24 V output

- max. 16 I/O lines
(max. 8 expansion modules / line)
- max. 34 interfaces (modular)

The entire family at a glance

SICAM A8000 - Communication modules, and remotely installed expansion module



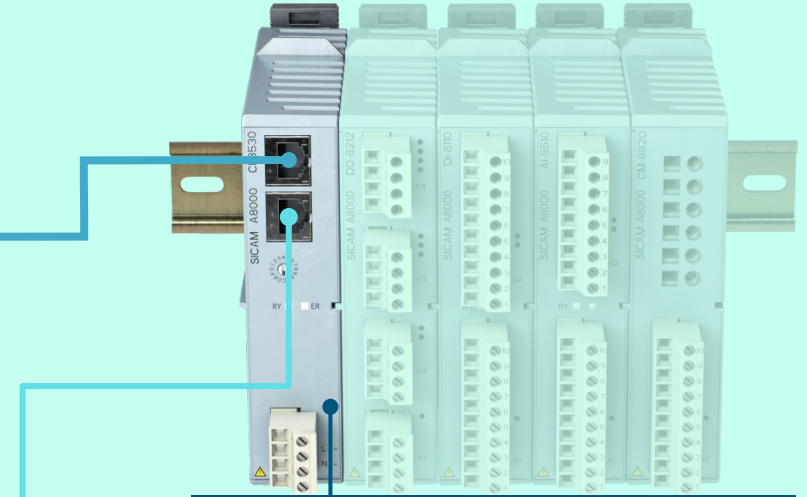
CI-8551

Serial communication module
(3x RJ45, 2x 8-pin clamp)

CI-8520 / 22

CI-8520 Ethernet communication module, 5x RJ45
CI-8522 Ethernet Communication module, 3x electric RJ45, 2x SFP

new!



CI-8530 / 32

CI-8531 / 33

CI-8530 I/O remote interface module, electrical DC 24–60 V
CI-8532 I/O remote interface module, electrical DC 110–220 V
CI-8531 I/O remote interface module, optical DC 24–60 V
CI-8533 I/O remote interface module, optical DC 110–220 V

new!

The entire family at a glance

SICAM A8000 - expansion modules

AI-8340

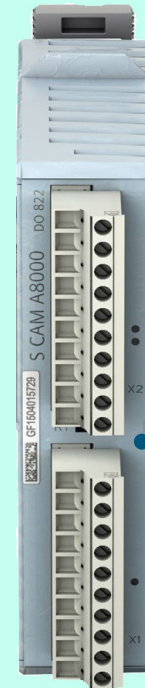
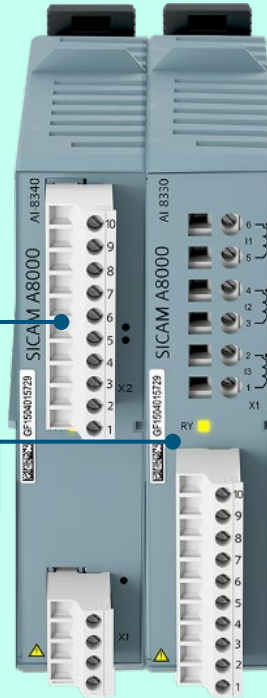
4x Voltage Inputs

Direct measurement (U_{max} AC 250V)
0,2% accuracy of measured values
0,5% accuracy for calculated values
Nominal frequency 50Hz & 16,7 Hz
2x digital outputs for synchro check

AI-8330

3x Current Inputs

0,2% accuracy of measured values
0,5% accuracy for calculated values
Nominal frequency 50Hz & 16,7 Hz
Nominal current 1A/5A with 100% overrange
I_{max} = 25A



DO-8221

Secured Command Output

12x 1-pole, 12x 1.5-pole, 6x 2-pole
Single and double commands
Switching voltages DC 24-220 V, AC 230 V
Switching power 4A @250VDC *)
1-out-of-n check
External circuitry continuity check

*) 5A @250VDC under development



SICAM A8000

Hardware News

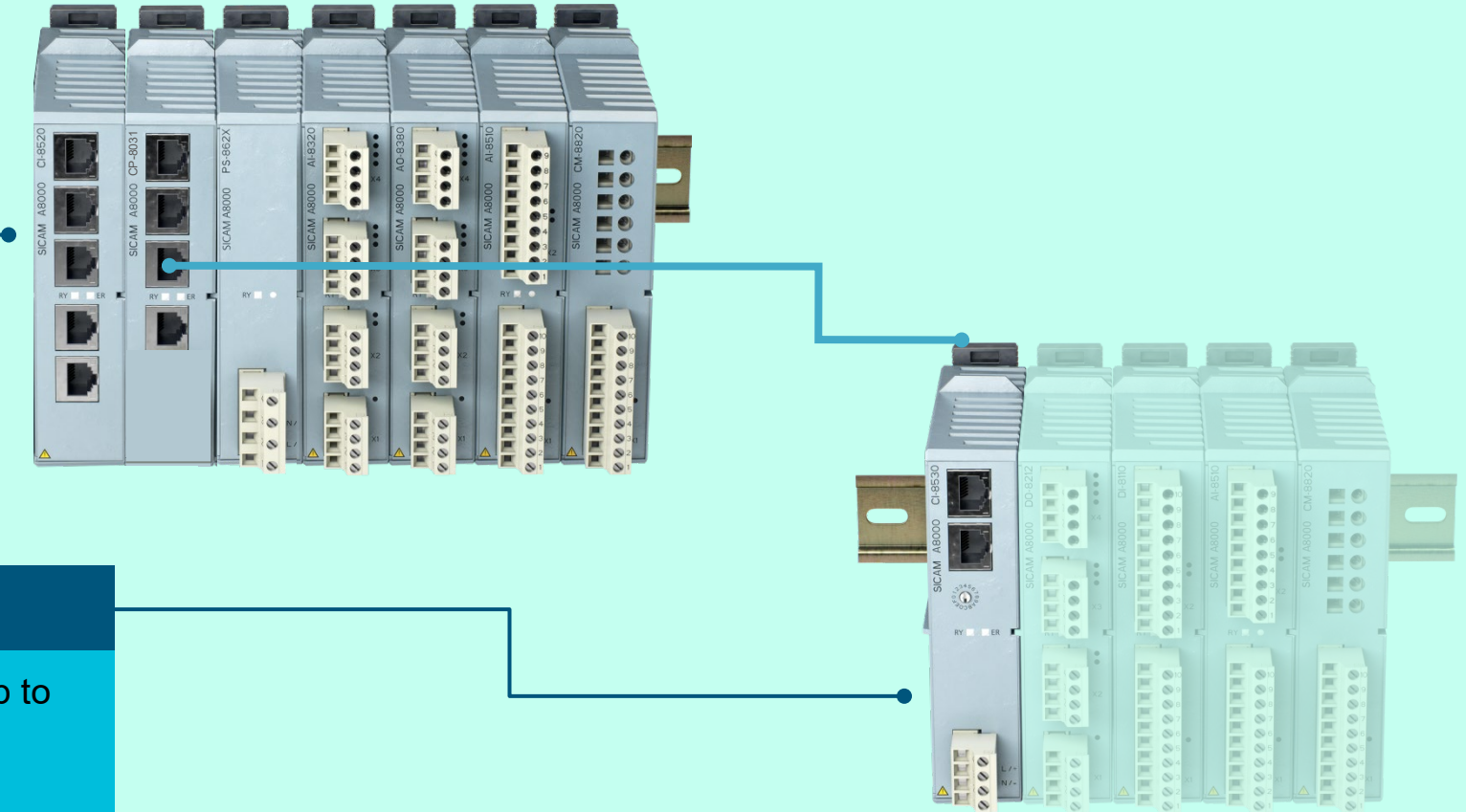
Since system release SREL 22-07 SICAM A8000 CP-8031, CP-8050

Enhancement for CP-8031

1x CI-85xx can be added to CP-8031
License required!

Enhancement for CP-8031

1x CI-853x remote I/O row can be added to allow up to
16x I/O modules
License required!



New SICAM TOOLBOX II Hotfix required!

Improvements for SICAM A8000 housing

Design improvements

Analysis of returned modules revealed misalignment on backward connector of modules and on bus module causing damage to some components resulting in bus communication errors.

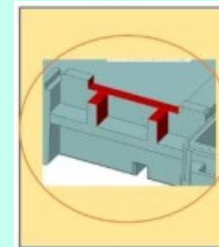
Measures to improve plugging onto the bus module were carried out.

Housing and bus module were effected.

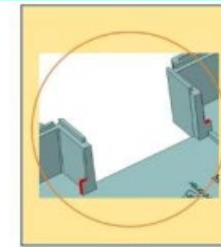
Hardware release $\geq$ FF (e.g. 6MF28320AA00 **FF**) indicates improved design

Bus module has improved stability due to welding.

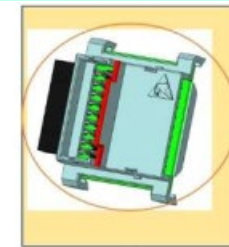
Details can be found in the manual



A



B



C

SICAM A8000

CP-8050/31 System News

News

SICAM A8000 CP-8031, CP-8050

Enhancement for CI-852x redundancy configurations

2x rings per CI-852x or
4x rings per CP-8050 configuration.
Allows to save costs for additional Ethernet
switches

Enhancement for CI-852x VLAN for RSTP/HSR/PRP

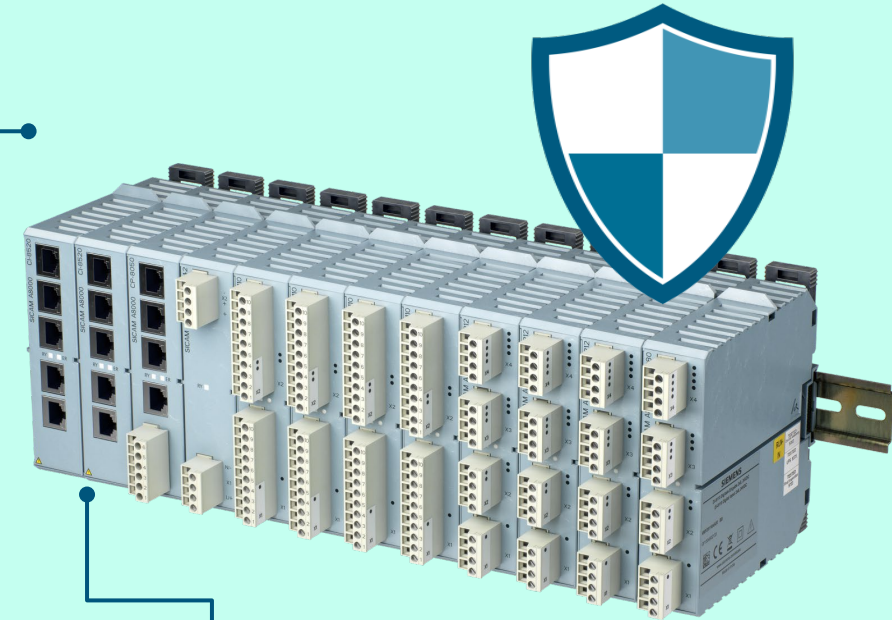
Allows tagging of data with different
VLAN tags e.g. to segregate IEC -104
data from data for remote diagnosis .

Enhancement IEEE 802.1x

Authenticator Rolle to authenticate directly
connected protection IEDs (e.g. SIP5).

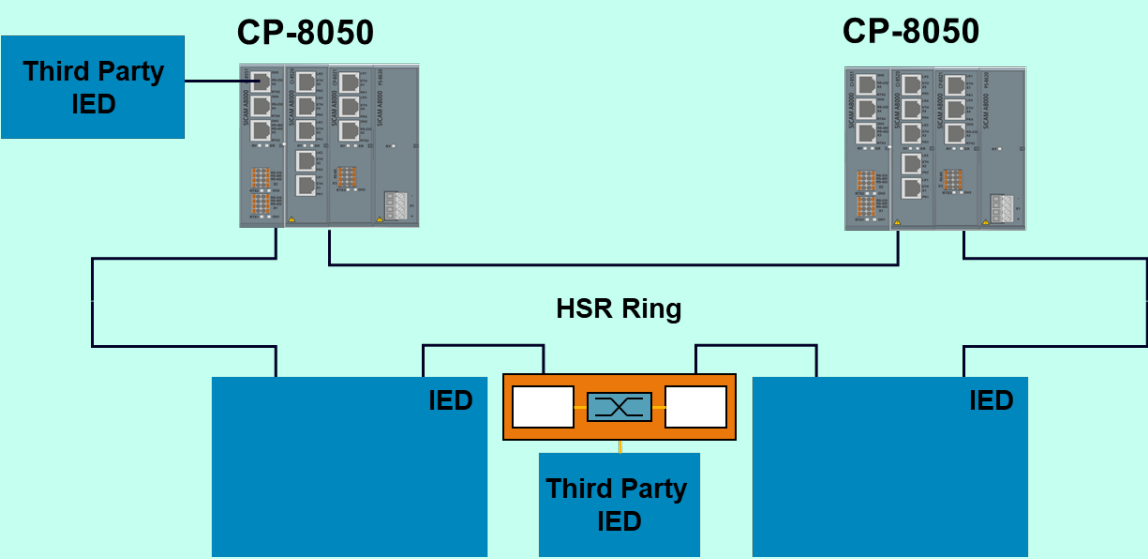
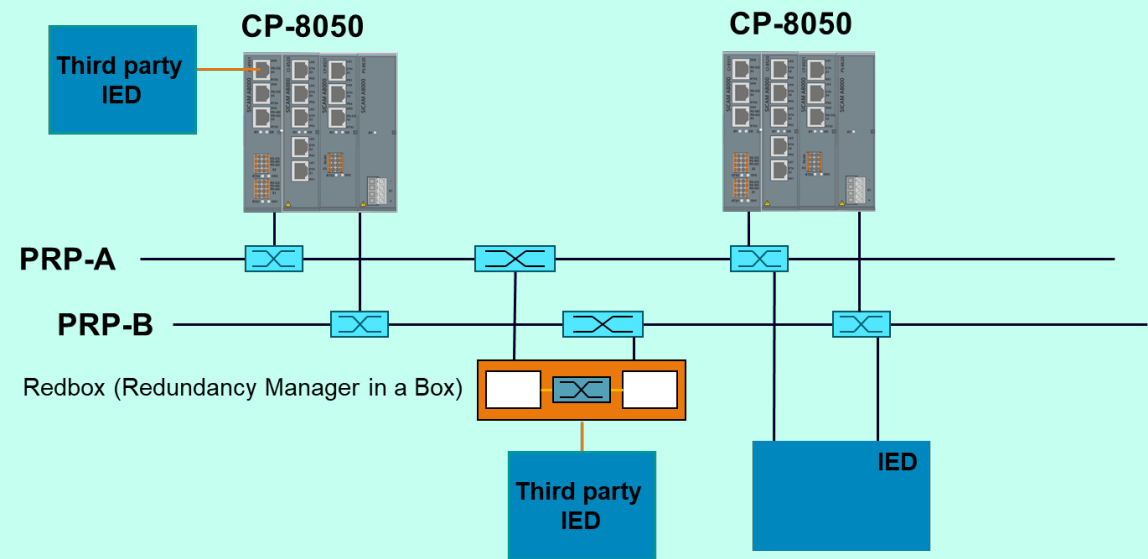
TLS Encryption

For additional services
Syslog & NTP



Comparison of PRP and HSR

Seamless configuration – no recovery time



New protocols available SICAM A8000 CP-8031, CP-8050

License: 6MF2750-2AA00 for protocols

OCPP 1.6J

Release as a SIAPP.
Function are tailored to dedicated charging stations pls. clarify in advance

OPC UA Server

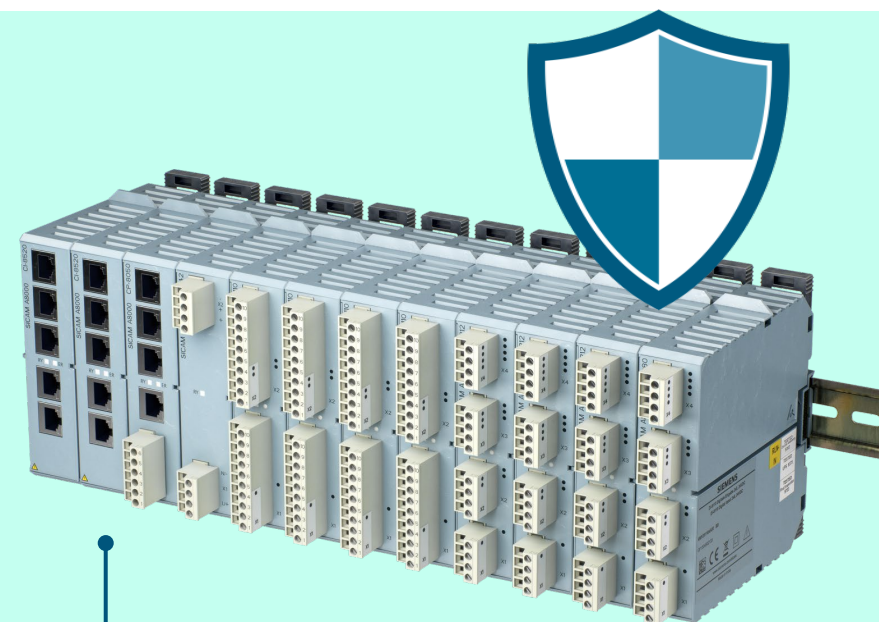
First release as a SIAPP
Pls. look at manual for detailed info

SINAUT 8FW auf CI-8551

Master & Slave supported
PDM Mode requires CI-8551!
New protocol license required

SK End-End

Migration protocol to legacy
"1703" products



IEC 61850 Ed. 2.1 Server

Including the LN for DER
IEC 61850-7-420

SICAM A8000 SIAPP Concept

SIAPP Preconditions

Hands On Webinar
offline available

Load App



SIAPP – Runtime License



Preconditions



APP



API



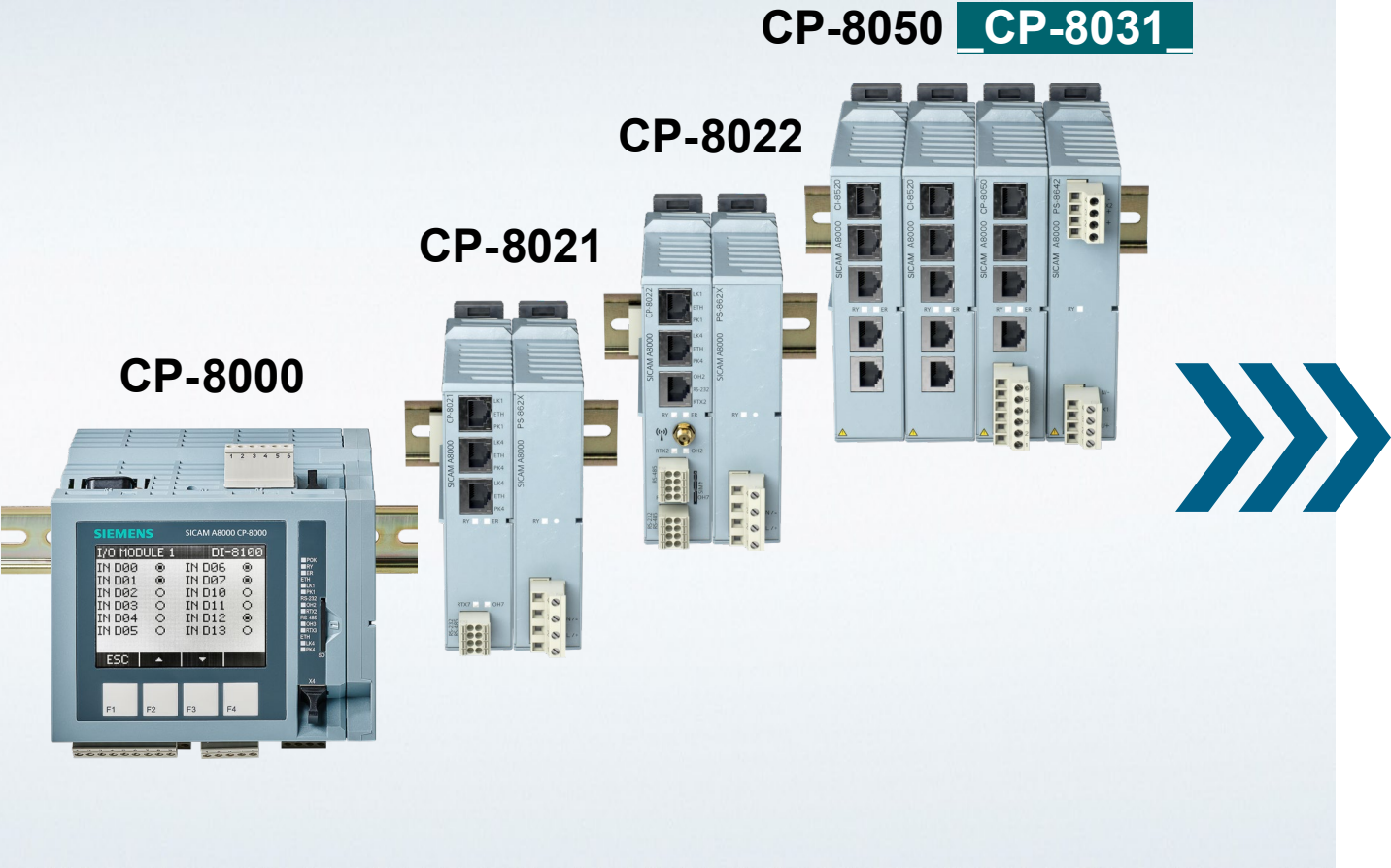
SIAPP Setup

- Preconditions
- SIAPP-Runtime-License
- [SIAPP SDK](#)
- Program and test against provided API
- Build SIAPP as Docker-Image
- Load SIAPP into CP-8031 or CP-8050 via SICAM Web or SD-Card
- CP-8031 module: 1 SIAPP
- CP-8050 module: max. 3 SIAPPs simultaneous

SICAM Device Manager News

SICAM Device Manager

The intuitive Engineering Tool for SICAM A8000 series



One Engineering tool for
SICAM A8000



SICAM Device Manager:

The intuitive Engineering Tool for SICAM A8000 - Customer benefits

Offline engineering

Online features with device via
SICAM WEB

Multiply devices

Project- and Device administration

PLC functions with CFC



Customer benefits

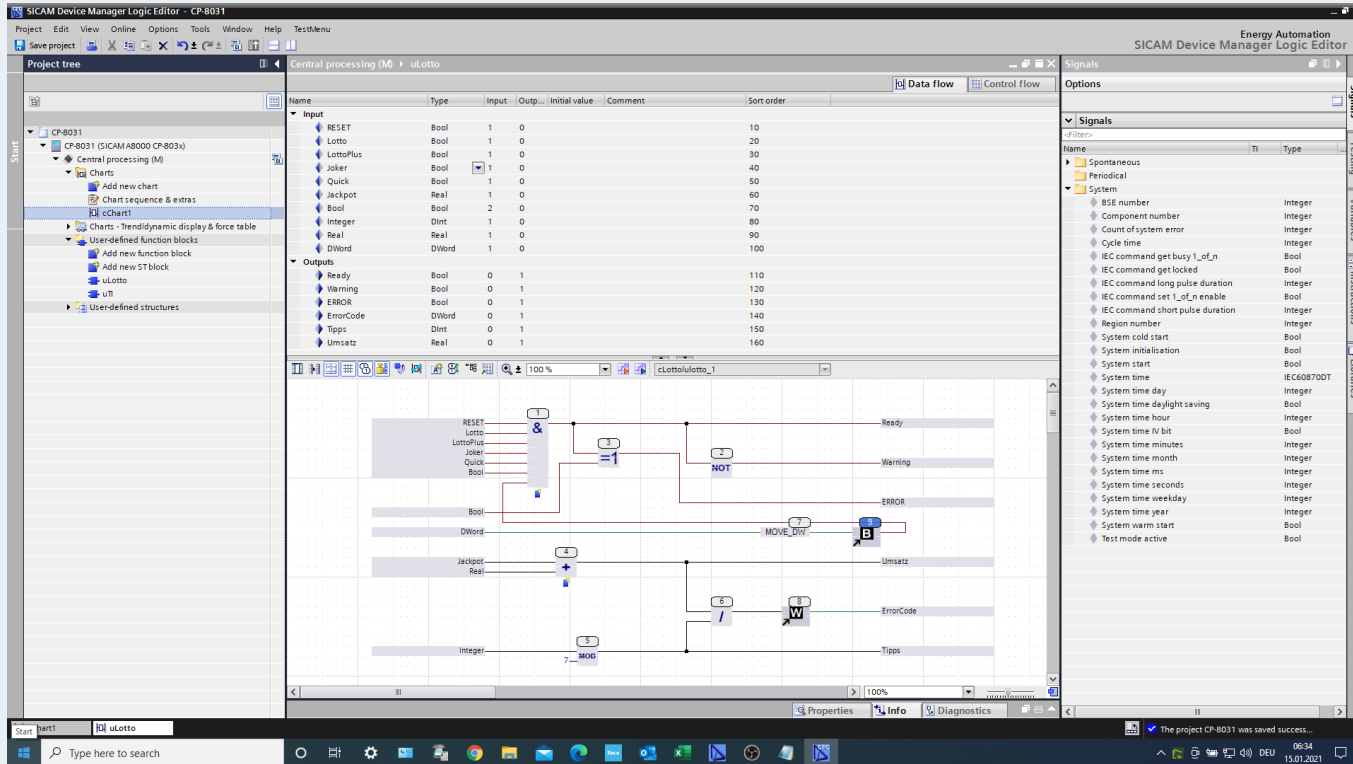
- Simple and clear management of projects and devices in folder structures
- Less effort needed for parameterization
- Duplication of devices and automatic adjustment of specific parameters
- Download parameters from device to SICAM Device Manager
- Look-and-feel correspond to SICAM WEB

- IEC 61850:
 - DER support customer specific logical nodes & data objects
- CFC:
 - Forcing inside UFBs
 - **Automatic Chart Generation: Export project to CSV**
 - Parameter Handling via Online-simulation
- Usability e.g. archive/backup w/o firmwares, SWEB (date/time,...)



SICAM Device Manager

Automatic chart generation for CFC editor



CFC automatic chart generation

Import from signal list e.g. CSV-File

1. Chart Generation
2. Function Blocks
3. Signal Connection

Saves time and money
→ Avoid manual editing errors
→ Reduced test effort

Customer Feedback: >90% of CFC programs can be generated automatically

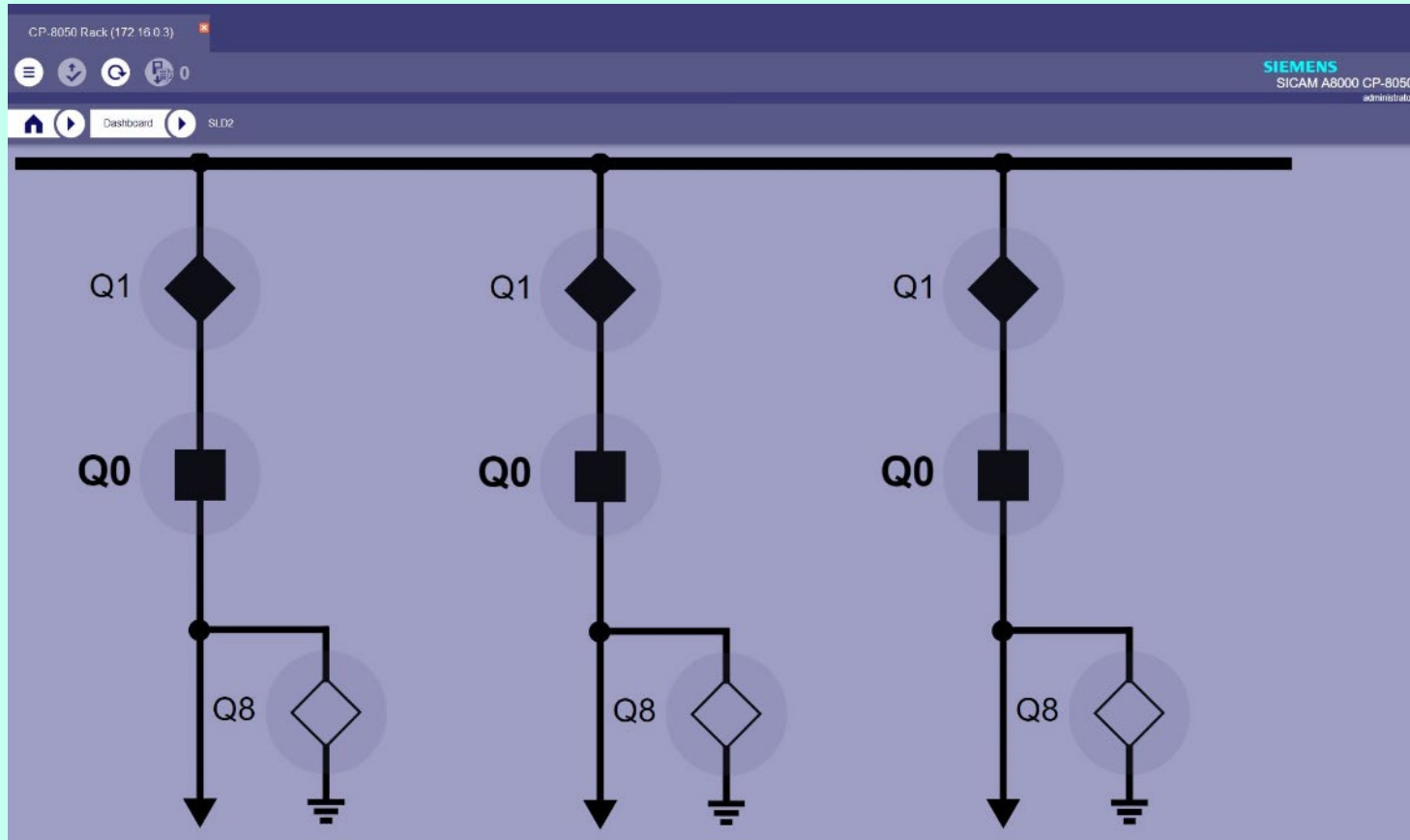


Welcome to SICAM Device Manager!

Open the side menu at the upper left corner
and select an option.

SICAM Web for CP-8050, CP-8031

Customized dashboard – SVG-graphic



- Individual SVG graphic per tile

- In total 200 signals can be used for SVG graphics

| Contact

Published by Siemens AG

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