SIEMENS

Smart Grid Products

SICAM CMIC

Intelligent and compact telecontrol unit for the power distribution network

Future-proof and universally applicable

Existing equipment has to be used more extensively and efficiently to meet the growing economic demands. For this reason, small network stations are increasingly becoming automated and integrated into existing network control systems. The SICAM CMIC device combines all the monitoring and control functions required.

Three-stage intelligence

All the options offered by the SICAM CMIC device can be roughly subdivided into the following three applications:

- Monitoring: The first stage focuses on the monitoring of stations to enable rapid fault localization and high availability.
- 2) Telecontrol: The second stage involves switchgear telecontrol in addition to monitoring, thus minimizing downtime. Thanks to this application, fault isolation and power supply restoration of de-energized network sections are no longer difficult tasks for power supply utilities.
- 3) Load flow control: In the third stage, the effects of decentralized power feed-ins are managed via automation. Network losses can be in this way significantly reduced.

SICAM CMIC - reliable and compact

The SICAM CMIC device is designed for harsh environmental conditions and can be used in unheated, small local network stations, as it has a high degree of electromagnetic compatibility and is intended for the temperature range from -40 °C to +70 °C.

The small housing (30 mm) of the new modules reduce space requirement. SICAM CMIC can be expanded with up to six new SICAM I/O modules.



Available expansion modules

AI-8320: 4 analog inputs (-20/+20 mA; -10/+10 V). **DI-8110/11/12/13:** 16 digital inputs (24 VDC; 48/60 VDC; 110 VDC; 220 VDC).

DO-8212: 8 digital outputs (24/48/60/110/220 VDC; 110/230 VAC).

Al-8510/11: 3 inputs current / voltage (LoPo, 230V). CM-8820: 3 inputs current, 1 A / 5 A (parameter-settable).

Customer benefits

- Time and cost saving thanks to simple maintenance without the need of a specialist.
- Flexible application and adaptation to existing communications infrastructure.
- Designed for distribution automation, optimized for ring main units.
- State-of-the-art protection against hacking.
- All data in view at all times.





Device characteristics

Communication interfaces and protocols

- 2 x Ethernet LAN TCP/IP10/100BASE-TX for communication and engineering
- 1 x RS-232, 1 x RS-485 (galvanically isolated)
- IEC 60870-5-101/-103/-104, Modbus RTU
- IEC 61850 Ed1/Ed2 client & server
- DNP3.0 serial, TCP/IP
- Further protocols on request

Operation and display

- Local operation with 4 function keys and display (128x96 pixels)
- Power, ready and error LED, status LEDs of communication interfaces

Real time clock

+/- 2 ppm, time synchronization via SNTP

Electromagnetic compatibility

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

IT-Security

IPSec, Radius, Syslog, https, SNMPV3

Auxiliary voltage

DC 18 - 60 V

Inputs/outputs

- 12 galvanically isolated digital inputs (24-60 VDC)
- 8 digital outputs
- Max. 116 I/O with expansion modules

Temperature range:

From -40°C to +70°C

Housing specification (basic unit)

- Plastic housing for DIN rail mounting
- Dimensions: 128 x 124 x 123 mm (W / H / D)
- Protection class: IP20, IP40 front

Special features

- Integrated web server for configuration and diagnostics
- Data storage via SD memory card (storage of parameters and device firmware)
- Freely programmable user programs according to IEC 61131-3
- Future security standard (BDEW white paper conformity and integrated crypto chip)

Please contact us for an individual consultation. We are looking forward to your request!

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This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).