

# Supervisory Controller Platform

## Update Advisory E3 and Site Supervisor Firmware 2.31F01

A new general release version of the Supervisory controller firmware version 2.31F01 has been released and is available for customer upgrade. For more information, visit the Supervisory Control page on the Copeland website:

<https://www.copeland.com/en-us/products/controls-monitoring-systems/facility-controls-electronics/facility-and-system-controls/supervisory-controls-platform>

### IMPORTANT!

For E3 firmware upgrades, be sure to use the *\_Display\_Update* file.

### Before Upgrading Firmware

- **Note that for firmware versions 2.16 to 2.22, you must first upgrade to 2.23 BEFORE upgrading to 2.31.**
- **Upgrading firmware from older versions is a tiered process. See page 5 of this document for links to resources for supervisory controller firmware upgrades.**



**WARNING: A Backup is REQUIRED before upgrading to firmware versions 2.31 and higher. The Backup is required to ensure setpoint files can be restored. Downgrading to a version below 2.31 is not possible.**

For system Backup instructions, refer to section 4.13 "Creating a Backup and Restore" in the Supervisory Controller User Guide.

### Why You Should Upgrade

All customers are advised to upgrade their Supervisory controllers to 2.31F01 and PCs running Connect+ to the latest version for security updates and to take advantage of the latest fixes and enhancements listed in the table below and on the following pages 2-5. **Regular updates often include critical security patches and enhancements that safeguard your system from emerging vulnerabilities and ensure optimal performance.**

CO <sub>2</sub> Suction Group Application	Distributed Controllers
XM679K Devices	MODBUS Offline Delay
ETN Breaker Panels	Enhanced Condenser
XCM25D Devices	XR75 Devices
Suction Group	PIB Board
Alarm Communications	Generic Alarms
Offline Programming	CC200
MQTT	ISD 2.0 Device
Enhanced Suction	Facility Status Display (FSD)

## CONNECT+ UPDATE RECOMMENDED

It is recommended to upgrade to the latest Connect+ version. If you plan to upgrade Supervisory controllers and Connect+ at the same time, upgrade Connect+ to the latest version first, then update the Supervisory controllers. Contact Copeland for more information about upgrading.

### Supervisory Controller and Connect+ Compatibility Matrix

Supervisory Controller Version	Recommended Connect+ Version
2.31F01	1.5.10F01

## CONTROLLER FIRMWARE COMPATIBILITY

### Firmware Platform Mapping

Firmware	Platform
E3_#.#####_Display_Update	E3 only
SS_#.#####_Firmware_Update	Site Supervisor only

### Supervisory Controller 2.31F01 Feature and Fix Matrix

Features and Fix Descriptions	Supported in Supervisory Controllers 2.31F01
<b>Features</b>	
<b>XEV20</b> <ul style="list-style-type: none"><li>➤ XEV20 support added for Site Supervisor.</li></ul>	✓
<b>Distributed Controllers</b> <ul style="list-style-type: none"><li>➤ Users can now customize Baud Rate, Data Bits, Parity, Stop Bits for select Modbus devices.</li><li>➤ Auto Search support added.</li><li>➤ General firmware device enhancements.</li><li>➤ High Frequency Sampling Mode (select controllers). Select points for sampling and set to ON to start the sampling period.</li></ul>	✓
<b>Application Status Screens</b> <ul style="list-style-type: none"><li>➤ Outside Air Temperature (OAT) and Outside Humidity (OH) added on the Status screen title bar for each application Status screen.</li></ul>	✓
<b>Serial Manager</b> <ul style="list-style-type: none"><li>➤ Added statistics to Device Comm Stats Log.</li><li>➤ General enhancements.</li></ul>	✓
<b>MQTT</b> <ul style="list-style-type: none"><li>➤ Enterprise software using MQTT API can now renew the certificate without having to manually load a new certificate.</li></ul>	✓
<b>Enhanced Serial Diagnostics</b> <ul style="list-style-type: none"><li>➤ Device Com Stats Log enabled in Com Ports settings.</li></ul>	✓

## Supervisory Controller 2.31F01 Feature and Fix Matrix

Features and Fix Descriptions		Supported in Supervisory Controllers 2.31F01
Fixes		
<b>CO<sub>2</sub> Suction Group</b> <ul style="list-style-type: none"> <li>➤ MT Shutdown Circuit no longer displays even when all loads are enabled.</li> <li>➤ The Oil Failure alarm now returns to normal when the COMP PRES OIL and Oil Sensor Type are changed to NONE.</li> <li>➤ Variable Speed Compressor will no longer ramp up while pressure is below setpoint.</li> <li>➤ LT Rack - The Pump Down setpoint is now correct at 125 PSI.</li> <li>➤ Property Sequence is now correct on the Outputs tab when more than 10 stages are configured.</li> </ul>		✓
<b>UI</b> <ul style="list-style-type: none"> <li>➤ User Management screen - Tile point settings are no longer in conflict if the user and user role have the same name.</li> <li>➤ Network Summary screen - language is no longer English after a user's language is set to Chinese Mandarin.</li> <li>➤ My Profile screen - Change of Language is now displayed in the confirmation dialog when saved.</li> <li>➤ Application Status screens - Points under Other Devices now appear normally after moving between tabs.</li> </ul>		✓
<b>XM Circuit</b> <ul style="list-style-type: none"> <li>➤ During Defrost cycle, "Did Not Defrost" alarm is no longer occurring.</li> </ul>		✓
<b>XM679K v4.2</b> <ul style="list-style-type: none"> <li>➤ Pressure Transducer can now be set to the max high limit of 60 with no "value out of range" error displaying.</li> </ul>		✓
<b>ETN Breaker Panel v3.2</b> <ul style="list-style-type: none"> <li>➤ Version 3.2 rails no longer enter a "deadlock" state.</li> </ul>		✓
<b>XCM25D</b> <ul style="list-style-type: none"> <li>➤ When Initial Sync has completed, the setting will now automatically go to OFF.</li> </ul>		✓
<b>System</b> <ul style="list-style-type: none"> <li>➤ Reboot no longer occurs after restore.</li> <li>➤ "Access Denied" message no longer appears when opening some applications.</li> </ul>		✓
<b>BACnet MS/TP</b> <ul style="list-style-type: none"> <li>➤ Two MS/TP routers are supported on a single COM Port.</li> </ul>		✓

## Supervisory Controller 2.31F01 Feature and Fix Matrix

Features and Fix Descriptions	Supported in Supervisory Controllers 2.31F01
<b>Physical IO Status</b> ➤ IPX AI - The set Engineering Unit (EU) will retain the correct setting when saved and screen reloads.	✓
<b>Suction Group</b> ➤ Compressor capacity no longer adjusts to a negative percentage when the controller is power cycled.	✓
<b>Alarms</b> ➤ Alarm communication will repeat the alarm message at the set interval. ➤ Smart Alarm information is no longer omitted from emails and is now consistent with the controller.	✓
<b>Offline Programming</b> ➤ A blank page is no longer displayed when creating a session.	✓
<b>Site Supervisor Display</b> ➤ Clean out is now functioning properly with firmware version 2.31F01.	✓
<b>Modbus Offline Delay</b> ➤ In General Settings, the Modbus Offline Delay will trigger an alarm at the configured time setting instead of one minute.	✓
<b>Enhanced Condenser</b> ➤ When the alarm out is on, the variable speed fans will now ramp up and down. The single speed fan banks are now cycled instead of operating in a constant run state.	✓
<b>Pointer Functionality</b> ➤ REST pointer functionality is now supported.	✓
<b>PIB Board</b> ➤ The IP Address of the PIB board is no longer changed when restoring a prepared setpoint file into the controller after a reboot. ➤ "Assertion Failed" message no longer appears during board upgrade.	✓
<b>Security Updates</b> ➤ In Network Settings, Force SSL is now enabled by default. ➤ The existing One Day Password is no longer supported.	✓
<b>Controller Reboot</b> ➤ Controller no longer reboots when point values are sent using <b>Send To Point</b> from Alarm Setup.	✓
<b>MQTT</b> ➤ Enhancements now prevent unreleased memory allocation.	✓
<b>ISD 2.0</b> ➤ Stand Alone Mode Alarm will no longer trigger when dip switch 9 is set in the Network Mode position.	✓
<b>CC200</b> ➤ When performing a BACnet firmware update, the new firmware will now be loaded.	✓
<b>Facility Status Display (FSD)</b> ➤ "Assertion Failed" message no longer displays in the Log Entry screen.	✓

## Supervisory Controller 2.31F01 Feature and Fix Matrix

Features and Fix Descriptions		Supported in Supervisory Controllers 2.31F01
<i>Fixes Continued</i>		
<b>XR75 v5.6 Device</b> <ul style="list-style-type: none"><li>➤ Properties now convert correctly when performing a restore from UltraSite to the Supervisory controller.</li></ul>		✓
<b>Generic Alarm</b> <ul style="list-style-type: none"><li>➤ The Generic Alarm is no longer triggering earlier than the set delay in the Standard Circuits application. For active Generic Alarms, if the occupancy changes, the alarm will automatically return to normal.</li></ul>		✓
<b>XM679K v4.2 Device</b> <ul style="list-style-type: none"><li>➤ Properties now convert correctly when performing a restore from UltraSite to the Supervisory controller.</li></ul>		✓
<b>Alarm Annunciator</b> <ul style="list-style-type: none"><li>➤ Alarm states between E2 and E3 controllers are no longer mismatched: Alarms not present in the E2 log no longer remain active on the E3 annunciator.</li></ul>		✓
<b>Enhanced Suction</b> <ul style="list-style-type: none"><li>➤ Properties now convert correctly when performing a restore from UltraSite to the Supervisory controller.</li></ul>		✓

### Resource Links for Upgrading Firmware

For more information on firmware upgrades, see the 026-4184 Upgrade Advisory:

<https://media.copeland.com/26c43266-6c38-4731-8934-b16d0056cfb8/026-4184%20Supervisor%20Upgrade%20Advisory.pdf>

For more information on E3 firmware upgrades before 2.20F03, see the 026-4185 Upgrade Advisory:

<https://www.copeland.com/documents/026-4185-upgrade-advisory-for-e3-controller-versions-below-2-20f03-en8070726.pdf>

For more information on Supervisory Controller Password Management and Security, see the 026-4923 Password Management Guide:

<https://media.copeland.com/17e2abee-4e3c-413d-8bbc-b30900b07bc8/Supervisory-Controller-Password-Management-Guide.pdf>

## Security

*At Copeland, we prioritize the security and safety of our customers and their systems. Over time, Copeland has conducted a variety of security assessments and penetration tests against this control system. Any critical issues that were discovered during these testing procedures are addressed in updates and releases of the product. As threats and vulnerabilities continue to evolve and be discovered we will continue to assess, test and update these control systems during their active life cycle to help provide peace of mind to our customers.*

*Copeland recommends adhering to all instructions and specifications included with the device and following all security industry best practices, including but not limited to:*

- Never expose the control system to the broader internet
- Eliminate or restrict access to administrative and generalized protocols like SSH, FTP
- Restrict inbound/outbound communications to and from the device
- Ensure default accounts are updated, and strong passwords are used
- Configure and enable TLS for web-based traffic
- Apply patches and updates in a timely manner

## Supported Browsers

- Google Chrome 105.0.5195 and later
- Firefox 105.0 and later
- MAC Safari® 14.1.2 and later
- iOS Safari® 14.7 and later
- Edge 84.0.522 and later
- Android Chrome/WebView 105.0.5195 and later

Visit our website at [copeland.com/en-us/products/controls-monitoring-systems](https://copeland.com/en-us/products/controls-monitoring-systems) for the latest technical documentation and updates.

For Technical Support call **833-409-7505** or email **ColdChain.TechnicalServices@Copeland.com**