

# SEL Pump Management Solutions



## Reliable, secure solutions for water and wastewater pump applications

- Improve operations with complete remote and local access to view, monitor, and control the pump system status and parameters.
- Increase situational awareness and condition monitoring with trusted analytics and diagnostic tools.
- Enhance safety and performance with comprehensive low-voltage motor protection, including arc-flash mitigation and condition-based maintenance.
- Lower your cost of ownership with our standard no-charge configuration software, free technical support, and ten-year, no-questions-asked warranty.





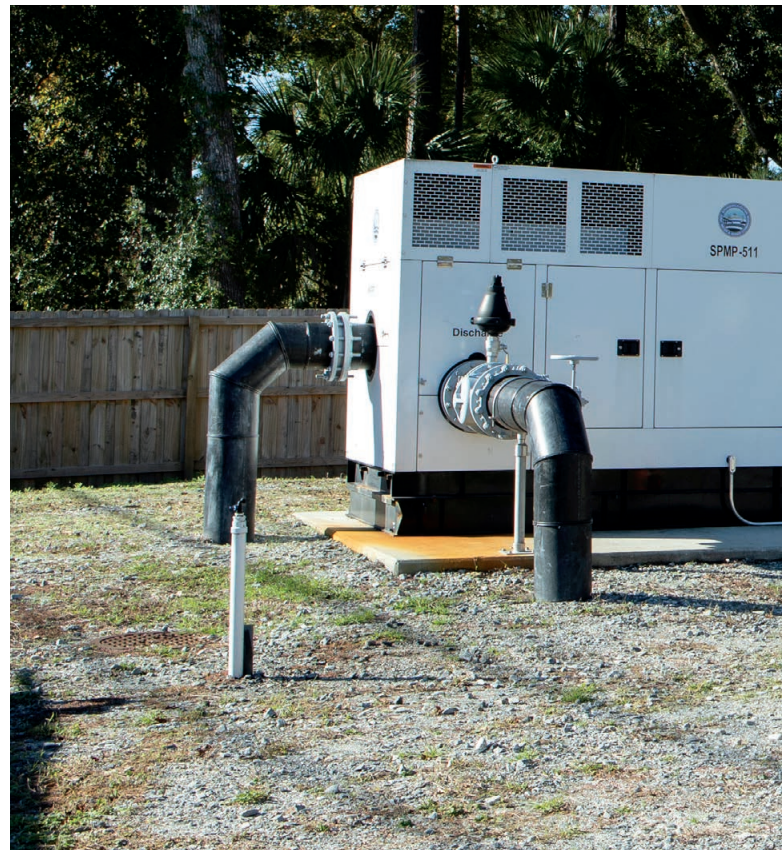
## Solutions You Can Trust

Schweitzer Engineering Laboratories (SEL) is a trusted provider of complete power protection, automation, communications, and metering solutions for critical industries and utilities worldwide. Our solutions are designed, manufactured, and tested in the United States to meet the rigorous environmental and operational demands of critical industries that must operate flawlessly 24 hours a day, 7 days a week.

### Optimize Lift Station Operations

Our hardened, feature-packed devices easily fit into lift station applications and help water and wastewater utilities to:

- Significantly improve the reliability of waste collection systems to minimize spills and overflows.
- Protect operators and critical assets.
- Seamlessly connect remote stations to SCADA.
- Protect against cyber attacks.
- Reduce operational costs.



**DATA CONCENTRATION  
AND SCADA CONNECTIVITY**  
SEL-3505/3505-3 Real-Time  
Automation Controller (RTAC)

**PUMP CONTROL**  
SEL-2411P Pump Automation  
Controller

**WIRELESS COMMUNICATIONS**  
SEL-3061 Cellular Router



**SECURITY**  
SEL-3622 Security Gateway

**MOTOR PROTECTION  
AND MANAGEMENT PLUS  
ARC-FLASH MITIGATION**

- SEL-849 Motor Management Relay
- SEL-710-5 Motor Protection Relay

# SEL Solutions

## Manage Pumps With Greater Visibility

With the SEL-2411P Pump Automation Controller, utilities can reliably control and monitor pump stations. The standalone, SCADA-ready controller offers flexible I/O with 20 digital inputs, 7 digital outputs, and two additional I/O expansion cards. It is a preconfigured solution that is simple to set and install and is customizable to fit your applications. The SEL-2411P connects to any SCADA system and provides improved visibility with local monitoring and control. It also offers real-time pump status reports and Sequence of Events (SOE) reports to help you efficiently troubleshoot issues.



### APPLICATIONS

- Pump-down control for lift stations (simplex, duplex, and triplex)
- Pump-up control for wells and tanks
- Booster pump station control
- Nonpotable “reuse” water applications

## Robust, Secure Connectivity With SCADA

Use the SEL-3505-3 Real-Time Automation Controller (RTAC), our economical and compact controller solution, to concentrate and manage lift station data. The SEL-3061 Cellular Router lets you communicate the data to your SCADA system while ensuring data confidentiality and integrity with comprehensive security methods. The SEL-3622 Security Gateway secures all Ethernet and serial communications and helps merge physical security and cybersecurity for field operations.



### APPLICATIONS

- Wireless communications
- Central authentication
- User access control
- Encryption
- Password management
- Physical security



## Arc-Flash Protection at the Speed of Light

The SEL-849 Motor Management Relay and SEL-710-5 Motor Protection Relay securely and accurately detect and mitigate arc-flash events to protect personnel and equipment. Our arc-flash detection (AFD) technology significantly decreases the time it takes a relay to trip in response to an arc fault, which reduces hazardous arc-flash incident energy by as much as 90 percent.

### APPLICATIONS

- Arc-flash mitigation for service entrances and switchgear
- AFD in motor control centers
- AFD for remote control panels and disconnect switches



## Protect and Optimize Critical Motors

The SEL-849 and SEL-710-5 provide comprehensive, industry-leading motor protection for low- and medium-voltage induction and synchronous motor applications. These devices quickly detect and respond to faults to minimize equipment damage, process upsets, and hazards to personnel. They also offer helpful information for condition-based planning and equipment life-cycle optimization.

### APPLICATIONS

- Thermal overload protection
- Voltage and current phase monitoring and protection
- Current imbalance protection
- Phase reversal protection
- Frequent-starting protection
- Load jam and loss protection
- Power metering

Note: The SEL-710-5 is available with an LCD or touchscreen display.



## Backed by Unmatched Quality and Support

We are committed to quality with a worldwide, ten-year, no-questions-asked warranty and unmatched, free technical support and customer service. When you work with SEL, you get more than our products or solutions—you get a partnership. That means we'll provide support whenever you need us. No matter the issue, we will be there until it's resolved.

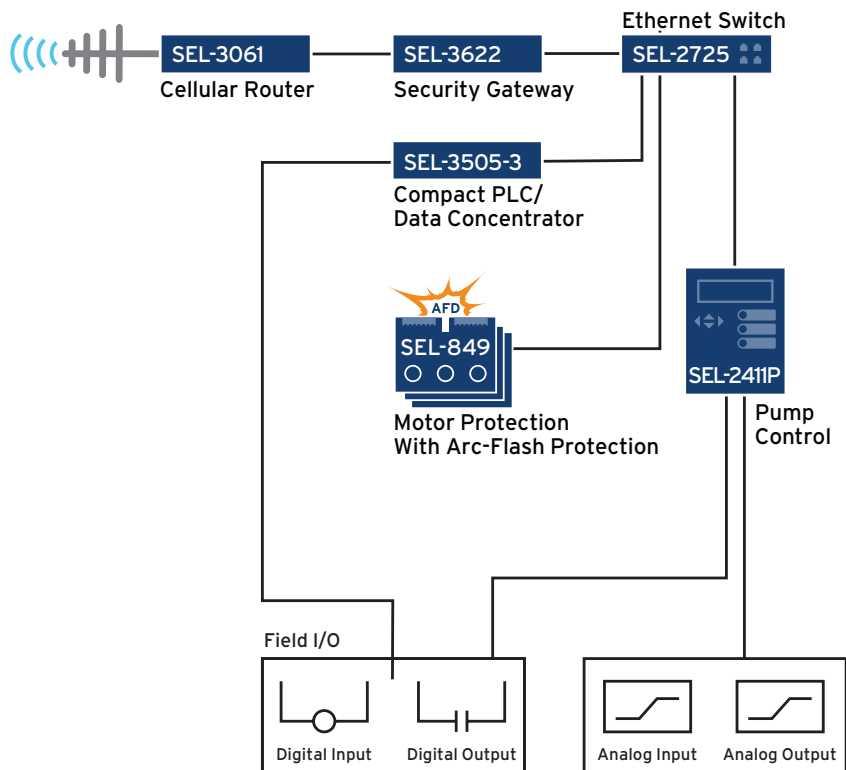
From mobile response teams and disaster discounts during times of tragedy to expedited deliveries and onsite technical help, we stand by you.

**"I'm always greeted by a friendly voice and get the help I need. Call me old-fashioned, but real customer service requires real people."**

KEN DICKERSON  
Deep East Texas Electric Cooperative

# Example Remote Triplex Lift Station Application

SEL solutions are customizable and scalable, allowing you to expand your system from a pump controller to a complete pump management system that manages, secures, and protects the critical assets in your lift stations.



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