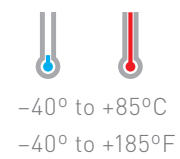
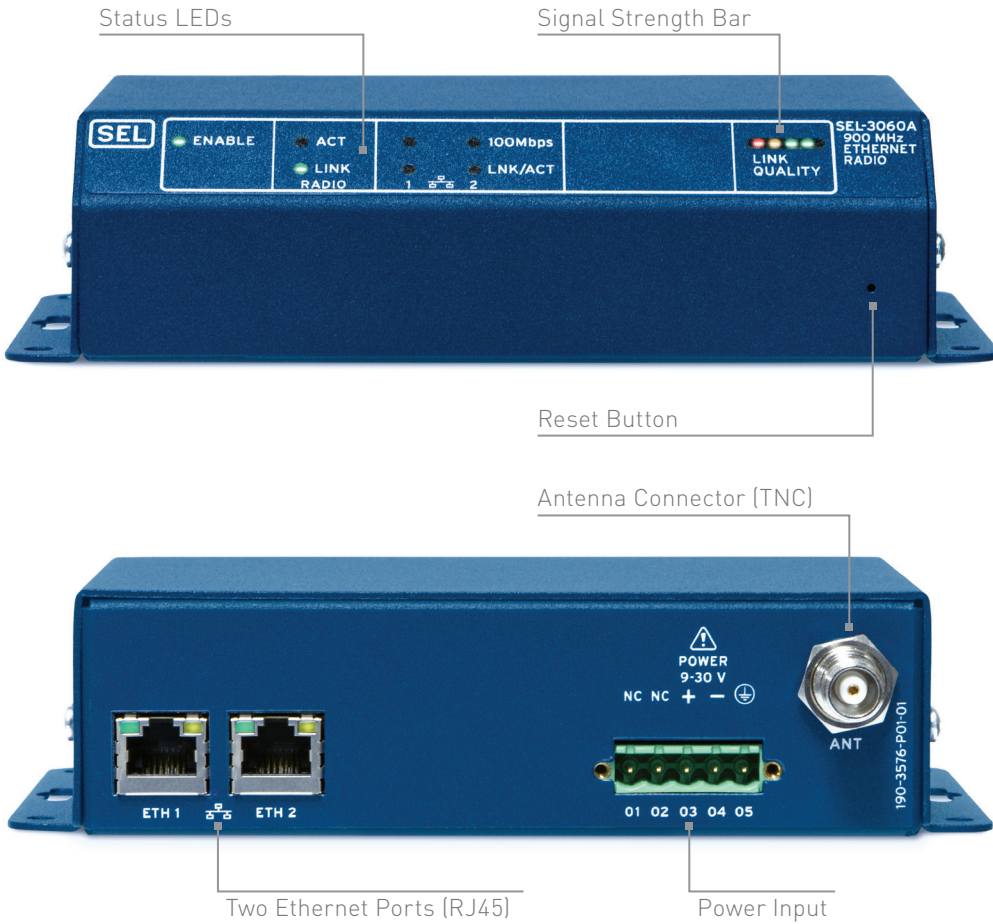


SEL-3060

ETHERNET RADIO
WIRELESS LAN EXTENSION





BROADEN YOUR NETWORK CAPABILITIES

EXTEND ETHERNET CONNECTIVITY WITH WIRELESS TECHNOLOGY.

The SEL-3060 is a multipurpose Ethernet radio that can be used for point-to-point operation to transfer data with low latency and point-to-multipoint operation to economically gather SCADA information. The SEL-3060A operates in the 900 MHz, license-free ISM frequency band and the SEL-3060B uses the license-free 2.4 GHz band.

Flexible

Operates point-to-point or point-to-multipoint with up to 63 nodes. Apply the SEL-3060 for:

- Distribution automation
- Data acquisition
- SCADA
- Engineering access

Powerful

Communicate 15 miles point-to-point or 10 miles point-to-multipoint using 12 channels with the SEL-3060A. With the SEL-3060B, point-to-point links can stretch 10 miles and point-to-multipoint links can span 7 miles. The SEL-3060B communicates using 26 channels.

Fast

Transfer data up to 1 Mbps, with 6–12 ms latency for IEC 61850 GOOSE messages using point-to-point operation.

Low Power Requirements

Consuming less than 4 watts, the SEL-3060 is well-suited for battery backup in remote locations.

Secure

Supports AES 128-bit encryption.

Reliable

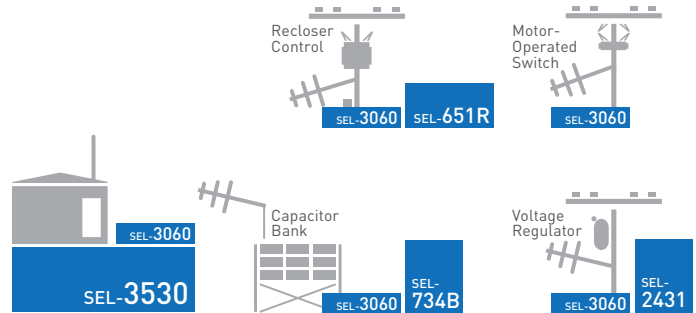
Certified to IEEE 1613, IEEE C37.90, and IEC 60255 standards, and backed by a ten-year warranty.

ELECTRIC POWER SYSTEM APPLICATIONS

SEL-3060 PROVIDES LOW-COST, EFFECTIVE COMMUNICATION FOR DISTRIBUTION AUTOMATION, SCADA, ENGINEERING ACCESS, AND SUBSTATIONS.

Distribution Automation

Communicate to voltage regulator controls, capacitor bank controls, meters, motorized switches, and recloser controls. SEL-3060 Ethernet Radios can be used for control, IEC 61850 GOOSE messaging, engineering access, SCADA, metering, and synchrophasor data.



Distribution system communications example.

Substation Communications Link

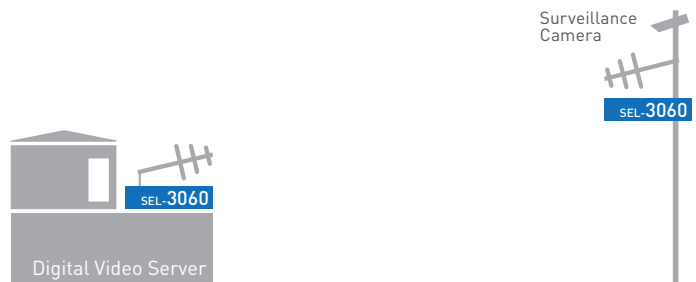
Create a primary or backup communications link between substations using a pair of SEL-3060 Ethernet Radios. In point-to-point mode, SEL-3060A Radios can operate up to 15 miles apart and SEL-3060B Radios can operate up to 10 miles apart. For greater distances, connect two collocated SEL-3060 Radios to act as a repeater.



Link substations via radio for communications throughput up to 1 Mbps.

Surveillance Video

Transmit video from a substation surveillance camera to a digital video server in the control enclosure using an SEL-3060 Radio link to avoid digging trenches for cabling.



Transmit a video signal to the control enclosure.

GENERAL SPECIFICATIONS

Ports	Two RJ45 10/100BASE-T Ethernet ports	
Wireless	ISM band	902–928 MHz (SEL-3060A), 2.40000–2.46875 GHz (SEL-3060B)
	Line-of-sight distance	
	Point-to-point	15 miles (SEL-3060A), 10 miles (SEL-3060B)
	Point-to-multipoint	10 miles (SEL-3060A), 7 miles (SEL-3060B)
	Nonoverlapping channels	12 (SEL-3060A), 26 (SEL-3060B)
	Channel Bandwidth	2 MHz
	Technology	Digital modulation
	Aggregate data rate	1 Mbps
	Latency	6–12 ms point-to-point 20–50 ms point-to-multipoint (for IEC 61850 GOOSE messages)
	Modes	Point-to-point Point-to-multipoint Repeater with 2 collocated radios
	Multipoint nodes	Up to 63
	Output power	+20 dBm (SEL-3060A) +18 dBm (SEL-3060B)
	Receive sensitivity	–93 dBm at 1% packet error rate (SEL-3060A) –91 dBm at 5% packet error rate (SEL-3060B)
	Encryption	AES 128-bit
Mounting	Wall mount	
Power Input	9–30 Vdc at <4 W	
Operating Temperature	–40° to +85°C (–40° to +185°F)	
Certifications	Exceeds IEEE C37.90, IEC 60255, IEEE 1613 UL (pending), FCC	



**MAKING ELECTRIC POWER SAFER,
MORE RELIABLE, AND MORE ECONOMICAL**

**SCHWEITZER ENGINEERING
LABORATORIES, INC.**

Tel: +1.509.332.1890
Email: info@selinc.com
Web: www.selinc.com

