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# Take Command of Your Future With New Supervisory Controls

The industry's most trusted facility control system just got smarter



By Sam Smith Product Manager Emerson



With constant competitive pressures and a growing shortage of qualified technicians, companies are looking for every opportunity to streamline site performance and simplify facility management tasks. The Emerson Supervisory Controls platform has been re-engineered to help these operators achieve ongoing operational success.



Preparing for the future of building and energy management is a top concern for operators of small- and large-format grocers, restaurants and convenience stores. With constant competitive pressures and a growing shortage of qualified technicians, companies are looking for every opportunity to streamline site performance and simplify facility management tasks. The Emerson Supervisory Controls platform has been re-engineered to help these operators achieve ongoing operational success — with a suite of robust, easy-to-use features that can help operators drive bottom-line improvements.

Building upon what's considered the industry standard among leading retailers, the new Supervisory Controls offering packs additional storage and processing power to enhance building management, refrigeration control and energy optimization capabilities. Key new features include:

Smart Alarms — Alarms are essential for helping facility managers determine when to respond to potential issues so that they can minimize system downtime. But dealing with a constant influx of unprioritized alarms can be counterproductive. Smart Alarms filters through the noise to prioritize actionable alarms and present them in easy-to-understand language, not cryptic or confusing codes. Smart Alarms gives operators a list of possible causes and potential resolutions, which can help them to quickly diagnose the root cause, potentially saving time and costly truck rolls.

Site Aggregator — In facilities where multiple Supervisory Controllers and/or the E2 facility management controller may be used, Site Aggregator provides a consolidated view to allow operators to see a complete picture of their facility. Site Aggregator is designed to enable quick navigation among controllers, allowing end users to switch between them with fewer clicks and from a single, convenient location.

**Performance Meter** — Are your refrigeration cases at the correct temperature? Which cases are underperforming on individual refrigeration circuit? Can this data be viewed graphically or downloaded for detailed analysis? Performance Meter holds answers to these questions and much more, giving operators access to real-time performance data to help them accelerate issue resolution, reduce their maintenance costs, and alert store managers to potential food safety issues when they determine it is appropriate.

*Floor Plans* — From refrigeration and HVAC systems to lighting and energy usage, Floor Plans allows you to easily monitor and view active alarms in each key facility system. Using 2D and 3D visualization, operators can access a detailed overview of a store's layout and its equipment arrangement. Designed for advanced and non-technical end users alike, Floor Plans also integrates with Emerson's Connect+ Enterprise Management software and can be easily accessed through a web browser, mobile device, or via wall and panel-mounted, touch-screen displays.

# **Comprehensive control capabilities**

Supervisory Controls provides comprehensive control and management over your entire facility envelope.

#### **Refrigeration controls**

#### Condensers

Enhance the performances of both air-cooled and evaporative condensers using split condenser control and fast recovery strategies.

#### Suction groups

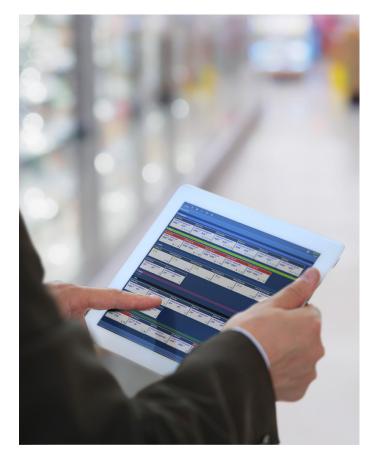
Manage up to four compressor racks with up to 16 compressors; utilizes advanced algorithms to fine-tune control strategies, extend compressor life, and maximize energy savings; covers a variety of refrigerants and control strategies.

# Circuits/display cases

Choose between standard refrigeration control and distributed case control. Both options provide temperature control, monitoring, defrost management and alarming for out-oftolerance conditions.

# Refrigerant leak detectors

Receive prompt notification of leaks from Emerson's singleand multi-zone refrigerant leak detection devices; enable programming of multiple setpoints for each device to customize leak detection levels.



# **Supervisory Controls benefits**

As the preferred facility control platform for the world's leading grocery retailers, Supervisory Controls is designed to offer advantages for end users of varying skill levels:

- *Powerful control* Manage alerts, alarms, energy use, scheduling, maintenance information, advanced reporting and more.
- *Intuitive navigation* Requires no special training for day-to-day operation; utilizes familiar processes and an icon-based interface.
- **Prioritize actions** Priority alarms and alerts are visible for immediate attention and can be sent via text or email.
- *Simplified setup* Manage and control inventory setup from one location to simplify and accelerate installation and startup processes.
- *Improved file management* Back up, restore and update firmware; install or remove files; and access the list of applications from one screen. Includes SD and USB ports for local backup and restoration.
- *Graphic scheduling* Click-and-drag functionality makes it easy to set, duplicate and change schedules.
- **Fast response** Act quickly with access to detailed information, available instantly through a simplified user interface.
- *Mobile-optimized* Access data and make decisions from your mobile device; compatible with iOS and Android platforms.
- Data management and security Securely manage information, user access and permissions based on your preference locally, on your own network or the Emerson cloud.
- User-friendly interface Enhanced graphics, simple icons and familiar functionality make scheduling, report viewing and screen organization easier; option to customize views with the Connect+ graphical tool.
- *Multiple display options* 10-, 15- or 21-inch, touchscreen displays offer different price points and user experiences; designed for remote mount flexibility for convenience and local access where needed most.

#### Anti-condensate heater controller

Direct doorframe heaters run only when necessary to help operators achieve maximum energy savings; closed-loop algorithm uses data from the relative humidity sensor to optimize anti-condensate control.

#### Third-party connectivity

Supervisory Controls also supports connection to third-party equipment using Modbus.

# **Building controls**

# HVAC

Group air handler and rooftop units in zones for simplified control. Achieve networked control over heating and cooling setpoints, occupancy schedules, emergency override, indoor air quality, alarms and remote unit reset. Supports management of variable-speed drives.

# Lighting

Optimize lighting system control with advanced scheduling features, light-level sensors and override buttons — including floor, parking lot and exterior lighting.

#### Power monitoring

Implement extensive demand shedding features and access detailed power usage logs to help spot trends and optimize facility operations. In addition to kWh, retailers can use Emerson's energy meter to access a variety of attributes, including power quality, maximum demand, power factor, phase loss, over-current, over-voltage and accumulated usage.

# Advanced controls

#### Graphs

View status graphs for a variety of log groups to identify historical patterns and issues.

# Multiflex boards

Integrate via a flexible I/O system with analog and digital inputs, as well as relay and analog outputs.

#### Advanced scheduling

Create advanced schedules based on occupancy and other factors to enhance energy savings — up to 64 schedules with 15 custom events per schedule. In addition, override standard time schedules with up to four different holiday schedules, each with up to 24 days for special events.

# Greenfield, remodels and retrofits

The ultra-flexible Supervisory Controls platform is effective in greenfield applications, facility remodels or system retrofits. For new facilities, Supervisory Controls can be configured into a single system to offer powerful control, expansion options and advanced system supervisory functions. Whether you're replacing a single unit, retrofitting multiple components or remodeling an entire site, Supervisory Controls also can be easily integrated with existing systems.

