



SIPROTEC 7SX85

The comprehensive solution for Data Centers

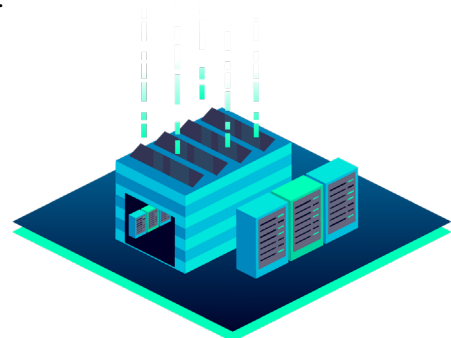
[siemens.com/7SX85](https://www.siemens.com/7SX85)

The exponential growth in data generation, driven by trends like cloud computing, the Internet of Things, and AI/ML, will require robust and scalable data center infrastructure to store, manage, and process this vast amount of information. Reliability, availability and security of data center power systems are crucial in this regard.

Different functionalities are required to do this job:

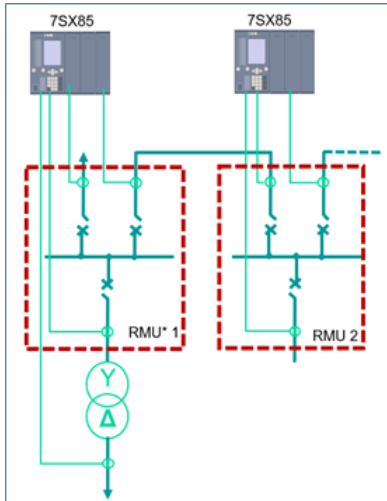
- System protection
- Automation for uninterrupted operation
- Control of the power station
- Secure communication
- Sensing and monitoring different process data
- And more...

SIPROTEC 5 universal protection devices allow you to manage all your protection needs with a single physical device (IED), maximizing efficiency and ensuring continuous operation of your critical infrastructure. The 7SX85's modular design supports easy expansion and customization, offering protection for feeders, transformers, lines and single bus bars. Due to its Universal Concept design, the 7SX85 can serve as a replacement for any relay in any bay. This versatility significantly reduces the need to maintain a large inventory of spare parts.



Your benefits for Data Centers

01 Fewer physical devices = lower investment

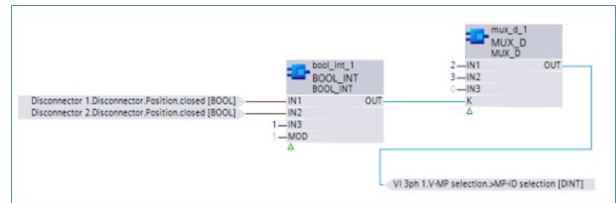


One single 7SX85 provides the capability to control and protect a complete ring-main-unit (multiple bays), optimizing your data center operations. And: reduces your data center's devices stock, increases the efficiency of assets and patch management.

02 Ensure uninterrupted power supply



Data centers need strong, reliable automated systems to maintain continuous operation, ensure proper selectivity, and prevent unnecessary outages and switchovers. To achieve high availability in your data center, automatic transfer schemes and fault isolation methods, such as Zone Selective Interlocking (ZSI), are essential features. 7SX85 as part of SIPROTEC 5 family includes an extensive library for developing control, automation, and protection logics, letting you customize the system to your data center needs.



03 Seamless integration into data center communication infrastructure



SIPROTEC 5 devices provide extensive communication options for coherent integration into the data center infrastructure with common industry protocols like IEC 61850, Modbus TCP, PROFINET, DNP3 or serial protocols like Modbus RTU.

Additionally, SIPROTEC 5 family includes the option of 2 to 4* independent redundant communication ports, enabling the solution of separate networks. This redundant connectivity enhances cybersecurity by isolating the operational network from any external-facing networks.



*Optional in Modular SIPROTEC 5 devices.

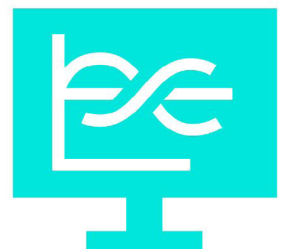
04 Highest network reliability via built in Power Quality Monitoring



Power quality monitoring in the data center allows you to detect voltage variations, harmonics, and other anomalies that can impact the reliability of your critical infrastructure. By identifying these issues early, you can take proactive measures to maintain optimal power conditions and avoid costly downtime.

7SX85 as part of SIPROTEC 5 family offers power quality monitoring functions for an early detection of anomalies and detailed analysis:

- Voltage unbalance
- Voltage changes: Dip, swells, interruption
- TDD, THD and Harmonics

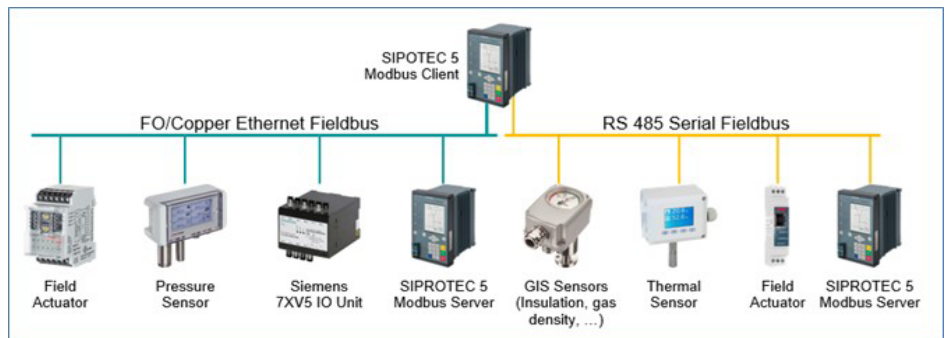


05 Need to process any sensors data? No problem!



No additional IED is needed to obtain, monitor, record, or pass on sensor data. The SIPROTEC 5 handles this task.

The SIPROTEC 5 platform includes Modbus client functionality. Field sensors and devices can be connected either serial or per Ethernet.



06 Cybersecurity by Design



Did you know that it is estimated that more than 80% of global cyber-attacks target data centers? With the increasing number of cyber threats, data center operators must implement comprehensive security strategies to safeguard their assets.

To address this challenge, Siemens' SIPROTEC protection relays, when incorporated into a comprehensive security architecture, offer a powerful defense against cyber attacks.

Key features of SIPROTEC that will keep your infrastructure secure:

- Customer Signed firmware
- Access based in roles (RBAC)
- Logging security related events
- IEC 62443 & BDEW White Paper compliant
- Secure IEC 61850 according IEC 62351-3
- ProductCERT – Vulnerability handling

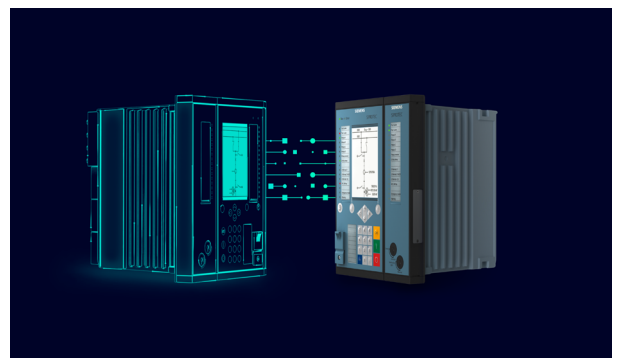


07 Faster engineering & commissioning



Accelerate your engineering and testing with Siemens powerful tools suite: DIGSI 5, SIPROTEC Tools, and SIPROTEC DigitalTwin. These tools optimize engineering, commissioning, and advanced protection testing, simplifying workflows and boost efficiency:

- DIGSI 5: Execute your engineering processes with intuitive interfaces and comprehensive functions, making configuration efficient and error free.
- SIPROTEC Tools: Reduce hardware and wiring test times by up to 60%, ensuring maximum reliability and safety for your critical power infrastructure.
- SIPROTEC DigitalTwin: Experience an exact replica of a SIPROTEC device based in the cloud, enabling virtual m commissioning and testing to optimize system performance even before deployment.



Siemens AG
Smart Infrastructure
Electrification & Automation
Mozartstrasse 31c,
91052 Erlangen, Germany

Siemens Industry Inc.
3617 Parkway Lane
Peachtree Corners, GA 30092
United States

[PRO Tips - SIPROTEC 5](#)

[SIPROTEC 5 Configurator](#)

[Online Shop - Industry Mall](#)

© Siemens 2025

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.