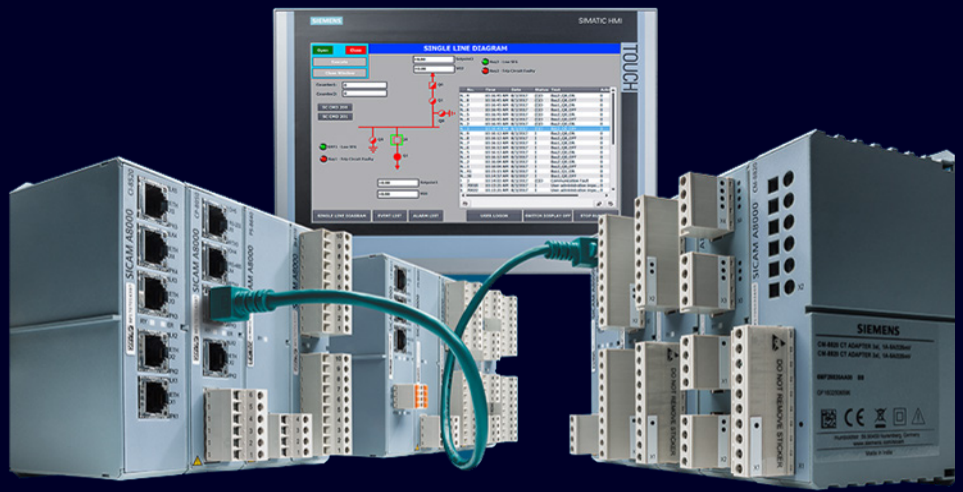


SIEMENS



ENERGY AUTOMATION PRODUCTS

SICAM A8000 – for **Industry and Infrastructure**

Substation Automation for all areas of energy supply
[siemens.com/sicam-a8000](https://www.siemens.com/sicam-a8000)

Wherever energy flows

SICAM A8000 represents a device series with a comprehensive portfolio for energy automation in industry and infrastructure.

The numerous module variants enable a solution that is specifically tailored to your requirements.

Requirements such as IT security, scalability, flexible communication, space-saving design, and design for harsh environmental conditions were taken into account in the design of the SICAM A8000.

Your profit

- High temperature range from -40°C to +70°C
- Increased EMC stability up to 5 kV (IEC 60255) for direct use in industrial switchgear
- Engineering with SICAM Device Manager
- Fulfillment of high cyber security requirements according to BDEW whitepaper, NERC CIP and IEC62351 with support for RADIUS, Syslog, IPSec and TLS
- Easy connection to industrial communication protocols, such as MODBUS, Profibus and Profinet
- Investment security through use of international standards such as IEC 61850, IEC 60870-5-101/-103/-104, etc.

- Variety of interfaces for adaptation to existing communication infrastructure
- Wide range of applications with modular platform and thus reduced inventory management
- Use for network monitoring with integrated short-circuit indicator functionality
- Time and cost savings thanks to easy installation and maintenance – plug and play

The universal digital and analog input/output modules can be plugged in any order and are suitable for the smallest spaces due to their module width of 30 mm.

Special features

- Data storage by means of SD memory card (for storing parameters and device firmware)
- Freely programmable user programs according to IEC 61131-3

Our tip

Register at the Industry Mall, create an account and benefit fully from our SICAM A8000 configurator. So you also get the regional list prices displayed.

Device characteristics

Communication interfaces and protocols

- CP-8010/12:
2x RS-485/422 (RJ45), 1x RS232 (RJ45),
3x Ethernet (RJ45), 1x R-SMA
- CP-8012:
On Board LTE Modem with GPRS fall back,
external antenna via SMA connector
- CP-8031:
On Board: 2x RJ45 (Eth), 2x RJ45 (seriell)
Extension: 5 interfaces with 1x CI-85XX
- CP-8050:
On Board: 2x RJ45 (Eth), 2x RS232 (RJ45), 1x RS485
Extension: max. 34 interfaces with CI-modules
- IEC 60870-5-101/-103/-104
- Modbus RTU/TCP, Profibus, Profinet
- IEC 61850 Ed1/Ed2 Client & Server incl. GOOSE
- DNP3 Master/Slave serial, TCP/IP
- Zigbee
- Further protocols on request

Auxiliary voltages

- DC 24 to 60 V (integrated in CP-8010/12)
- DC 24 to 60 V (12 W or 45 W)
- DC 110 to 220 V (12 W or 45 W)
- AC 230 V (45 W)
- Redundancy possible

In-/outputs

- CP-8010/12:
 - On Board: 8x DI, 7x DO, 1x AI
 - External extension: max. 128 I/Os
2 modules without additional PS (Power Supply)
8 modules with additional PS (Power Supply)
- CP-8031: max. 128 I/Os
- CP-8050: max. 2048 I/Os with up to
16 I/O lines, 8 expansion modules each

Electromagnetic compatibility

- IEC 60870-2-1, IEC 61010, IEC 60255-5, IEC 61000-4,
EN 55022, CE marking

Temperature range

- From -40°C to +70°C

Housing specification

- Plastic housing for DIN rail mounting
- Dimensions CP-8010/12: 153,5 x 160 x 105 mm (W / H / D)
- Dimensions CP-8031/50, CI, PS and expansion modules:
30 x 132 x 124 mm (W / H / D)

Available modules

Processor modules

- CP-8010/12 – Combined device incl. power supply and I/Os,
additional I/O extension, CM-8880 – RGB display
- CP-8031/8050

Power supply modules

- PS-8620/22 – DC 24...60 V/ DC 110...220 V, 12 W
- PS-8640/42 – DC 24...60 V/ DC 110...220 V, AC 230 V, 45 W

Communication modules

- CI-8520 – Electrical Ethernet
- CI-8522 – Electrical and optical Ethernet
- CI-8530 – I/O detached interface modul, DC 24...60 V
- CI-8531 – Optical Ethernet; DC 24...60 V
- CI-8532 – I/O detached interface modul, DC 110...220 V
- CI-8533 – Optical Ethernet, DC 110...220 V
- CI-8551 – Serial communication interface

Binary inputs

- DI-8110/11/12/13 – 2x8 DC 24/48/60/110/220 V

Binary outputs

- DO-8212 – relay 8x DC 24...220 V/AC 230 V
- DO-8221 – secure command output
- DO-8230 – transistor 16x DC 24...60 V

Analog input

- AI-8310/20 – Pt100, Ni100/ 4x ± 20 mA/ ± 10 V
- AI-8510/11 – 3x U, 3x I (LoPo)/ 3x U (LoPo), 3x I (LoPo)

Analog output

- AO-8380 – -20...0...+20 mA, -10...0...+10 mA,
- -10...0...+10 V

Current transformer and LED module

- CM-8820 – 3xI (1 A/5 A)
- CM-8830 – SICAM I/O LED