

# SEL Secure Network Communications Products



Improve response times and operational efficiency by enhancing communications

- Ensure secure access and log access events for substation devices.
- Automate relay password management.
- Create a secure Ethernet LAN while integrating legacy serial devices.
- Add precise time synchronization and extend the LAN with wireless communications.

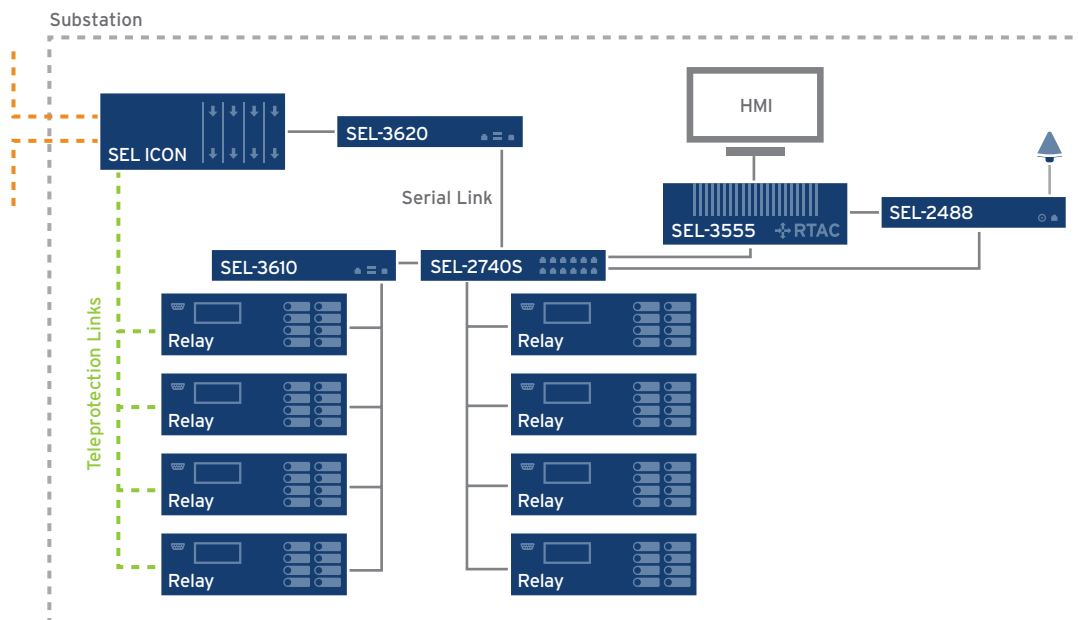


# Enhance Substation Operations With Secure Network Communications

From wide- and local-area networking, security, and precise time to radios, transceivers, and cables, SEL offers a wide range of networking solutions to enhance your substation operations. These solutions combine dependability, security, and high performance to provide reliable communication.

The following products support a secure communications system:

- The SEL ICON® is a wide-area-networking multiplexer with unmatched performance for protection circuits over Ethernet or time-division multiplexing (TDM) transports.
- SEL-2740S Software-Defined Network Switches provide Ethernet LAN connectivity with better security, control, and performance than traditional networking switches.
- The SEL-3620 Ethernet Security Gateway secures access to the substation, automates password management, and provides event logging.
- The SEL-2488 Satellite-Synchronized Network Clock enables submicrosecond time synchronization for devices in the substation.
- The SEL-3610 Port Server connects Ethernet networks to devices with serial ports. The SEL-3610 is an EIA-232, EIA-422, or EIA-485 serial-to-serial and Ethernet-to-serial cryptographic port server.

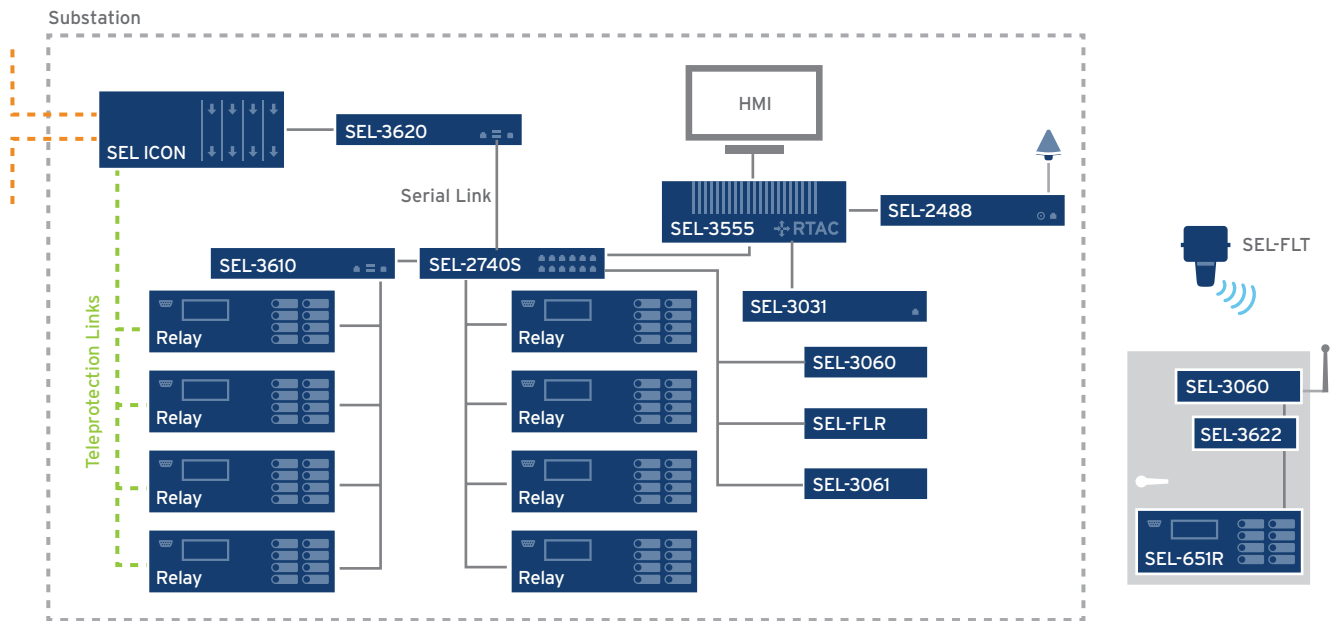


SEL communications work as a system to provide secure connectivity from the WAN to substation devices.

# Extending the Substation LAN

SEL offers network communications solutions to extend communication beyond the substation to downline distribution devices. Adding communications to downline distribution devices allows you to connect these devices to a SCADA system and monitor and update the devices remotely. The following products can help you extend your substation LAN:

- SEL-3031 Serial Radio Transceivers extend communications up to 20 miles and support MIRRORRED BITS® communications for low-latency control applications.
- SEL-3060 Ethernet Radios offer 1 Mbps throughput with a range up to 15 miles.
- SEL-3061 Cellular Routers offer secure 4G/LTE cellular communications for end devices with serial or Ethernet ports.
- The SEL-FLR Fault and Load Receiver works with SEL-FLT Fault and Load Transmitters to locate faults and monitor loads, improving distribution reliability.
- SEL-3622 Security Gateways offer secure access, password management, event logging, and physical sensing for enclosures installations.



SEL wireless products extend communication to devices downline from substations, including recloser controls, voltage regulators, SEL fault and load transmitters, and more.

# Training and Services

SEL offers SEL University courses on cybersecurity and communications. In security courses, students receive a range of security training to help them create secure industrial control systems. Our communications courses teach engineers and technicians introductory and advanced networking and data communication troubleshooting principles and best practices.

Our Engineering Services team can provide communications cybersecurity assessments, solution designs, testing, and more. SEL brings industry-experienced engineers to every project for the best possible solution, providing expertise for increasingly complex communications system requirements.

