



ENERGY AUTOMATION PRODUCTS

SICAM EGS – Gateway for local substations in power distribution grids

[siemens.com/sicam-egs](https://www.siemens.com/sicam-egs)

The SICAM Enhanced Grid Sensor (EGS for short) enables the combination of measurement and a secure RTU gateway in one compact device while complying with the highest safety standards. SICAM EGS is an "all-in-one device solution" for local substations, low-voltage cabinets, cable distribution cabinets and junction boxes of houses.

SICAM EGS is a part of the universal power automation platform SICAM 8!

SICAM EGS – Use cases / areas of application

- **Power distribution monitoring:** distribution network automation optimized for use in LV / MV switchgears
- **Asset monitoring:** for transformers and switchgears
- **Grid connection monitoring:** for solar and wind parks and charging stations for electric vehicles
- **Communication gateway:** for different networks, protocols, and easy SCADA integration

- **IoT-Gateway:** for easy connection of products and solutions for measurement technology, sensor technology, protection and automation, power quality and measurement technology to cloud-based platforms for asset management and data analytics
- **Technology beyond the local network station:** system connections and cloud-based monitoring/control

SICAM EGS – Benefits / customer benefits

Effective retrofit solution for the recording and reporting of messages and measured values from the medium voltage switchgear and low-voltage fuse distribution in existing local substations.

- **Flexible and easily expandable:** prepared for upcoming changes in the power distribution
- **Permanent power monitoring:** working at the power limit with the existing infrastructure

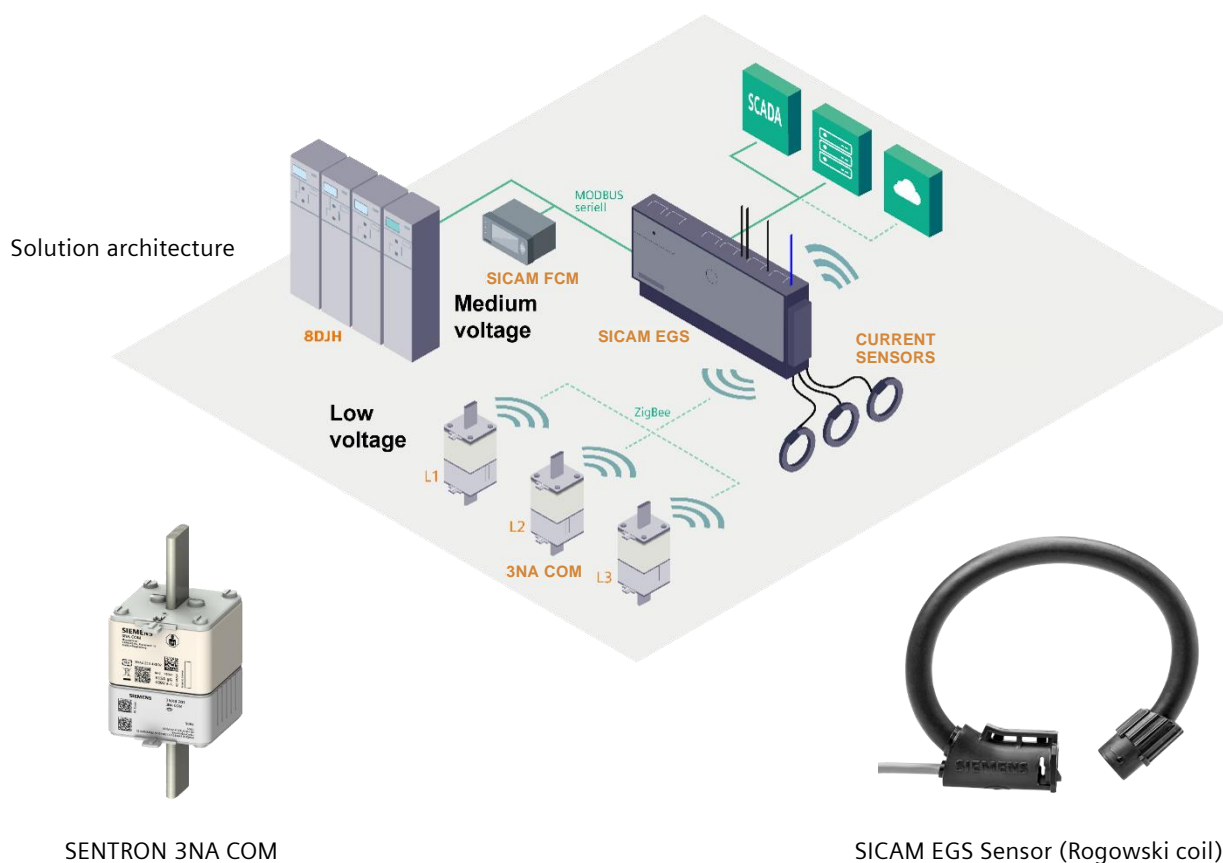
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- **Use existing space:** operate local network and distribution stations without conversion
- **Designed for harsh operating conditions:** Integration direct in cable distribution panelboards without cubicles
- **Inexpensive and easy to install:** Easy installation and commissioning, short changeover times
- **Proven, advanced technology:** investment into the future, based on the proven SICAM 8 Platform availability
- **Cybersecurity:** according to the highest standard, secure updates
- **Maintenance-free:** long service life based on RTU standards

Technical features

- Integrated 3-phase measurement functionality for current and voltage monitoring in low-voltage grids; calculation of electrical values (P, Q, S, cos phi, f)
- Automation functions (IEC 6113-3), e.g., for control of a regulated distribution transformer
- Support of SIAPP - Application based on Docker using the SIAPP Software Development Kit (SDK)

- Recording of outgoing currents from the low-voltage fuse distribution via direct radio communication (ZigBee) to the SENTRON 3NA COM fuses with integrated current sensors
- Telecontrol communication via standards IEC 61850, IEC 60870-5-104, DNP 3.0
- Connection of multimeters and short circuit indicator (e.g., SICAM FCMplus) via serial Modbus RTU interface
- Ethernet interface and integrated LTE module for easy adaptation to existing communication infrastructures
- IoT connectivity: provision of data via a secure internet connection for cloud-based applications and services (OPC UA Pub/Sub, MQTT SparkPug, MindConnect)
- Auxiliary power supply from the measuring voltage; bridging time in case of power failure 1 minute
- Dimensions: 200 mm x 100 mm x 60 mm (WxHxD)
- Weight: 1.2 kg
- Protection class: IP54



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For all products using security features of OpenSSL, the following shall apply: This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org), cryptographic software written by Eric Young (eay@cryptsoft.com) and software developed by Bodo Moeller.