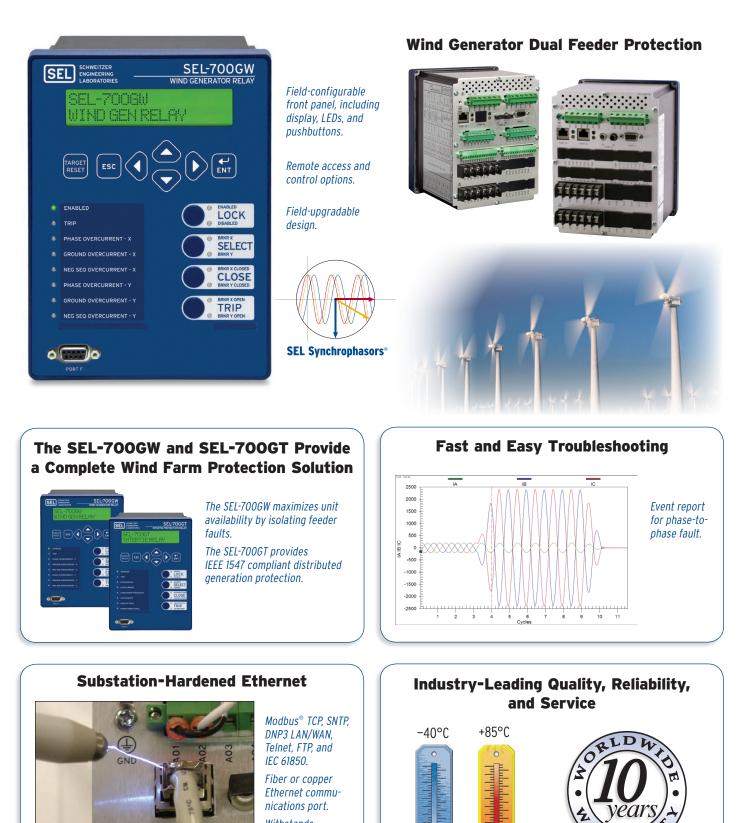
# **SEL-700GW** Wind Generator Relay





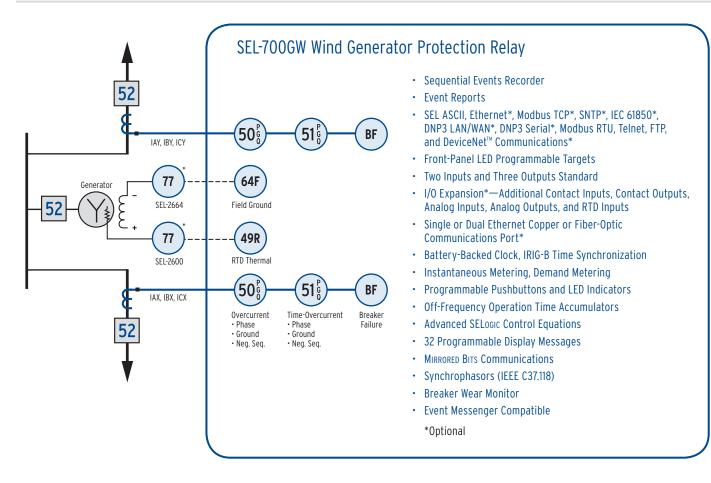
Making Electric Power Safer, More Reliable, and More Economical®

nications port. Withstands

electrostatic air discharge of 15 kV.

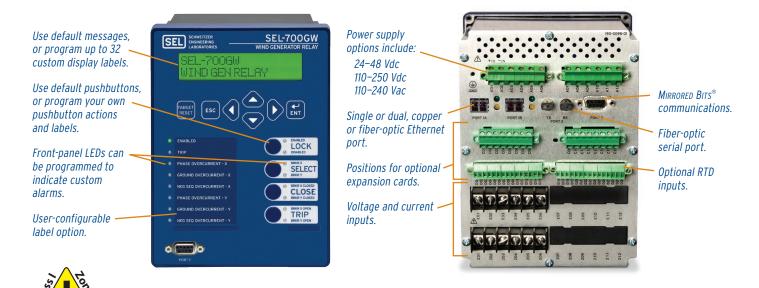
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# **Functional Overview**



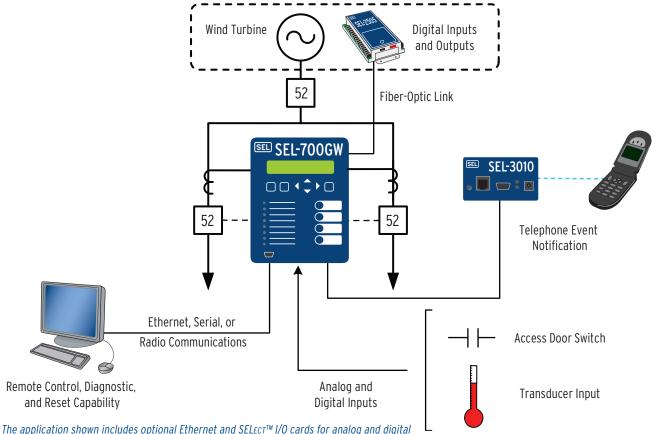
# Feature Overview

APPROVED



#### **Complete Wind Feeder Protection**

The SEL-700GW is a complete feeder protection solution for distributed generation. The SEL-700GW provides high system availability by using two sets of overcurrent elements (50/51) to detect and isolate a fault on either feeder. The SEL-700GW also provides many of the same functions as a programmable logic controller (PLC). Multiple communications options, various I/O choices, and programmable SELogic<sup>®</sup> control equations make the SEL-700GW a complete solution.



The application shown includes optional Ethernet and SELεct™ I/O cards for analog and digital I/O. The SEL-3010 Event Messenger and SEL-2505 Remote I/O Module are sold separately.

# **Event Notification**

Automatically alert key personnel to problems with direct SEL-3010 Event Messenger support. The SEL-3010 features text-to-speech technology and a built-in telephone dialer. The SEL-700GW uses Messenger Points to send text messages to the SEL-3010, which are then relayed to personnel via telephone.

- Send as many as 32 unique messages triggered by relay faults, alarms, or other critical information.
- Provide important message information on power system condition and operation to mobile operations staff, enhancing efficiency and reducing response time.
- Include process data or analog values such as fault location or time in messages.
- Use a standard telephone line to monitor or to back up SCADA systems.
- If email-based event notification is preferred, use the SEL-2890 Ethernet Transceiver to automatically send Summary Event Reports to any email-enabled device, such as a smartphone.



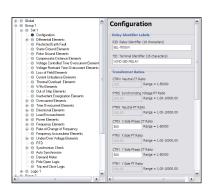
# Easy to Set and Use

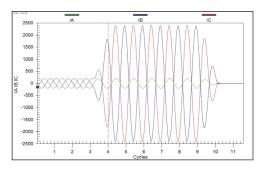
#### Use AcSELERATOR QuickSet® SEL-5030 Software to Set, Monitor, and Control the SEL-700GW

- Save engineering time while keeping flexibility. Communicate with the SEL-700GW through any ASCII terminal, or use the AcSELERATOR QuickSet graphical user interface.
- Develop settings offline with a menu-driven interface and completely documented help screens. Speed up installation by copying existing settings files and modifying applicationspecific items.
- Simplify the settings procedure with rules-based architecture to automatically check interrelated settings. Out-of-range or conflicting settings are highlighted for correction.

#### Use ACSELERATOR Software to Retrieve and Display Event Reports Recorded by the SEL-700GW

- Display event report oscillograms. View each report as a plot of magnitude versus time. Select analog and digital points to build a custom display.
- Display phase and symmetrical component phasors. Display the phasor view of electrical data to better understand asymmetrical, three-phase faults. Build a custom plot using per-phase and symmetrical component sequence currents and voltages.
- Retrieve event reports using serial or Ethernet communications links.





## Flexible Communication

#### **Communications Media**

- Ethernet 10/100BASE-T
- Ethernet 100BASE-FX
- Single or dual Ethernet ports
- EIA-232 serial
- EIA-485 serial
- Fiber-optic, serial multimode ST<sup>®</sup>

### **Communications Protocols**

- SEL ASCII
- MIRRORED BITS communications
- IEC 61850
- Modbus RTU/TCP
- Simple Network Time Protocol (SNTP)
- DNP3 serial, LAN/WAN
- DeviceNet<sup>™</sup>
- Telnet
- FTP
- Synchrophasors (IEEE C37.118)



Central control room.



Field remote terminal.



Engineering access.

# **Mounting Options**

### **Retrofit Replacement Kits**

Replace existing generator protection with the SEL-700GW and the applicable mounting kit. These kits provide everything needed to replace many existing generator relays with the SEL-700GW.

No cutting or drilling is required when you use the optional mounting kits. Replacement of existing protection is quick and easy!





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