



## Copeland Corporation

Copeland Corporation, part of Emerson Climate Technologies, is a pioneer in the heating, ventilation, air conditioning and refrigeration industry and is the world's leading manufacturer of compressors.

## Background

Growing global demand has driven Sidney, Ohio-based Copeland Corporation to continue to boost production and efficiency throughout its organization. Manufacturing automation is one way the company responded to this challenge. Yet, as manufacturing automation increased, the tolerance for downtime decreased, making high availability network protection a higher priority.

## Case Summary

**Location:** Sidney, Ohio

**Products/Services:**

- Liebert GXT UPS
- Liebert Intellislot OpenComms Web Card
- Liebert Npower UPS

**Critical Needs:** Deliver improved power availability to support increasing manufacturing automation.

## Results

- Successful implementation of manufacturing automation program.
- 100 percent perfect availability of remote network systems.
- Increased visibility into remote business-critical network locations.

## The Situation

An established leader in the HVACR industry, Copeland produces high-efficiency compressors, condensing units and electronics for commercial refrigeration and residential and commercial air conditioning applications. The company's Copeland Scroll™ compressor is renowned for its proven performance, enhanced reliability and high efficiency.

In addition to a main computer room housing mainframes and servers protected by a 130 kVA Liebert Npower UPS, the Sidney facility has 17 network closets in the main plant and seven at remote locations. Network lines from both the office and factory come into these sub-computer rooms, which hold Cisco switches and routers to tie the shop-floor machines to the main computer room.

Before the latest round of plant modernization began, network closets were vulnerable to power loss. "In the past, the only way we knew if we had an issue with a UPS was if we had a power failure and the UPS would not work," says Phil Stickel, manager of Information Systems at Copeland. "Sometimes switches wouldn't roll over to UPS and other times we would discover that the batteries were dead."

But as manufacturing automation increased, the tolerance for downtime decreased. In response, Stickel took a hard look at the UPS systems supporting his increasingly mission-critical network devices.

"If the machines on the shop floor can't communicate with our SQL servers, we can't make compressors," Stickel says. "We could no longer be exposed to that risk. We needed to deliver 100 percent uptime, and we had to prove to management that we could guarantee it."



Stickel (right) pictured here  
with Cameron Franklin,  
Network Engineer

***"With the Liebert UPS, I can now confidently  
guarantee management that we will have  
100 percent power to our systems."***

*Phil Stickel, Manager of Information Systems, Copeland*

## The Solution

To develop a more proactive approach to power management, Stickel and network engineer Cameron Franklin consulted the SMS Group, a Liebert Solutions Partner that provides systems integration solutions for manufacturing businesses. The SMS Group worked closely with the local Liebert Representative, Uptime Solutions, to deliver exceptional local support.

After analyzing the network closets, Sales Engineer Mark Winner recommended replacing the existing UPS systems with the Liebert GXT UPS. This rack-mountable UPS delivers true fault-tolerant, double-conversion power protection in a compact size that is perfect for areas where space is at a premium.

The Liebert Intellislot OpenComms Card added SNMP and Web-based management to the Liebert GXT UPS systems. The card allows users to monitor and control a Liebert UPS from a Network Management Station, or any Web-enabled PC.

## The Results

Since standardizing on Liebert UPS in the network closets, Stickel has met his 100 percent uptime goal, even when an ice storm left the city of Sidney without commercial power for several hours.

Stickel is especially pleased with the monitoring capability of the Liebert UPS. “The monitors send an alert if the UPS requires maintenance before we have a utility power failure,” he says. “That way, we know our UPS is always available, and so is our network. With the Liebert UPS, I can now confidently guarantee management that we will have 100 percent power to our systems.”



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