

# SEL Real-Time Automation Controllers (RTACs)

## CAISO Remote Intelligent Gateway (RIG)



### A Reliable and Affordable Solution

The SEL RTACs combine RIG functionality with high-quality protective relay features. They provide a secure gateway connection to CAISO (California Independent System Operator) for operational data and automatic generation control (AGC) logic for generation control.

SEL RTAC RIGs have a variety of industry-standard programmable functions to fit different needs, including custom logic and protocol conversion. With no moving parts and a robust design, the RTAC RIG is capable of withstanding harsh environmental conditions, from vibrations and electrical surges to fast transients and extreme temperatures.

SEL RTACs support NERC CIP security requirements, providing alarms, intrusion detection, Syslog, logging, and centralized user access control. They also collect real-time telemetry data from revenue meters, PV inverters, plant equipment, and weather stations required by the CAISO.

The SEL RTAC products that support the RIG solution include the SEL-3555, SEL-3530-4, SEL-3505, SEL-3505-3, and SEL-2240 Axion®. All the products run the same firmware, and all except for the SEL-3505 and SEL-3505-3 have a web-based human-machine interface (HMI) option.

SEL RTACs are widely used in the power industry and come standard with a ten-year, worldwide warranty and our free, industry-leading technical support from experienced application engineers.

### SEL RTAC RIG Features

- Meets the IEEE 1613 protective relay specifications.
- Withstands harsh environmental conditions.
- Designed with no moving parts.
- Supports structured text, ladder logic, and continuous function chart logic.
- Runs Linux®-based operating system.
- Includes IEC 61131 logic engine.
- Supports DNP3, Modbus®, SEL Fast Message, and other industry-standard protocols.
- Includes ten-year, no-questions-asked warranty.
- Designed with a web-based HMI that runs on HTML5 technology.



# Engineering Services

## Providing a Complete Solution

SEL's Engineering Services provides reliable solutions for CAISO RIG applications. These industry-experienced engineers assist with the design, documentation, communications architecture, configuration settings, and field commissioning necessary for RIG projects.

Engineering Services – and SEL as a whole – is committed to quality. Our products perform at the highest level of quality because we constantly find ways to improve our processes in a controlled environment. Through this cycle of identifying the process, measuring it, and improving it, we strive to exceed customer expectations in product and service design, manufacture, and delivery.



**SEL** Making Electric Power Safer,  
More Reliable, and More Economical

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