

# SEL-2730U

## 24-Port Unmanaged Ethernet Switch



### Reliable Ethernet communications, designed for simplicity and durability

- Requires no settings or configurations, simplifying commissioning and network troubleshooting.
- Eliminates the need to install patches and firmware upgrades, reducing the total cost of ownership.
- Withstands vibration, electrical surges, electrostatic discharge, fast transients, and extreme temperatures from  $-40^{\circ}$  to  $+85^{\circ}\text{C}$  ( $-40^{\circ}$  to  $+185^{\circ}\text{F}$ ).
- Features dual hot-swappable power supplies to ensure continuous operation during single power source failures.
- Offers the flexibility to choose different combinations of copper, single-mode fiber-optic, and multimode fiber-optic ports.



# Reliably Control and Monitor Your Substation and Industrial Networks

The SEL-2730U is an unmanaged “no settings” switch. Just connect power, Ethernet devices, and the fiber-optic Ethernet network. It is specifically designed to handle extreme conditions found in harsh substation environments. It withstands vibration, electrical surges, fast transients, electrostatic discharge, and extreme temperatures and humidity without losing a single packet.

The SEL-2730U has the highest mean time between failures (MTBF) in the industry. It reliably supports communications under high electromagnetic interference (EMI) and temperature stress with easy-to-provision settings chosen specifically for IED messaging.

## Features

### Tough

The SEL-2730U withstands vibration, electrical surges, electrostatic discharge, fast transients, and extreme temperatures. It meets or exceeds IEEE 1613 (Class 1) and IEC 61850-3 standards for communications networking devices in electric power substations. The SEL-2730U drops no packets throughout this rigorous testing.

### Reliable

SEL is committed to providing superior reliability and quality in all its products. The SEL-2730U is equipped with hot-swappable dual power supplies, allowing simultaneous connection to primary and backup power sources. This ensures no loss of service due to a single power source failure. Directly power the SEL-2730U from 12, 24, or 48 Vdc or 125/250 Vdc or Vac. The observed power supply MTBF exceeds 3,000 years.

### Simple

The SEL-2730U is an unmanaged “no settings” switch. Just connect power, Ethernet devices, and the fiber-optic Ethernet network. LED indicators simplify commissioning and network problem

solving. The copper Ethernet ports automatically configure for crossover cables, speed, and half- or full-duplex operation. The SEL-2730U is an ideal choice for applications where managed networking is not required, ensuring there will never be a network configuration error.

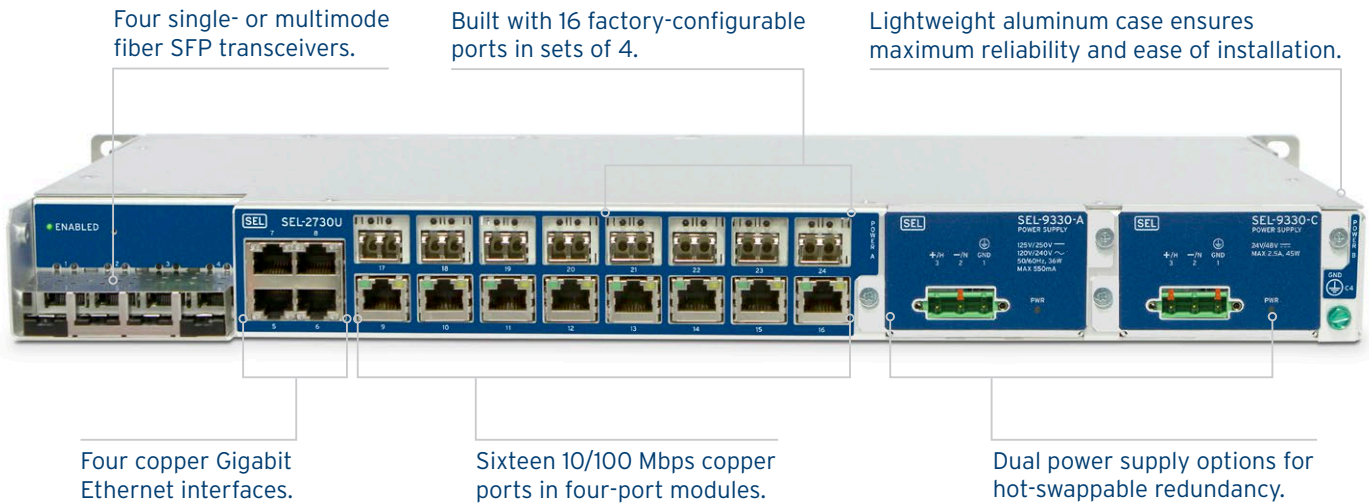
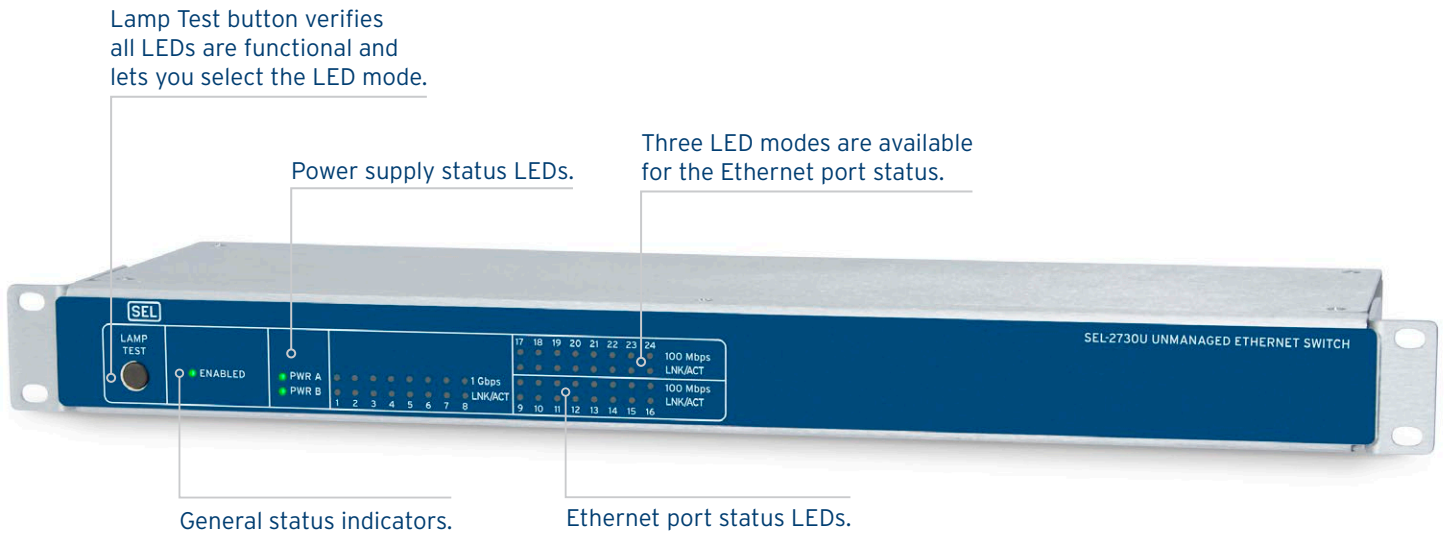
### Flexible

The base-model SEL-2730U has 4 fixed Gigabit Ethernet copper ports and 16 10/100 Mbps copper Ethernet ports, built as 4-port modules. Each of these modules can be ordered as single- or multimode fiber-optic ports to meet your network’s unique requirements. In addition, up to 4 fiber-optic Gigabit Ethernet ports can be added via small form-factor pluggable (SFP) transceivers, for a total of 24 ports.

### Economical

The SEL-2730U saves on total cost of ownership. Because there are no management settings, deployment is fast and simple and there will never be any operational costs associated with installing patches or firmware upgrades. Compare our superior specification compliance, lower price, and ten-year, worldwide warranty to alternatives.

# Overview



## Base Model SEL-2730U Configuration

The base model SEL-2730U comes populated with 4 Gigabit Ethernet interfaces, 4 fiber-optic SFP cages, and 16 additional copper ports. These 16 copper ports can be upgraded to fiber-optic interfaces (single- or multimode) in groups of 4.

# SEL-2730U Specifications

## General

**Ports 1–4** Ports 1–4 each accept an SFP transceiver, which adds a single- or multimode Gigabit Ethernet fiber-optic uplink port.

**SFP options**

0.5 km multimode fiber  
2 km single-mode fiber  
20 km single-mode fiber  
30 km single-mode fiber  
40 km single-mode fiber  
50 km single-mode fiber  
80 km single-mode fiber

**Ports 5–8**

Data rate	10/100 Mbps
Connector	RJ45 female
Autoconfiguration	Crossover, speed, and half- or full-duplex mode

**Ports 9–24**

**Standard**

Data rate	10/100 Mbps
Connector	RJ45 female
Autoconfiguration	Crossover, speed, and half- or full-duplex mode

Optional (in groups of four: 9–12, 13–16, 17–20, and 21–24)

**Multimode and single-mode optical interface**

Data rate	100 Mbps
Connector	RJ45 female

**Power Supply Ratings** Base unit includes one power supply; second supply is optional.

**Voltage Options**  
100/120/220/230 Vac @ 45–65 Hz, 100/125/220/250 Vdc  
24/48 Vdc

**Operating Temperature Range** –40° to +85°C (–40° to +185°F)

**Relative Humidity** 5–95%, noncondensing

## Substation- and Plant-Grade Equipment

Designed, built, and tested to IEEE 1613 (Class 1), IEC 61850-3, and other IEEE and IEC standards:

- Electrostatic discharge.
- Fast transients.
- Radiated emissions.
- Surge withstand capability.
- Dielectric strength.

Using the recommended STP Ethernet cables, no packets are dropped. Refer to the SEL-2730U data sheet for detailed test data.

## Related Products

SEL-C627: Category 5e STP Ethernet Cables

SEL-C808: 62.5/125 µm Multimode Fiber-Optic Cables



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