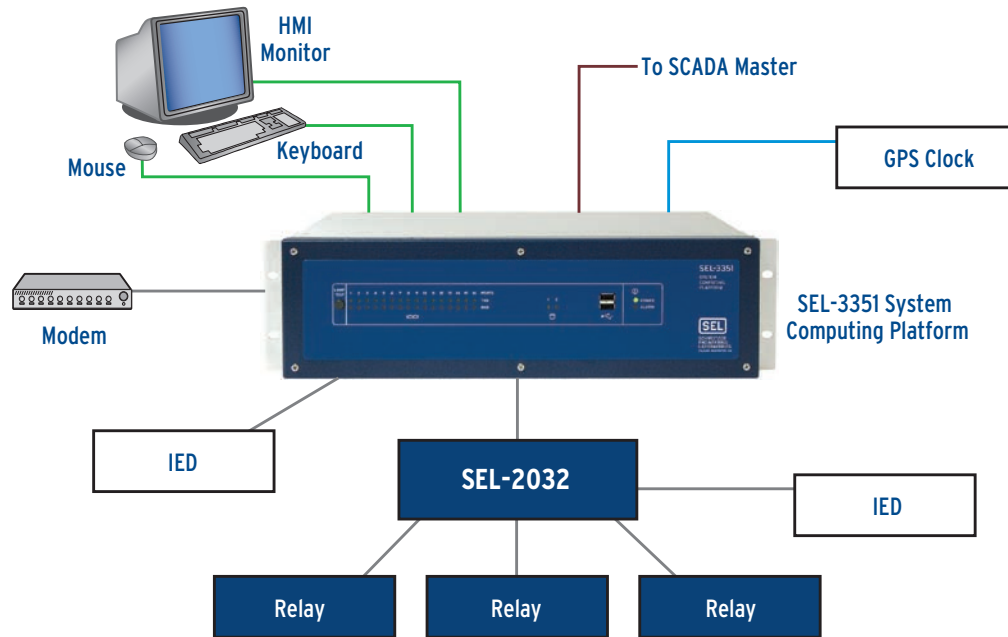




SEL-3351 System Computing Platform

Improve Reliability and Decrease Maintenance With a Rugged Computing Platform



Withstands harsh conditions and performs substation computer tasks, including data collection, automatic control, graphic HMI display, and more.

Features and Benefits

■ **Reliable Substation Operation — Meets IEEE C37.90 and IEC 60255 Protective Relay Standards**

Install the SEL-3351 in your substation, industrial, or government systems instead of desktop and rack-mount computers designed for controlled office environments. The SEL-3351 is designed for harsh environments to withstand vibration, electrical surges, fast transients, and extreme temperatures.

■ **Robust Hardware Design — No Fans, No Moving Parts, Ten-Year Warranty**

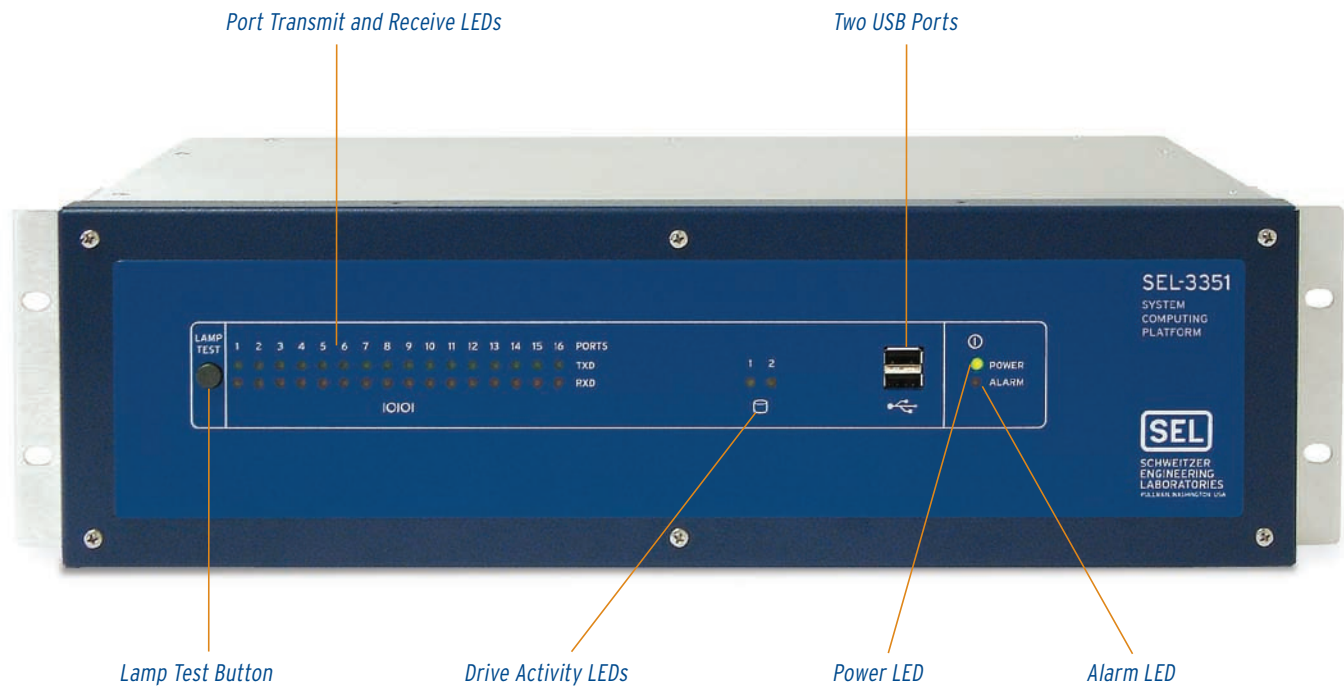
Improve reliability with the SEL-3351, which has a predicted mean time between failures (MTBF) of at least five times that of typical computers. An independent diagnostics watchdog processor improves system availability by detecting and alarming for problems, detecting system interruptions, and restarting the main processor. Eliminate inverters by using station dc power.

■ **Flexible Solution Meets Your Needs Using Computer Industry Standards**

Customize the SEL-3351 and its operating system with software from SEL and third-party vendors. Additionally, utilize the serial ports, dual Ethernet connections, status and activity LEDs, and the alarm contacts for a solution that fits your needs.

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

Front View



Port Transmit and Receive LEDs

Show activity to aid commissioning and problem solving.

Lamp Test Button

Verifies LEDs are operational.

Drive Activity LEDs

Indicate activity of Flash memory drive and optional drive connected to internal IDE connector.

Two USB Ports

Accommodate plug-in memory, mouse, and other devices.

Power LED

Illuminates when power is applied.

Alarm LED

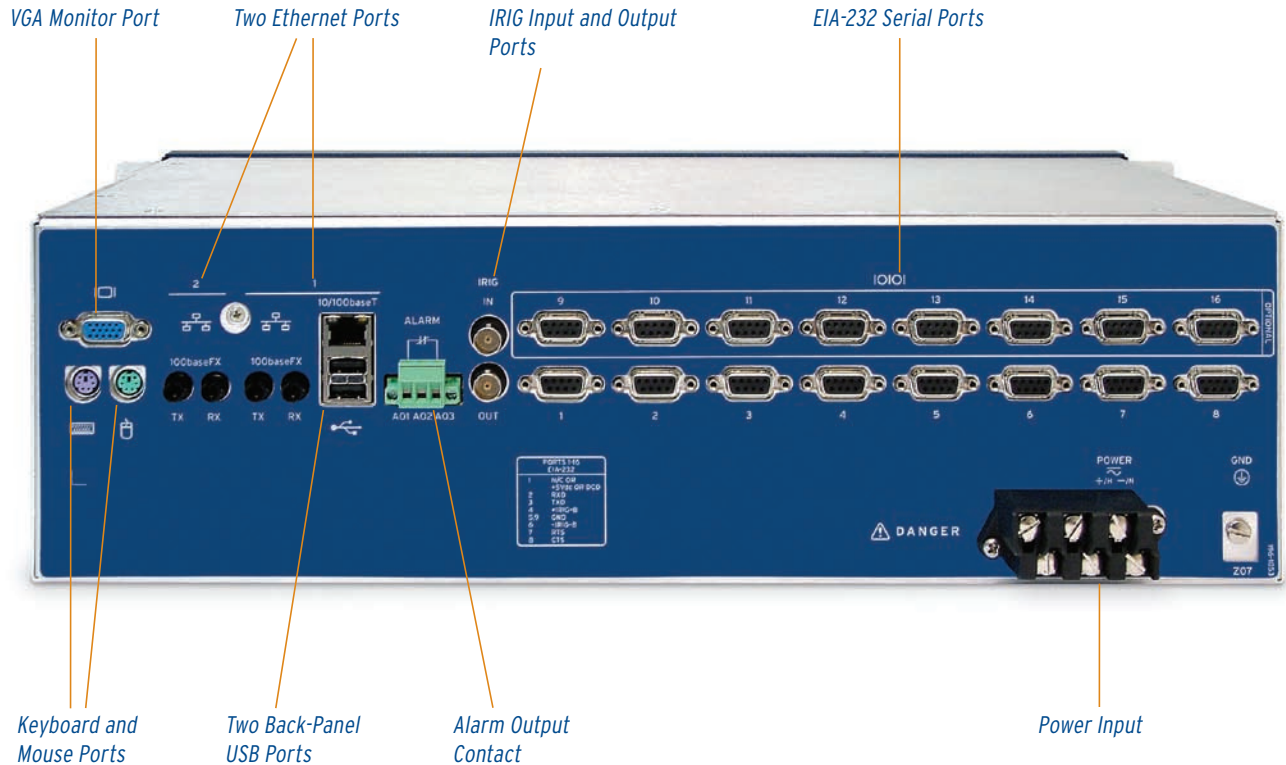
Annunciates alarm state.

SEL-7000 Integrated Substation System

Include an SEL-3351 System Computing Platform in a complete system for control, automation, monitoring, and protection.



Back View



VGA Monitor, Keyboard, and Mouse Ports

Provide human-machine interface (HMI) and easy setup and diagnostics.

Two Ethernet Ports

Both support 100 Mbps fiber-optic connections; one port also has a 10/100 Mbps electrical connection.

Connect to LAN, WAN, or laptop computer for data transfer and configuration.

Back-Panel USB Ports

Support pointing devices, external memory, and other devices.

Alarm Output Contact

Indicates system failure (detected by an independent watchdog processor), login access, and power failure.

IRIG Input and Output Ports

Connect IRIG-B time-synchronization signal to IRIG IN to set the computer clock.

Send a time signal to synchronize the clocks of other devices through the serial ports and the IRIG OUT connector.

EIA-232 Serial Ports

Connect to remote links or local devices with 8 or 16 EIA-232 serial ports.

Each supports full-duplex data communications plus an IRIG-B time-synchronization output.

SEL-3351 System Computing Platform

General Specifications

General

1.1 GHz Intel® Pentium® M processor, single-board computer with 512 MB RAM
Watchdog processor, independent of single-board computer
Windows® XP Professional operating system
Operating temperature range of -40° to +75°C (-40° to +167°F)

SEL Substation Software

SEL-5010 Relay Assistant
SEL-5020 Settings Assistant
ACSELERATOR QuickSet® SEL-5030
ACSELERATOR Report Server™ SEL-5040
ACSELERATOR Analytic Assistant™ SEL-5601
SEL-5077 SYNCHROWAVE® Server

Communications Protocols

In addition to the software listed above, SEL offers protocol conversion software, supporting many popular utility and industrial protocols, including IEC 61850. For a detailed listing, refer to the model option table at www.selinc.com/motlist.htm.

Internal Connections

Two CompactFlash® drive sockets
Internal DB-25 parallel port for hardware keys or security devices

Ethernet Ports

Ports 2
Data Rate 10 or 100 Mbps
Standard IEEE 801-2

Ethernet Port 1

Connectors RJ-45 Female and 2 ST® Connectors
Interface 10/100BASE-T and 100BASE-FX

Ethernet Port 2

Connectors 2 ST Connectors
Interface 100BASE-FX

Serial Ports

Ports 1, 8, or 16
Connectors DB-9 Female
Data Rate 300 to 115000 bps
Data Signals EIA-232 Full-Duplex Data
Time Output Demodulated IRIG-B
Other +5 Vdc Power Output on Pin 1

IRIG Ports

Connectors Female BNC
IRIG Input Modulated IRIG-B or Demodulated IRIG-B
IRIG Output Demodulated IRIG-B

Power Supply Options

125/240 Vdc or Vac
48/125 Vdc or 125 Vac
24/48 Vdc

Substation- and Plant-Grade Equipment

Designed, built, and tested with the same practices, processes, and standards that we use for our protective relays, information processors, and other products. This includes compliance with IEEE and IEC standards for electrostatic discharge, fast transients, radiated emissions, surge-withstand capability, dielectric strength, pulsed magnetic fields, and disturbances.

Refer to the SEL-3351 Data Sheet for detailed test data. Specifications and tests are per the ANSI/IEEE C37.90-1989 and IEC 60255 protective relay standards, and the ANSI/IEEE 1613-2003 standard covering communications and networking devices.



Pullman, Washington USA
Tel: +1.509.332.1890 • Fax: +1.509.332.7990 • www.selinc.com • info@selinc.com

© 2005-2009 by Schweitzer Engineering Laboratories, Inc. PF00078 • 20090401

