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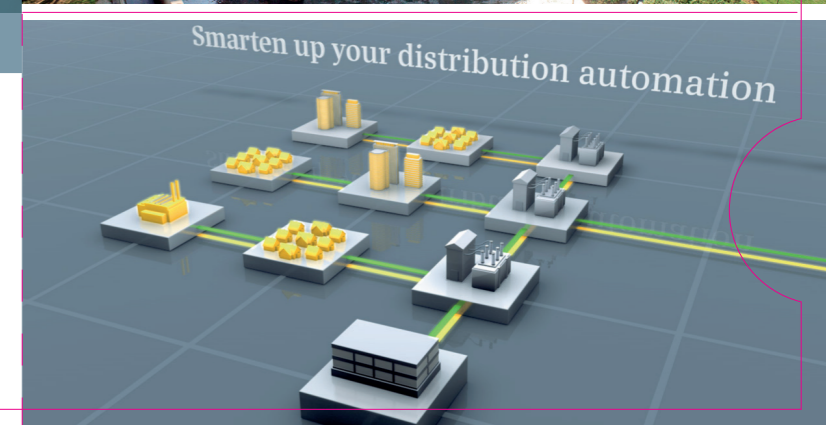


## SICAM – Substation Automation

Flexible control and monitoring system

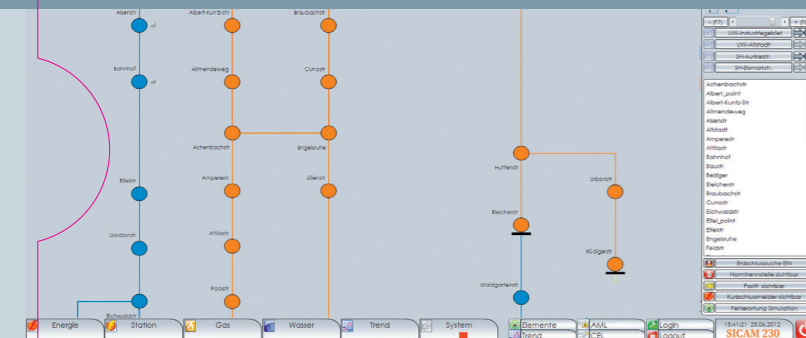
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Answers for infrastructure and cities.





## SICAM 230



## Process monitoring and controlling

### Applications

A scalable control system – from the one-site controls to the redundant client server integrated energy system for utility companies.

- Multi-hierarchic control center concept
- Easy engineering
- Efficient communication
- Optimal process monitoring
- World view
- Multitouch controls

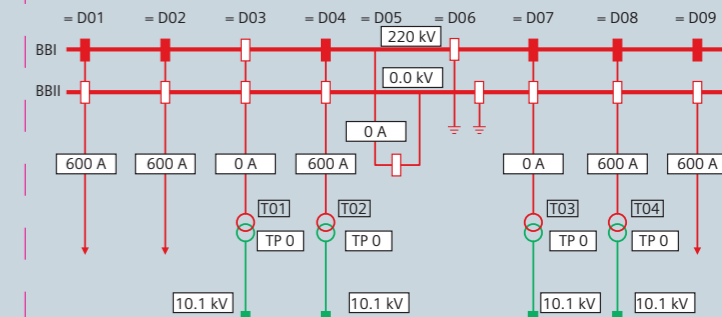
## Operation and monitoring

### Applications

Easy-to-configure HMI for energy automation system with:

- SICAM PAS
- SICAM MIC, EMIC, CMIC, TM, AK and SICAM SAS
- Equipment with communication standard IEC 61850
- Scalable functionality from single workstation system to redundant client/server systems, Internet access by means of WebNavigator
- Process visualization with topological coloring

## SICAM SCC



## SICAM AK



## Controlling and telecontrol for large data volumes

### Applications

As telecontrol substation or central unit, automation unit, data node, front-end or gateway.

- Engineering: SICAM TOOLBOX II
- Flash card data storage
- 66 communication interfaces, modular
- Rear panel or 19" mounting
- Large number of third-party protocols

## Scalable energy automation

### Applications

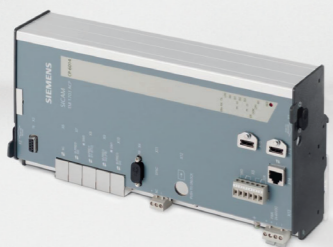
Energy automation system for operation of substations.

- Modular and scalable in architecture and functionality
- User friendly and intuitive for project planning and operation
- Project planning, operation and testtools "on board"
- Easy project planning redundancy function for system and communication e. g. PRP
- Open system thanks to standards, e. g. IEC 61850, OPC, CFC
- Cyber secure in accordance with BDEW and NERC CIP
- Power Quality System (SICAM PQS) can be integrated

## SICAM PAS



## SICAM TM



## Controlling and telecontrol for medium data volumes

### Applications

Automation with integrated telecontrol engineering for hydropower plants/turbine controllers, electric power distribution and transmission, oil/gas pipelines, transportation.

- Modular, up to 2048 signals
- Engineering: SICAM TOOLBOX II
- Flash card data storage
- 4 communication interfaces, modular

## Bay controller

### Applications

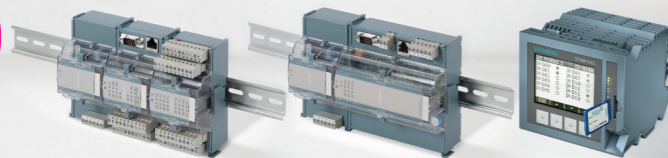
Feeder automation with/without integrated protection functionality, hardware technology from medium to extra-high voltage.

- Modular, up to 500 signals
- Engineering: DIGSI or SICAM TOOLBOX II
- 8 communication interfaces, modular, large number of communication protocols
- IEC 61850, PRP, HSR
- Simple operation via function buttons and key-operated switches

## SICAM BC / SIPROTEC 6MD



## SICAM MIC / EMIC / CMIC



## Controlling and telecontrol for small data volumes

### Applications

Electrical distribution substations, hydropower plants, pipelines, gas distribution substations, railway power supply systems, tunnels, building protection, data concentrator.

- Modular, up to 136 signals
- Engineering: Web browser or SICAM TOOLBOX II
- SIM card data storage
- Maximum 3 communication interfaces

## Integrated engineering system

### Applications

Integrated tool for the engineering of new systems and the maintenance and updating of existing systems and their relevant databases.

- Integrated system
- Object orientation
- Standard data storage throughout
- Engineering of the technical process
- Functions for SICAM automation systems, central control center systems, PLC applications, third-party systems

## SICAM TOOLBOX II

