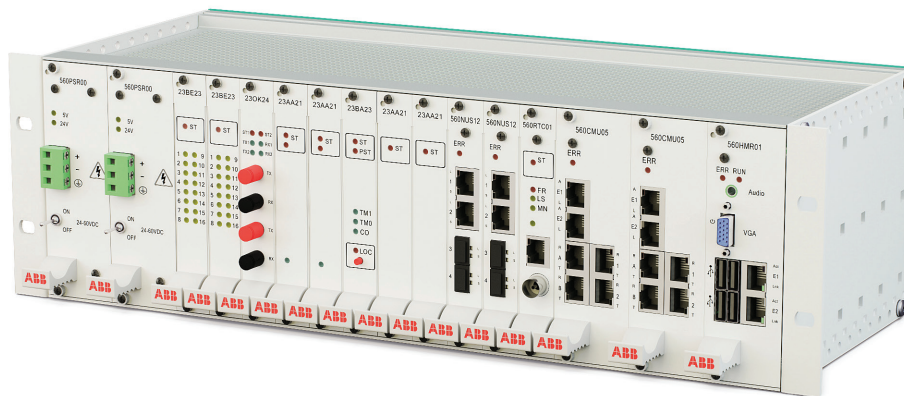

GRID AUTOMATION PRODUCTS

See the unseen from a new perspective.
SDM600 functionality joins RTU560 flexibility.



Intuitive data and security management.

SDM600 in RTU560 housing.



01

01 RTU560 allows for superior scalability for grid automation and control.

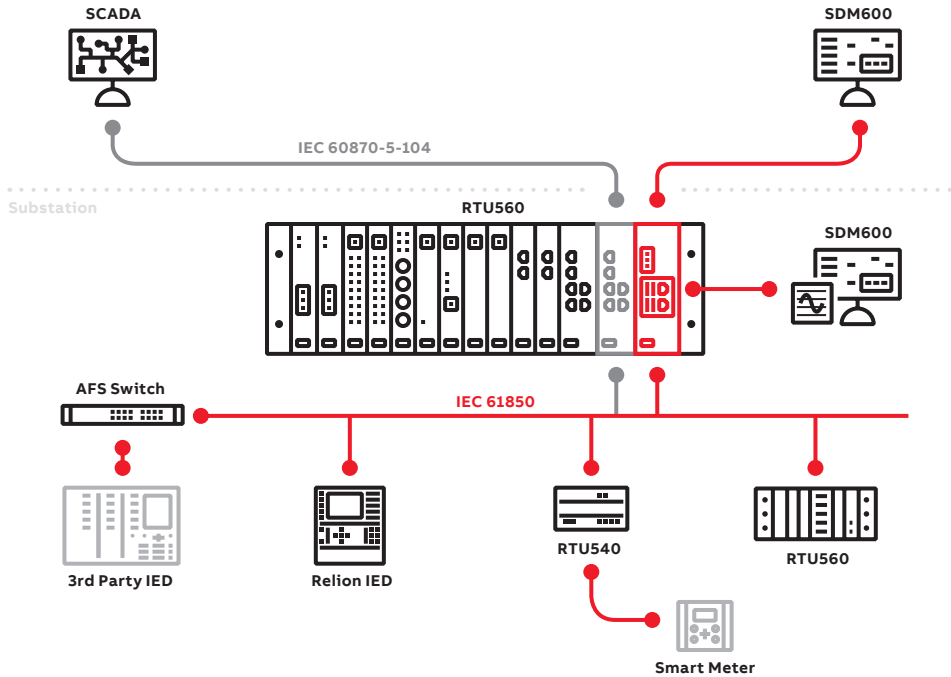
RTU500 series

Rack-based RTU560 units are part of the RTU500 series. The RTU500 series comprises ABB's complete remote terminal unit product portfolio with a clear structure and a maximum of flexibility. The open architecture enables adaptations to a variety of electrical and process automation applications. Functional and hardware extensions can be realized quickly and easily. These products are designed to meet your needs in transmission and primary distribution automation market. Interfacing the physical wires with their analogue and digital data and transmits to central SCADA system for critical actions. Other data is processed directly in the RTU enabling the utility company to distribute intelligence into the RTUs. The modular product design of RTU500 series enables you to have the most cost efficient solution for your requirements.

SDM600

Comprehensive SDM600 software solutions provide automatic service and cyber security-relevant data management in substations. With a web-based interface SDM600 creates a unique visualization of the automation network and the relays of which it is comprised. Cyber security events, disturbance reports, user accounts, and relay software versions are all collected into a single dashboard from which the user can share the insight of the SDM600, and see the unseen from a new perspective.

ABB’s system data management software (SDM600) now comes in a compact RTU560 housing. Adapted SDM600 functionality can be seamlessly integrated into existing, or new, RTU560-based substation automation systems.



The benefits of ABB’s solution.

- SDM600 improves your efficiency in disturbance recorder and cyber security related tasks
- Vendor neutral implementation allows implementation of sub devices
- Compact housing – SDM600 and the RTU Human Machine Interface (HMI) packed into one device
- Space and cost savings based on minimal installation time, preconfigured installation
- Standard protocols – Communication based on vendor-independent standard protocols including IEC 61850

Key features.

Data management.

Automatically collect, store and provide evaluation for disturbance recorder files.

Maintenance and service.

Documentation of Firmware and configuration revisions of the supervised IEC 61850 relays.

Cyber security management.

Provide centralized user account management and security logging for modern networks.



Disturbance recorder data management.



Tracking relay software versions.



Central cyber security logging.



Disturbance recorder data evaluation.



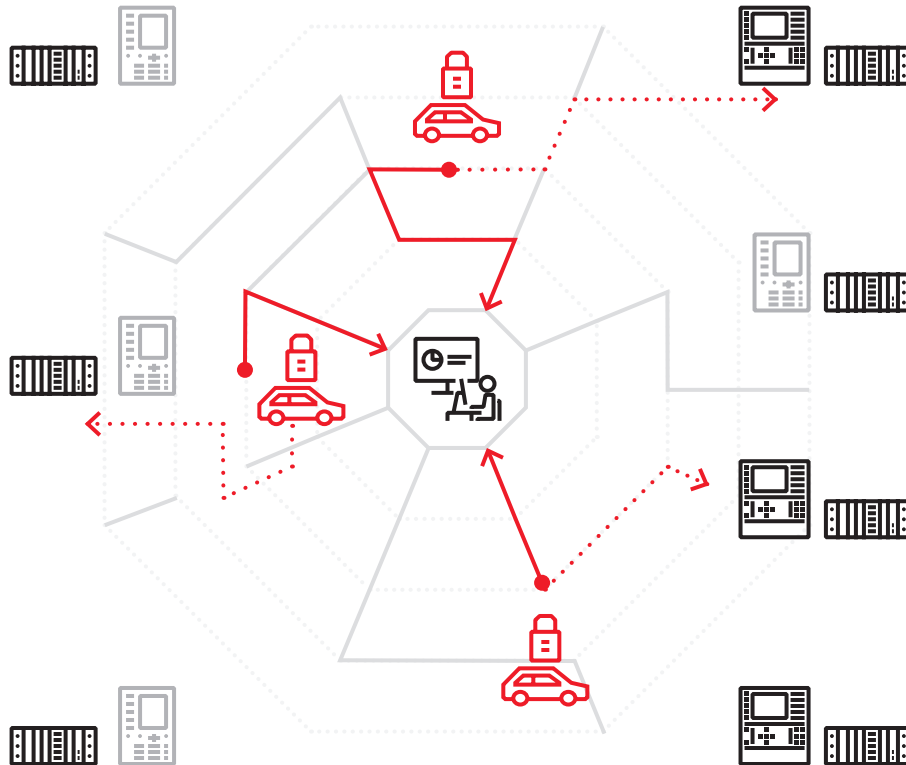
Tracking relay configuration revisions.



Central account management based on IEC 62351-8.

Customer reference.

Stadtwerke München.

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02

Imagine a city in Europe with more than 1.4 million inhabitants; the traffic and the challenges in such a metropolis brings in maintaining a distribution network.

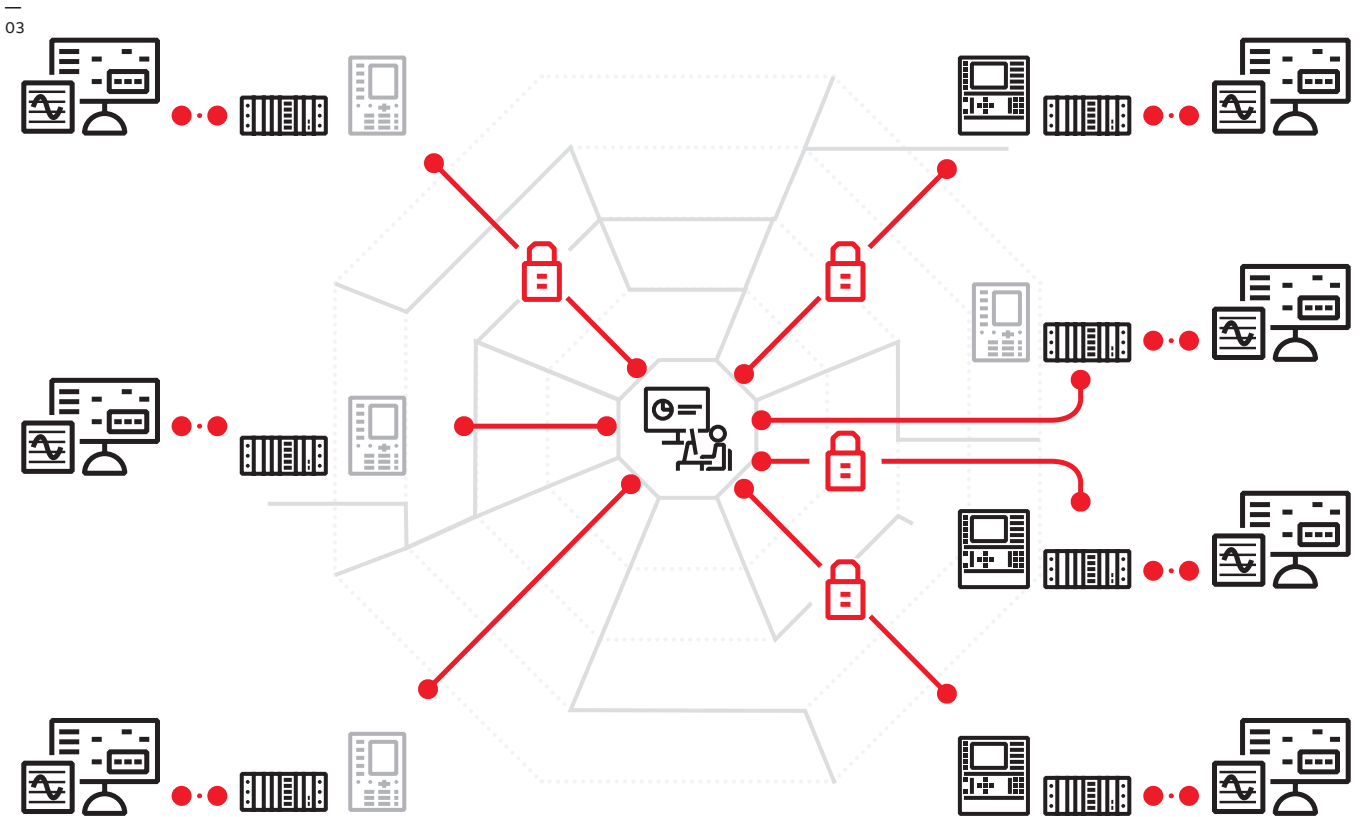
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02 Collection of disturbance files without ABB's solution.

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03 Collection of disturbance files with ABB's solution.

Stadtwerke München, a German utility is responsible for 40 substations (transforming 110 KV to 10 KV) in a city with such a population size. The company has a good relationship with ABB, and uses ABB products including the RTU560, but they also have protection relays from other vendors in the system. Around 10 years ago they started the upgrade to IEC 61850, one substation at a time, and now they have a standardized solution for all 40 substations though the system still combines products from different vendors.

The problem now is that every time an alarm goes off in the network control center the protection team has to drive out to the substations and manually gather disturbance record files – hardly an efficient way to do business in the 21st century.

The cost of sending engineers across a city, to retrieve records, is disproportionate in time and money, which is why this customer opted to install ABB's System Data Manager, the SDM600, into the existing RTU560. Retrofitting an RTU might sound like a big deal, but the use of the RTU560 housing means that SDM600 can be quickly dropped into place by placing a single module (the 560HMR01) which slots into the existing rack. One more wire and the RTU is ready to communications with the network control center, and the SDM600 can pick up data from any IED supporting IEC 61850.



That saves a lot of time, and expense, as the SDM600 can gather information from the different protection relays and collate it for sending back to central control. The gathered data is sent over via email to the responsible specialist, so when an alarm goes off he can be examining the disturbance records within seconds rather than dashing out of the building to spend hours navigating city traffic. With the information on hand the right fix can be decided on, and delivered, at a fraction of the cost, in a fraction of the time, resulting in a better network made possible by seeing what was previously unseen.

The SDM600 isn't just for collating disturbance reports, it combines data management, cyber security, service and maintenance into a single piece of software. It provides user management, ensuring that fragmented systems are only accessed by authorized individuals, but when the unauthorized user turns up then SDM600 records and reports: alerting security personnel of the cyber-attack in progress.

Integrating into the existing hardware, SDM600 brings new resilience to the operational network, and powerful tools for those charged with keeping it operations.

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ABB Ltd.

Power Grids Division
P.O. Box 10 03 51
68128 Mannheim, Germany

+49 621 381-3000
+49 621 381-7622
rtu-sales-support@de.abb.com

www.abb.com/remote-terminal-units

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