



SEL-3022 Wireless Encrypting Transceiver

Encrypted Wireless Links Protect Personnel and Equipment



Communicate using a secure wireless link between two remote serial ports or a remote serial port and your laptop or handheld PC.



Features and Benefits

■ Protect Personnel and Equipment

- Avoid exposing personnel to hazardous conditions by enabling them to control and monitor equipment from their trucks or other safe locations.
- Keep enclosure and control house doors shut to protect equipment from weather and contaminants.

■ Lock Out Intruders

- Locate equipment where vandals cannot reach it.
- Keep gates and control house doors locked.
- Lock out cyberintruders with communications links using National Institute of Standards and Technology (NIST)-approved encryption and authentication.

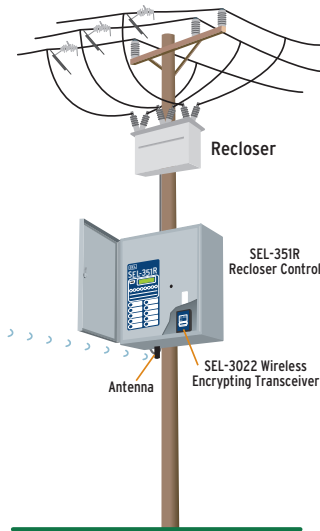
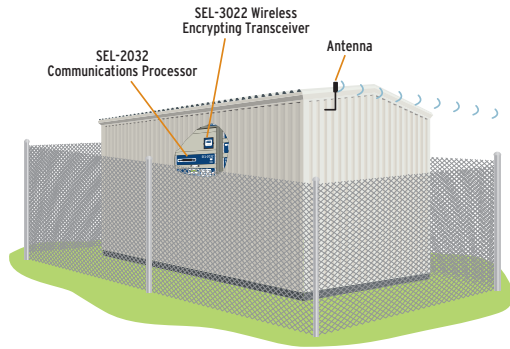
■ Apply Easily With Low Impact and Cost

- Install SEL PC software to add a virtual encrypted serial port for use with your existing application or communications software.
- Connect the SEL-3022 Wireless Encrypting Transceiver to an EIA-232 port on the equipment, with no change in the device firmware or software.
- Use for engineering access or for point-to-point connections, where pulling cables is not cost effective or practical.

Making Electric Power Safer, More Reliable, and More Economical®

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Application Example: Secure Point-to-Point Communications Between an SEL-2032 and an SEL-351R Recloser Control



In point-to-point mode, the SEL-3022 connects two IED serial ports via a secure wireless connection. Point-to-point wireless connection applications are ideal for situations where inter-IED communication is required, but pulling fiber or copper cables is not cost effective or practical.

General Specifications

Wireless Ethernet Port

For encrypted communications between a PC and a connected serial device.

Interface	IEEE 802.11b
Encryption	128-bit Advanced Encryption Standard (AES) and 128-bit Wired Equivalent Privacy (WEP) encryption
Authentication	HMAC SHA-1
Connector	SMA jack for reverse-polarity antenna

Serial Data Port

For unencrypted communications with connected device and initial setup of encryption keys.

Interface	EIA-232
Connector	DB-9 Female (DCE)
Data Rate	300 to 115,200 bps

Software

Adds a virtual serial port, as viewed through operating system or applications software interface.

Communicates with SEL-3022 using the encryption and authentication described above.

Power

5-24 Vdc

External ac and dc supplies optional

AC power adapter (#230-0600)

DC power adapter (SEL-9321)

Security

Designed to meet FIPS 140-2 Security Requirements for Cryptographic Modules (security level 2).

Substation- and Plant-Grade Equipment

Designed, built, and tested with the same practices, processes, and standards applied to SEL protective relays, communications processors, and other products.

Certifications

SEL testing labs are TUV Rheinland certified.



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