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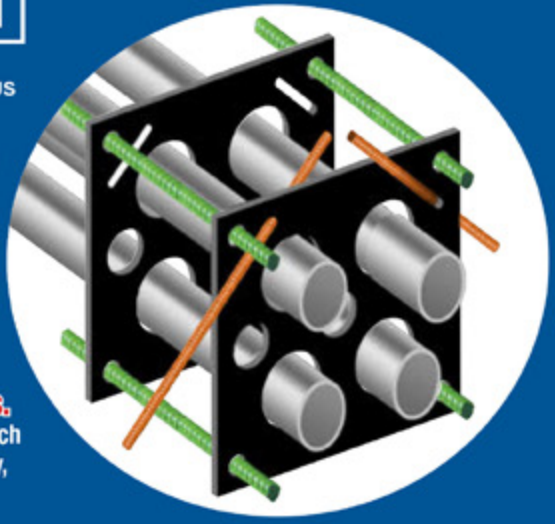

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Image courtesy of Emerson Automation Solutions

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# Generator InterLock Technologies, LLC

**Generator InterLock Technologies, LLC**, is a small-based company that manufacturers and sells its products across the country. The company was founded after Hurricane Isabel hit the east coast in 2003. The product was developed to meet the need for a safe way to use portable generators to power homes in the event of power loss.

The initial inspiration for the product came from a persistent friend of an electrician working for Master Electrical Services. As electrical contractors, they had seen various unsafe and illegal methods that people had used to try to power their houses with their portable generators. The electrician set out to develop a product that would meet National Electrical Code requirements and at the same time be cost effective and convenient for the homeowner. From that original inspiration came a new company: Generator Interlock Technologies or GIT.

The Interlock Kit is a simple safety product that locks out the Main breaker in the existing home panel and allows for the portable generator to power the home through a back feed generator breaker. While many electrical inspectors liked the product; they all agreed that the product would have to be listed to UL standards. After thousands of dollars in fees, rigorous tests, a year of changes and modifications, the Interlock Kit was finally approved for production to be used with panels listed under UL Standard 67.

The company started filling orders in early 2005, using Master Electrical Services as its basis for customer awareness. Starting with a few kits that fit the most recent Square-D and Cutler Hammer panels, the offerings grew to over 30 different models in less than one year. Generator Interlock Technologies now has kits for panels from 30 years ago to the most current and they continue to add new kits to meet their customer's needs. While contractors in Florida and the North East are the biggest customers, Interlock Kits have been sent throughout the United States and parts of Canada. Whether the power loss is due to costal hurricanes or from crippling ice storms in the northern , GIT has a kit that will allow customers to keep the power on in their homes.

The Interlock Kits are designed to be installed by licensed electricians and are cost effective for both the customer and the installer. Other products on the market such as generator sub-panels and transfer switches require extensive rewiring of the home panel, often taking the electrical contractor 6 to 8 hours to install. With the Interlock Kit, a qualified electrician can install a complete system in 2 hours or less by simply mounting the correct kit to the face of the panel and wiring a generator convenience outlet to a breaker installed in the panel.

***With the Interlock Kit, a qualified electrician can install a complete system in 2 hours or less by simply mounting the correct kit to the face of the panel and wiring a generator convenience outlet to a breaker installed in the panel.***

To use their portable generator, a homeowner plugs an extension cord from their generator to the new generator convenience outlet. He then starts the generator, turns off the main breaker, slides the Interlock Kit, turns on the generator breaker and selects the circuits for use up to the capacity of the generator.

Generator Interlock Technologies' Kit is a defining safety product that has been recognized as a Innovation Award Winner by *Electrical Contracting Products* magazine and one of the Top Products by *Electrical Products and Solutions* magazine.

Generator Interlock Technologies, LLC, has taken a problem of safety and convenience and developed a system to keep danger and expenses to a minimum. Starting with an idea of helping a friend in need, to helping thousands across the country, GIT continues to grow due to its commitment to deliver a quality product. Visit www.interlockkit.com for a complete list of products and details. ❑

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**Vince Miller started Miller Safety Consultants,** a veteran owned business in 1999. The goal of the business was to provide cost effective safety consulting, employee training such as: confined space entry, fall protection, electrical safety and provide sales of electrical shock and flash protective equipment and fall protection equipment to businesses in the Washington DC area.

Reliance Industries provided fall protection products and much of the sales and training was on behalf of the supplier. In 2000, the owner decided to retire from his business, and Vince decided to discontinue the fall protection line of his business and concentrate more in the electrical training and products.

Vince had been a distributor for Certified Insulated Products (CIP), a manufacturer of electrical insulated tools and electrical arc flash clothing manufactured by Otex in Rochester, New York. As a distributor, Vince provided sales through his internet website and much through relationships with electrical contractors. His training was a classroom environment and was provided directly to customers but he also taught as a sub-contractor for other safety consulting companies and the Chesapeake Safety Council in Baltimore, Maryland. In 2005, Vince partnered with Vivid Learning Systems in Cascades, Washington to provide on-line training in safe work practices.

Training in electrical safe work practices is still provided locally in the Washington DC area and as a partner with an electrical engineering firm and online. The training is based on the Occupational Health and Safety Administration (OSHA) standards and the National Fire Protection Association (NFPA) 70E standard.

Miller Safety Consultants is now a distributor for Cementex USA, Burlington, New Jersey, for insulated tools and equipment and clothing from OTEX Protective, Rochester, New York.

The majority of his sales of products are from the web-based store. Cementex is nationally known for their quality equipment. Otex Protective is becoming more known for their quality clothing. For years, they have manufactured their products under other provider labels. Vince chose to not create his clothing line, but to sell the manufacturer product.

Vince has worked with many electrical company employees to fine-tune the clothing to be more comfortable for the user. Working closely with the manufacturer, they have made slight changes in how the cloth pattern was modified to meet final production. An example is the lightweight 40 Calorie vented hood offered by Otex.

The material is of the latest technology. The vented assembly is constructed for balance on the back of the hardhat and the airflow is 27 CFM to prevent fogging of the face shield and provide cooling to the worker. It took over a year to develop the product with the user prior to having the hood "flash tested". This product is now standard issue with many electrical contractors.

Being a small business and having quality providers has resulted in satisfied customers for Miller Safety Consultants. Being a direct supplier for OTEX Protective, another small business means customized customer needs can be met. ❑

*For more information, visit Miller Safety Consultants at: www.electricalsafetysupply.com, email Vince at: sales@millersafetyltd.com or give him a call at (703)367-0404.*

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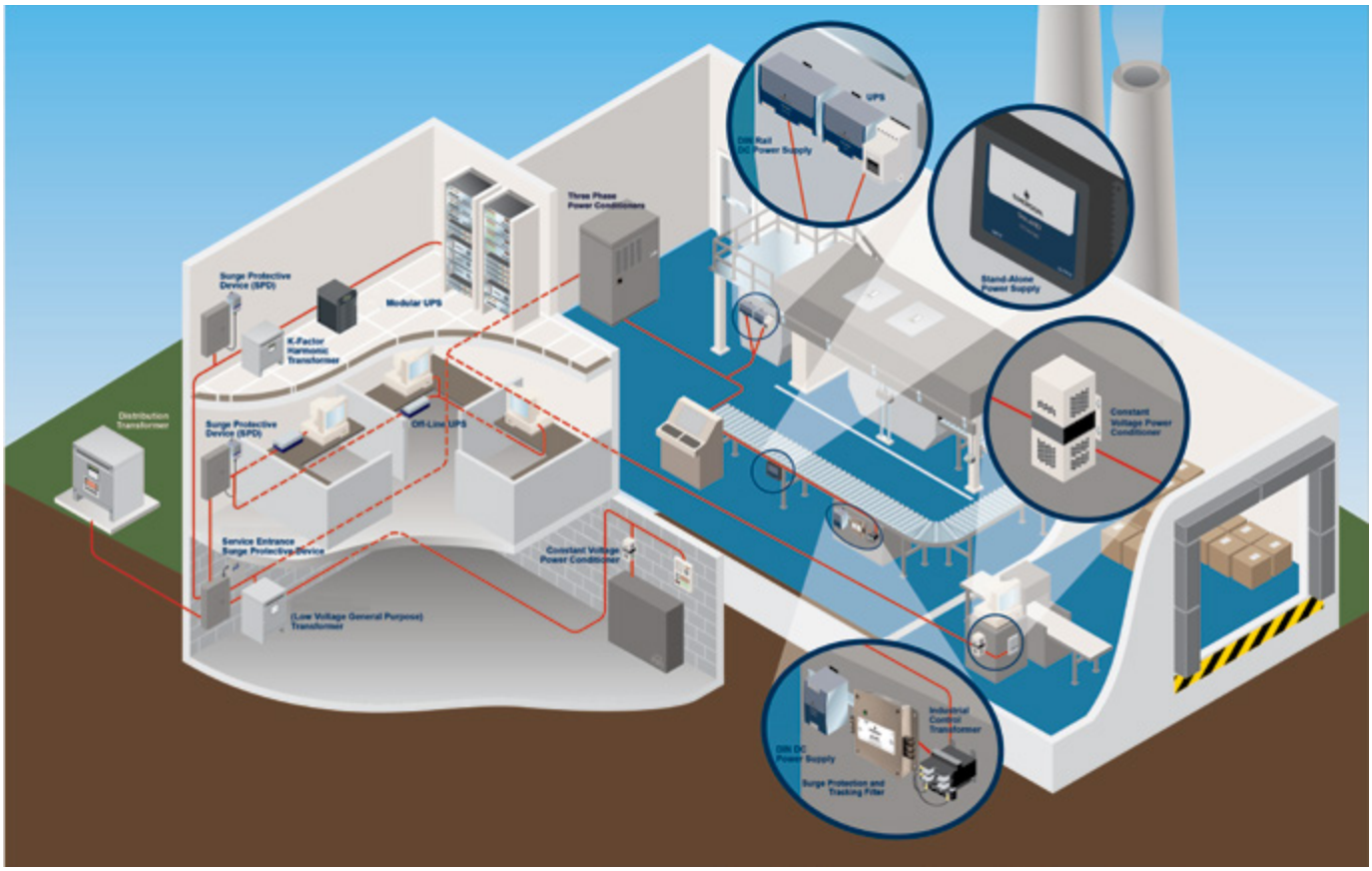
# Protecting Equipment Against Poor Power Quality and Disturbances

BY MARK DZIEDZIC

**YOU DON'T THINK TWICE ABOUT INSURING YOUR CAR,** health, and home but what about providing protection for your facilities automation equipment, sensors, servers and microprocessor-based controls and systems? All those are subject to power quality disturbances that cost American manufacturers $26 billion annually in damaged machinery, work stoppage, lost data, and energy costs. The good news is understanding the causes allows you to take some simple steps help manage the problems.

(CONTINUED ON PAGE 10)

# Emerson Automation Solutions (CONTINUED FROM PAGE 9)




When designing a power system for load sensitive equipment, the main rule is to make power quality the first consideration, not the last. Threats to load sensitive equipment come from inside and outside the facility. These can range from impulses, voltage sags, swells and noise, to interruptions due to utility brownouts and total blackouts. This whitepaper addresses ways to protect against those threats.

## Some Sources of Power Disturbances

Outside the facility, disturbances account for approximately twenty percent of recorded power quality events. Along with utility brownouts and blackouts, lightning strikes create high energy, transient voltage spikes that can disrupt power. Don't forget the utility power factor correction capacitors can cause problems as well. As will re-closures when the utility is clearing faults or switching power. Add in mother nature, high winds that blow tree branches into power lines or ice storms that can bring AC lines into contact with the ground or cause a short between phases. External sources of power quality problems exist everywhere.

Internally, on the other side of the electrical meter is your facility. Eighty percent of power problems are due to issues from inside your own walls. In an average factory, power problems primarily involve surges (62%) and sags (29%), with the balance being impulses, harmonics and the loss of AC line voltage altogether. Culprits may be electrical noise from a variable frequency drive, or a high inrush current from a motor or spot welder, or an electric arc furnace drawing several times its full load current when starting. Add to that other factors that can threaten power, improper grounding, improper routing, or even an undersized distribution panel. Whatever the source, poor power quality jeopardizes machine availability and ultimately, profits.

Throughout your facility, there exists mission-critical equipment, each interdependent on one other, complicating your electrical system. Power quality problems can bring any one of these operations or controls to a grinding halt at any time, usually at the worst possible moment. Power quality disturbances occur at varying magnitudes and rates, depending on the utility power at the service entrance and the electrical/power infrastructure on the plant floor. Plus, different types of equipment are sensitive to different types of loads. Microprocessors are highly sensitive to impulses, like motors or HVAC compressors. Lighting systems are susceptible to sags, swells or brownouts. Computer based controls, data storage, alarms and safety equipment are easily damaged by power interruptions. The truth is, even the most ideally installed and maintained equipment in a perfectly engineered facility can introduce power quality problems as the equipment ages.

To keep your facility up and running efficiently, you need to determine the costs of prevention and remediation, and then compare those to the costs of poor power quality interrupting or damaging your facility or systems usually resulting in downtime and lost productivity.

## Total Power Quality Solutions

You need to understand and implement a means to stabilize, (CONTINUED ON PAGE 12)

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# Emerson Automation Solutions (CONTINUED FROM PAGE 10)

control and manage your power equipment needs — from the service entrance down through the branch distribution panels, including all critical points of use, as well as controls, communications and data lines. You need a comprehensive Total Power Quality Solution.

## Control Power Solutions for Point of Use

To prevent premature wear on machines and computer equipment, you also need to protect them from momentary losses of line voltage, which are the most frequent of power quality disturbances found in industrial facilities. You need to enable your electrical system to safeguard almost any equipment application with a complete line of switching and linear power supply technologies. Properly sized power supplies ensure the right voltages are getting to your equipment or controls, regardless of voltage sags.

Control transformers are installed to convert the available voltage to accommodate electrical circuit or equipment requirements. They are designed and built in a vast range of configurations to meet requirements for variables such as power, heat, voltage and environmental conditions.

## Power Quality Solutions

Protecting critical data on network devices from surges and noise is critical to production. Adding surge protection devices is an essential line of defense in protecting your production line and facility. They focus on limiting high-voltage spikes to a level that is acceptable to most electronic equipment. Choose components that are placed in parallel with the line and serve as a clamping mechanism for high-energy impulses. Tracking filters are an ideal solution for microprocessor-based products to provide clean AC power at the equipment level avoiding damaging degradation or "electronic rust" over time. Finally, data/signal line products can be used to protect your point of use equipment from high-energy impulses protecting controls and critical data you need for your operation.

One of the most effective means for optimizing and protecting production efficiencies is with dedicated power conditioning solution. Power conditioners insulate equipment from damaging transients and noise, voltage surges, harmonics and changing voltage conditions that cause 95% of all power quality issues, except a total loss of power.

Because you cannot always control a complete power loss, uninterruptible power supplies (UPS) can be installed alternatively to ensure continuous operation and/or data protection during a power interruption. Certain UPS prevents power interruptions from affecting production and seamlessly switching to back-up battery power the instant it detects a voltage irregularity.

## Power Distribution Solutions

Reliably converting the voltage coming into facilities is essential. Facilities are challenged in procuring the transformer that can safely, efficiently, and reliably deliver the proper voltage for their specific needs. There are a broad range of transformers available for applications across manufacturing facilities, most can be manufactured standard or depending on the application specifically configured for your needs. This means they are designed and built to meet requirements from normal to harsh environments with power, heat, voltage, and environmental conditions in mind.

## Service and Support

Selecting the proper Power Quality Solution for your application can be tricky. Choose a manufacturer with experienced and dedicated sales representatives, along with available online tools, to help you make the right choice, every time and providing the support when you need it.

## Conclusion

Understanding power quality may seem abstract, but as facility managers and equipment owners know, good power quality can boost both productivity and profits, while poor power quality can drain the bottom line due to malfunctioning equipment, downtime, idled workers, energy costs and product scrap.

Given the relative costs of power protection devices versus the cost of doing nothing against poor power quality, the devices that improve power quality within industrial and automation settings by OEMs are worth their upfront costs and will continue to pay dividends. Devices that are integrated or bundled within new equipment or control cabinets offer a competitive advantage for the manufacturer's equipment. For a facility owner, the cost of downtime will hurt revenues and there is a need to protect bottom line.

The users for power quality devices within the MRO, industrial and commercial market spaces all have similar goals. Understanding that there is a potential for a return on your investment to prevent a major shutdown or damage to equipment is important. When a production line or a facility goes down, it typically requires fast attention. However, you can be prepared in advance, or even prevent, with some simple strategies, or applying total power quality solutions, no matter what kind of facility you have. ❑

**Understanding power quality** may seem abstract, but as facility managers and equipment owners know, good power quality can boost both productivity and profits, while poor power quality can drain the bottom line due to malfunctioning equipment, downtime, idled workers, energy costs and product scrap.

**ABOUT THE AUTHOR:** *Mark Dziedzic is the Sr. Product Marketing Manager, SolaHD Power Quality Solutions at Emerson Automation Solutions.*

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# 4 Differences Between Commercial & Residential Lighting

BY BRAD McELROY

**COMMERCIAL AND RESIDENTIAL LIGHTING** might look similar, but their design, purpose, and manufacturing couldn't be more different.

Depending on its application, commercial lighting can be customized to fit any facility and its operations. Brightness intensity, maintenance requirements, and warranties are all important factors when looking at commercial fixtures.

On the other hand, residential lighting is pretty simple. It doesn't need to meet the same requirements as commercial fixtures — like nearly endless hours of operation — so cost and quality are the most important factors to consider when retrofitting a home or outfitting a new one.

To set the record straight, we're taking a look at the four biggest differences (and similarities) between commercial and residential lighting.

## Commercial Grade vs. Residential Grade

First, let's talk about "grade." From a manufacturer's point of view, there is a difference in the grades of different fixtures and lamps. Commercial-grade fixtures are engineered for longer lifespans and longer continuous runtimes. They also usually feature tougher finishes or thicker bodies to (CONTINUED ON PAGE 16)

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# City Electric Supply (CONTINUED FROM PAGE 14)

stand up to more wear and tear.

Jim Glass, the City Electric Supply (CES) District Manager for Daytona Beach, uses his experience as an electrical supplier to weigh in on the differences between commercial and residential grades that electricians may not know about.

"A huge difference between commercial and residential LED lighting is the quality of the LED modules themselves and their ability to put out consistent lumens and color," Jim Glass said. "The LED modules are rated by what is called a BIN rating. Typically, commercial LEDs are made with higher bin-rated LEDs, which equate to higher quality and cost."

As a result, commercial-grade fixtures generally see better warranties. Not only is it manufactured with durability in mind, but its warranty is also factored into its cost-savings, which is huge when it comes down to a commercial facility retrofitting their building with energy-saving LEDs.

Residential-grade fixtures are manufactured to be as affordable as possible while still meeting energy-efficiency standards. Because they don't need the same requirements as commercial fixtures — like nearly endless runtimes — they are built with cost-effective components. Residential-grade products also have shorter warranties because replacing the fixture or lamp is more affordable and cost-effective for homeowners than manufacturers pricing in longer, comprehensive warranties.

Along with warranties, the biggest difference usually lies in the LED chip and driver. Commercial-grade products are engineered specifically for demanding applications, meaning they have improved drivers, heat sinks, LED chips, and lenses. Although they cost more, they are generally better and last longer. (CONTINUED ON PAGE 18)

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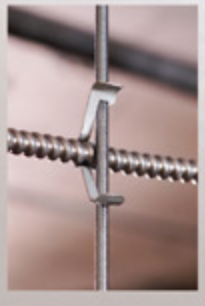

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# City Electric Supply (CONTINUED FROM PAGE 16)

### 1. Purpose

The biggest difference between commercial and residential lighting has to do with its purpose.

Focused on complementing a home's aesthetics and interior, residential lighting is typically used as ambient light. It makes a home feel more functional and more comfortable, while commercial lighting is more focused on creating an environment that is both productive and safe. Because of this, the lumen output inside a home versus an office or even a commercial facility will naturally be much lower and trend toward warmer colors.

On the other hand, commercial lighting is much more varied than residential lighting. Whether it's illuminating a workspace to improve employee health and wellness or illuminating a facility for maximum visibility, the commercial application will decide the luminous intensity.

### 2. Durability

LED luminaires are generally much more durable for commercial installations than residential installations. Long service hours and more demanding conditions require a manufacturer to build commercial LED luminaires with additional features, like an IP rating to stand up to dirt and water.

In homes, durability isn't a huge factor in the design of a residential LED luminaire, although it's still resistant to external shocks like jarring or bumping. Its lifespan is also much longer than other lamps and requires little-to-no maintenance besides replacing the luminaire itself.

If you're looking for the best of both worlds, CES District Manager Jim Glass has some advice that electricians may not have heard before.

"The industry has seen dozens of new companies emerge with the LED revolution we've experienced the last five to 10 years," he said. "Be sure the products you are considering buying are from a reputable manufacturer that stands behind their products. Quality products made by reputable manufacturers are not always the lowest in cost, but you have the reassurance that they will stand behind their products."

### 3. Cost

We've mentioned it before, but cost is another big difference between commercial and residential lighting. From improved durability to additional features, commercial lighting products simply cost more to manufacture.

For homeowners, these additional features are unnecessary. Instead of outfitting residential luminaires with unnecessary features, they're built to meet the most important specs needed inside a home, like improved energy efficiency and longer lifespans.

**"Lighting controls and connected lighting are some of the more exciting products evolving in both the commercial and residential spaces," said CES District Manager Jim Glass.**

However, that's not to say there's nothing innovative happening inside the home. Wherever you look, this industry is shaped by innovation, and contractors and customers are excited to pay a little extra for improved features.

"Lighting controls and connected lighting are some of the more exciting products evolving in both the commercial and residential spaces," said CES District Manager Jim Glass. "Occupancy sensors and ambient light sensors with integrated dimming capabilities are examples of these controls that are now offered by many different manufacturers."

"In addition, there are many platforms now that offer either Wi-Fi or Bluetooth connectivity, giving you the ability to control your lights from a mobile phone app or a software package on a computer. All of these features are important in lighting nowadays, and its impact on upfront cost is negligible when you look at savings over the long-term."

### 4. Lighting Design

In commercial spaces, lighting is focused on increasing efficiency in both cost and energy while improving safety and wellness for employees. Commercial color temperatures are generally around 4000K.

Although residential lighting changes throughout the interior of a home, most lighting trends toward 3000K, especially in bedrooms, to create a relaxing environment. Depending on the lighting in areas such as kitchens, bathrooms, garages, or laundry rooms, the lighting usually skews toward a higher luminous output.

With this in mind, lighting design is specifically tied to functionality, which is much more important in commercial applications than residential ones.

CES District Manager Jim Glass weighs in on the flexibility that contractors always look for in lighting design.

"Lumen and color tuning are by far the most popular features," he said. "One fixture can give you three to four color choices and two to three options for lumen output, all at the flick of a couple dip switches on the back of the fixture."

That customizable feature is important across all types of commercial lighting applications:

- **Decoration:** Restaurants, bars, and hotels are an example of decorative lighting and need different lumen outputs to accentuate the atmosphere.
- **Area lighting:** Factories, distribution centers, warehouses, and more require large areas to be well lit. LED luminaires help improve energy efficiency and visibility, both important factors when considering commercial lighting design.
- **Signage:** From emergency fixtures to advertising and storefront signage, this is another important application in commercial lighting design.

Finally, commercial lighting has to highlight areas with high movement and traffic for safety purposes. As a result, commercial lighting requirements are naturally much more demanding. ❑

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# Electri-Flex Organizes 1,000 Meal Food Drive for the 4th of July Holiday

ELECTRI-FLEX COMPANY, Roselle, IL, organized another 1,000-meal food drive this 4th of July holiday. Partnering with local community leaders at SCARCE and the DuPage County Sheriff's Department, the meals benefit Meals on Wheels for DuPage County residents. The food drive was sponsored by Electri-Flex Company, the Roselle Police Association Foundation, the DuPage County Sheriff's Office, Itasca Bank & Trust Co., Fates, Bodily & Parker PLLC, and SCARCE.

This is the largest amount of food collected and distributed, as each meal box contained a frozen chicken, a package of bratwurst sausages and buns, fresh fruit and corn, bread, potatoes, and assorted non-perishable food items. Meal boxes were prepared and distributed to 1,000 families on July 2nd, right before the 4th of July weekend.

Electri-Flex Company and the Kinander Family continue to organize charitable events, giving back to the local community. This event marks the 3rd consecutive food drive, successfully delivering meals to families in need. ❑

**ABOUT ELECTRI-FLEX COMPANY**
Electri-Flex Company, a leader in electrical conduit design and manufacture for over 65 years, produces Liquatite®, the most diverse line of liquidtight flexible electrical conduit in the industry. The company offers custom design, engineering, quality assurance and testing capabilities. For more information on Electri-Flex Company, call (630) 529-2920 or (800) 323-6174; fax: (630) 529-0482; e-mail: mktg@electriflex.com; visit: www.electriflex.com; or write: 222 West Central Avenue, Roselle, IL, 60172-1994.

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| 3/8 inch rod = Cat# TBT38-ST38 |

Support Up Thru 4 Conduits With 1 Support

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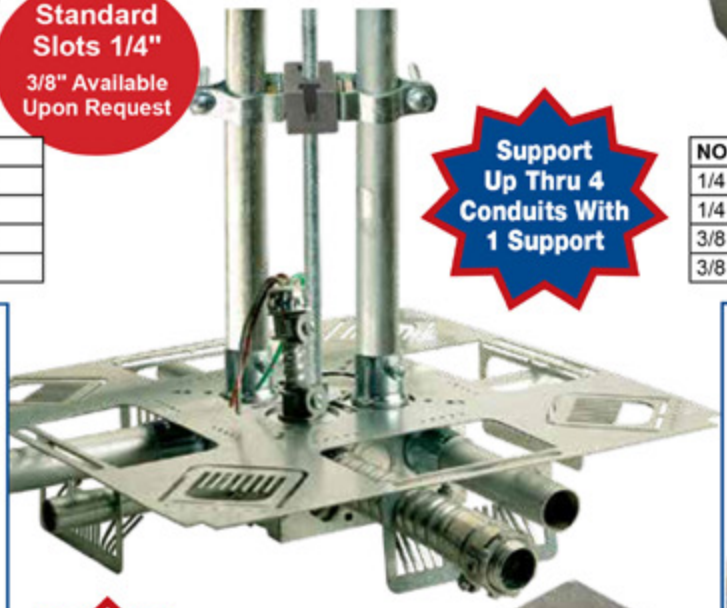
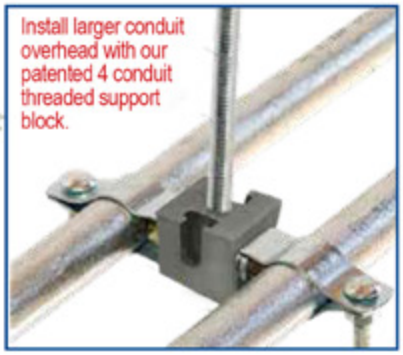
| 3/8 inch rod = Cat# TBT38-NT-ST25 |
| 3/8 inch rod = Cat# TBT38-NT-ST38 |



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IP19-20

# Woodlief Brings Diverse Experience to New Position

Danny Woodlief

WAGO has hired Danny Woodlief as their new Electrical Contractor and Wholesale Specialist for the Eastern US. He received his bachelor's degree in Aviation Management from Southeastern Flight School and holds diplomas in Industrial Distribution, Engineering Technology, Marketing and Voltaic Energy.

Woodlief's experience as an electrician started in high school and continued through college becoming a technician for American Airlines after graduation and then gaining journeyman status through Diesel Injection in Cary, NC. Following his certification in electrical distribution, his desire to understand the industry further moved him into marketing and ending up as the vice president of sales at Electro-mechanical Supply Company. After 20 plus years in electrical distribution, his focus shifted to factory automation, taking a job with GE as their Automation Sales Engineer before moving onto Wieland Electric as a regional manager.

Being hired at WAGO, he hopes that his experience will help guide him as he navigates his new position. "I am excited to contribute to our division, learn how to impact the market further, by bringing an already strong branded company into many more households," says Woodlief.

For more on the latest from WAGO, visit www.wago.us/press-contact. ❑

**ABOUT WAGO**

Innovation is at the heart of everything we do at WAGO. From our pioneering CAGE CLAMP® spring pressure connection technology to our extensive range of Interconnect, Interface and Automation solutions, such as the fieldbus independent WAGO-I/O-SYSTEM, our customers count on the unconditional performance and reliability of our products to ensure the safe, efficient operation of their systems every time.

For additional information, visit www.wago.us. Contact WAGO at 1-800-DIN-RAIL or info.us@wago.com.

# Platinum Tools® & Softing IT Networks Enter Into Supply Agreement

## Initially, Platinum Tools Will Sell and Distribute Softing's New NetXpert XG2 Throughout North America; NetXpert XG2 Provides 10G Speed Certification Over Copper and Fiber, and Complete Network Testing Over Copper, Fiber, and Wi-Fi Systems

Platinum Tools®, the leader in solutions for the preparation, installation, hand termination, and testing of wire and cable, is proud to announce it has entered into a supply agreement with Haar, Germany-based Softing IT Networks, GmbH.

Intially, Platinum Tools will sell and distribute Softing's NetXpert XG2 throughout North America. The NetXpert XG2 provides 10G speed certification over copper and fiber, and complete network testing over copper, fiber, and Wi-Fi systems.

"We are excited to enter into this agreement with Softing IT Netowrks and to launch such an impressive 10G speed certification tester as the NetXpert XG2," said Jason Chesla, Platinum Tools Director of Sales. "Softing IT Networks is synonymous with cutting edge technology and first class customer service, and we can't wait to begin this mutually beneficial relationship in North America."

Softing IT Networks specializes in measurement equipment for certifying, qualifying, testing, and documenting the performance of copper and fiber-optic IT cabling based on global standards. ❑

**ABOUT PLATINUM TOOLS**

Platinum Tools LLC, an NSi Industries company, was created based upon two very simple objectives. First, develop the absolute best possible solutions for the preparation, installation, and hand termination of wire and cable. Second, implement an operational infrastructure that can deliver these products in an efficient, timely, and high quality manner.

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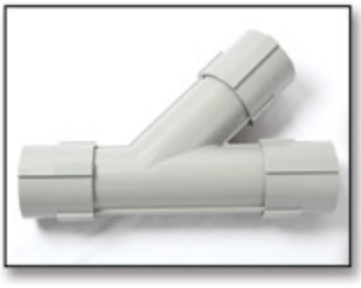

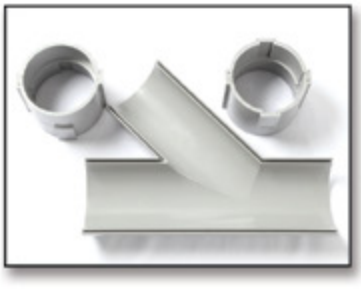

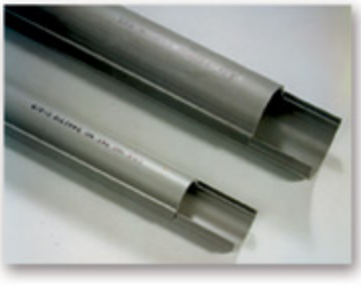

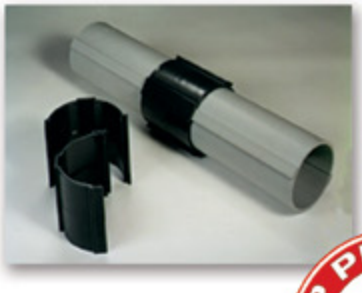

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# Legrand Introduces the Ultra-Fast Plus Power Delivery USB Outlet

*Debuted at Lightovation, the outlet will be available in both adorne and radiant collections this summer*

Legrand, a global specialist in electrical and network solutions, announced today the launch of its new Ultra-Fast PLUS Power Delivery USB Outlet. Combining the industry-leading amperage of the Ultra-Fast line with advanced Power Delivery, this built-in charging solution provides the fastest way to charge the newest phones, tablets, and laptops, matching their higher power capacity to reach optimal charging speeds. Built for intelligent charging, the outlet detects and delivers the precise amount of power needed for devices, allowing Power Delivery-enabled devices to charge up to 2x faster without sacrificing plugs or requiring a bulky adapter.

Consumers, contractors, and designers alike can easily upgrade a traditional outlet with the Ultra-Fast PLUS Power Delivery USB Outlet. The USB outlet includes two USB Type-C ports for convenient charging of multiple devices, including newer devices from Apple, Android & Google. Each port also features a charging indicator light for checking charging progress at a glance. The new Ultra-Fast PLUS Power Delivery USB Outlet offers multiple layers of overcurrent protection, ensuring both the outlet and the device operate at optimal levels without risk of damage. Further, it is all backed by a host of easy-to-use digital resources and a lifetime warranty.

"Building on the success of Legrand's adorne and radiant Ultra-Fast outlets, the Ultra-Fast PLUS Power Delivery charges even more quickly, offering a future-proof solution to meet the need for cutting-edge speed and accommodate the newest devices," says Manny Linhares Jr., Director of Product Marketing & Strategy at Legrand. "The addition of Power Delivery allows the outlet to operate at higher levels while maintaining safety with overcurrent protection, pairing top-of-the-line technology with Legrand's legacy of quality you can count on."

Debuted at June 2021 Lightovation, the adorne and radiant Ultra-Fast PLUS Power Delivery outlets will be available to the market in August 2021 in both 15A and 20A options. With adorne, the outlet will pair with any of the collection's 40+ wall plates available in chic materials and finishes like slate linen, matte antique copper, brushed satin brass and more. As part of the radiant Collection, the outlet will come in a sleek, screwless design in a variety of stylish colors. ❑

**ABOUT LEGRAND AND LEGRAND, NORTH AND CENTRAL AMERICA**

Legrand is a global specialist in electrical and digital building infrastructures. Its comprehensive offering of solutions for commercial, industrial and residential markets makes it a benchmark for customers worldwide. The Group harnesses technological and societal trends with lasting impacts on buildings with the purpose of improving life by transforming the spaces where people live, work and meet with electrical, digital infrastructures and connected solutions that are simple, innovative and sustainable. Drawing on an approach that involves all teams and stakeholders, Legrand is pursuing its strategy of profitable and sustainable growth driven by acquisitions and innovation, with a steady flow of new offerings—including Eliot* connected products with enhanced value in use. Legrand reported sales of over €6.6 billion ($7.4 billion) in 2019. Legrand has a strong presence in North and Central America, with a portfolio of well-known market brands and product lines. The company is listed on Euronext Paris and is notably a component stock of the CAC 40 and Euronext ESG 80 indexes. (code ISIN FR0010307819).

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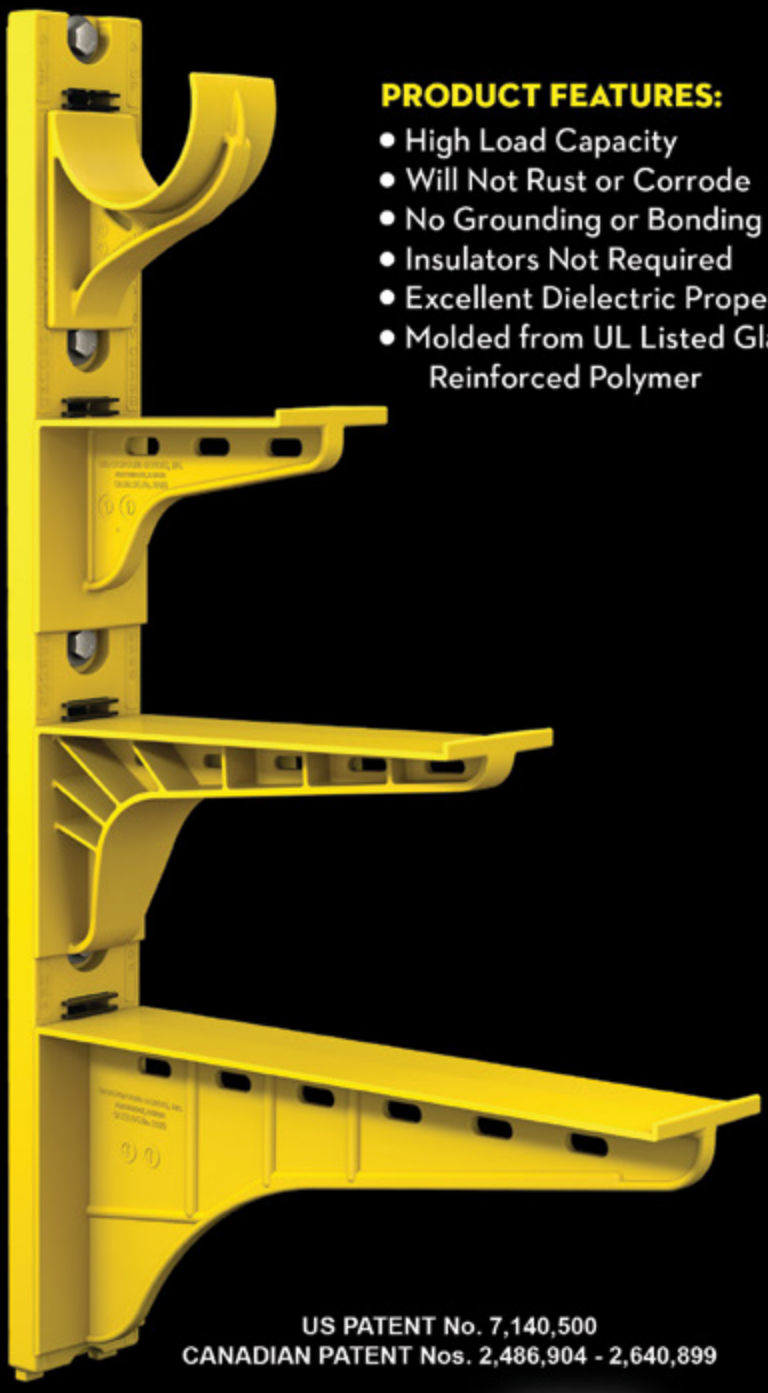

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## Emerson High-Efficiency Power Supplies Help Ensure Maximum Machine Availability in Harsh Industrial Environments

*SolaHD SDN-D Power Supplies Generate Significantly Less Heat in Cabinets*

SolaHD, an Emerson brand and one of the world's most innovative suppliers of power quality solutions, has strengthened its leadership position with the launch of the next generation SDN-D Series of power supplies that ensure maximum machine availability and minimal unplanned downtime over an extended lifecycle.

"SolaHD SDN-D power supplies are very energy efficient compared to standard models, making them transformational to performance achievable in the IIoT age," said Patrick Murphy, Product Marketing Manager for Emerson's SolaHD brand. "Emerson is committed to developing power quality solutions that help customers across an array of industries attain the most dependable and productive operations."

Optimized to thrive in heavy-duty environments, SDN-D power supplies deliver the industry's highest power efficiencies within an ultra-compact, slimline footprint. Available in 10 and 20 Amp models with 24 Vdc single-phase output, these exceptionally robust power supplies support manufacturers requiring extensive hazardous location certifications, a wide operating temperature range, and quick drop-in compatibility to replace existing power supplies. Optional redundancy modules allow two SDN-D power supplies to power the same load, addressing the possible loss of a unit due to failure and eliminating any risk of downtime.

Heat is the enemy of automation components, especially when those components are installed within an enclosed panel. By achieving up to 94.2 percent efficiency, SDN-D power supplies generate far less heat than standard power supplies, resulting in enclosures staying cooler on the inside and preventing heat-related component failure. This advantage is critical in operating environments that already have high ambient temperatures, such as petrochemical refineries, auto manufacturing, and food processing plants. Additionally, the higher efficiencies eliminate the expense of cooling fans in the panel and the need for power supply derating.

Manufacturing engineers and integrators were top of mind during the design of SDN-D Series. The overall footprint of SDN-D power supplies is 31 percent narrower than previous generation SolaHD SDN-C models to help these professionals make the most of crowded DIN rails. Reduced dimensions enable more components to be safely integrated onto panels and for the use of smaller, less expensive enclosures. This is especially important in complex automation applications requiring the extensive use of control components and availability of reliable power. Diagnostics information is easily viewable through the incorporation of a single two-color LED with printed status legend, and DC OK relay terminals for transmitting diagnostics data to a PLC or controller.

**For information, visit www.solahd.com**

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## Engineered Products Company Unveils New Small Space LED "Lite" Luminaire with Motion Sensor

Engineered Products Company (EPCO), a supplier of specialty lighting and wiring consumable products for electrical contractors, today announced that the company has added a new "Lite" version of the Small Space LED Luminaire to its product line. Still designed for indoor spaces that require a compact yet powerful lighting solution, the new luminaire is simply activated by detecting motion and quickly and easily transforms dimly lit, confined spaces into bright, well-lit locations with sustainable, energy efficient lighting.

The Small Space LED Luminaire with motion sensor provides unparalleled performance, improved efficacy, more usable lumens per watt and is a reliable and sustainable LED lighting solution for small areas. Perfect for new or retrofit applications, the Small Space LED Luminaire is cost effective, eliminates batteries and saves money. It comes with a 13-Watt LED Luminaire and snap-on frosted acrylic diffuser.

"We expanded our Small Space LED Luminaire product line to include a "lite" version to meet market demand," said EPCO President Jim Anderson. "Our new offering has a great price point, can be effortlessly installed and still provides a practical and simple solution for tricky, small space lighting issues."

The new Small Space LED "Lite" Luminaire comes with a five-year warranty and complies with general rebate requirements for lighting upgrades.

**For more information, visit www.engproducts.com**

# Making perfect connections has never been simpler. In fact, now it's a SNAP!

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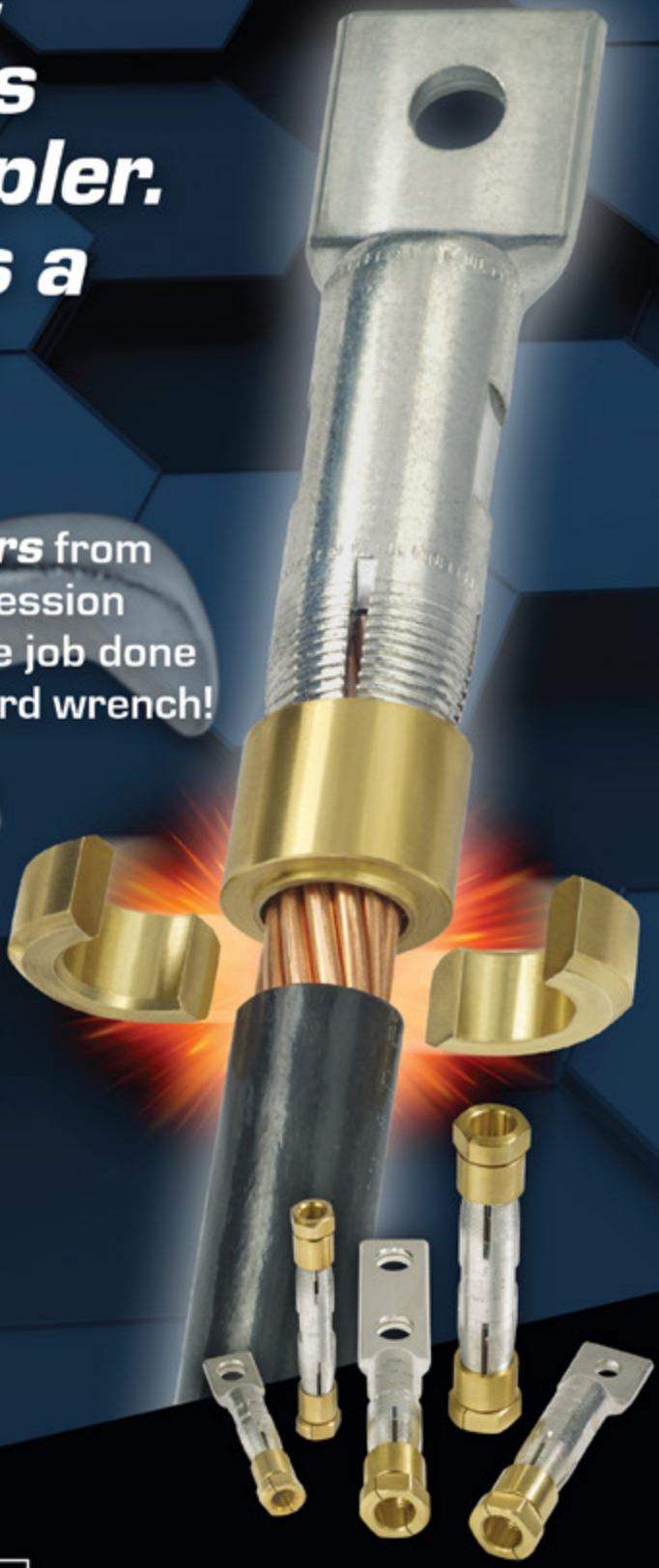

GREAVES

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## Good news from Kichler! The brand introduces its new Smart Control Timer for outdoor landscape lighting.

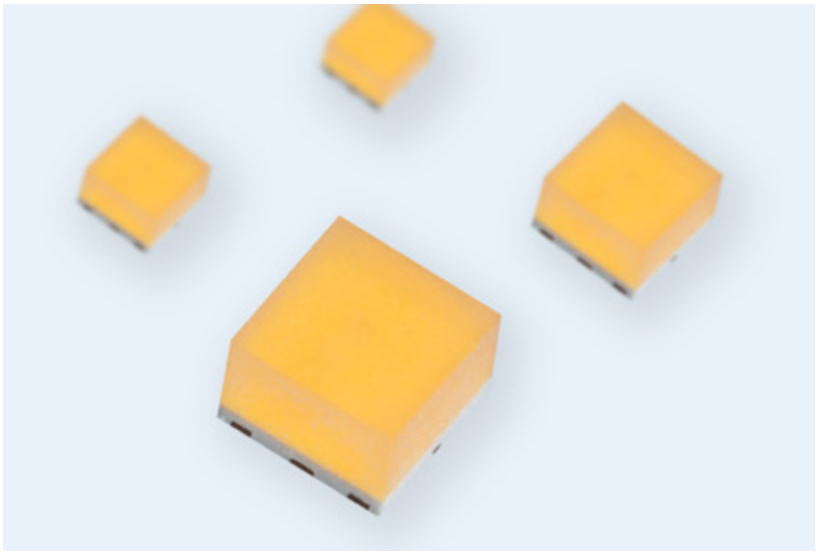
When paired with the Kichler Connects app, it allows you to digitally control your landscape lighting with a smartphone, tablet, or voice-controlled home device, like Amazon® Alexa® or Google Home®. With the app you can create custom on/off schedules, sync multiple transformers, and use one-step, preset scheduling for easy set-up.

The Smart Control Timer operates with Bluetooth® and Wi-Fi for cloud and location-based control, including astronomical scheduling, to align with the daylight savings hours and the changing seasons. An on-board memory can control your lights, even if your Wi-Fi connection is interrupted.

Plus, the Smart Control Timer's unique external antenna allows for long-range connectivity and control by extending the signal range from the transformer enclosure, supporting superior performance in more applications.

The timer works with Kichler's Contractor Series, Plus Series, and Pro Series transformers as well as certain competitive units and can be controlled by multiple family members.

**For more information, visit Kichler.com**



## Luminus Releases MP-3030-120H Ultra High-Performance Mid-Power LEDs

*Industry Leading Lumens/Watt for High-Performance General Lighting & Horticulture*

Luminus Devices announces the launch and immediate availability of a new high efficacy family of 3030 Mid-Power LEDs designed for high-performance general lighting and horticulture applications. These new MP-3030-120H ultra high-performance LEDs provide low thermal resistance, up to 226 lumens/Watt, high PPF/W, and CRI options of 80, 90 and 95 minimum. In addition, they are compatible with standard SMT reflow solder process and are RoHs and REACH compliant. Customers who are listing their products with DLC can leverage the MP-3030-120H series 9000 hour LM-80 reports in both PPF and lumens with Q90 and L90 >36k hours under a wide range of operating conditions. While competitors are quoting 30+ week lead times, Luminus has inventory at Digikey and Mouser and supports a standard 8 week lead time on new high volume orders.

What makes the MP-3030-120H stand out from other 3030 LEDs? Tom Jory, VP of Illumination Marketing, highlights "we're really hitting on all cylinders with this much-anticipated product launch since the product has outstanding efficacy, solid LM-80 in both PPF and lumens, high quality of light with optional 95 CRI minimum and lead times which enable customers to move quickly."

This product line is now available through Luminus' authorized distributors.

**For more information, visit www.luminus.com**

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## Nora Lighting Wet Location Emergency & Exit Fixtures Feature Battery Backup & Self Diagnostics

Nora Lighting's Wet Location Emergency and Exit Lights feature three updated models that all include self diagnostic testing; manual test switch; 90-minute backup battery; and brownout and short circuit protection.

The fixtures have impact-resistant polycarbonate housings with flame retardant/wet location ratings, and are designed for egress lighting where non-corrosive splashing and dripping may occur.

The lights are UL-listed and meet or exceed UL 924, NFPA 70 and NFPA 101 Life Safety Code. They include:

- Dual Head Emergency (NE-970) with two 2.5W fully adjustable LED emergency heads;
- LED Exit and Emergency Combination (NEX-720-LED) with dual 3.2W adjustable heads and exit sign; and
- LED Exit Sign (NX-617-LED) with red or green letters and optional cold weather heater.

Nora Lighting has served the lighting industry for more than 30 years and is a recognized leader in the development and introduction of LED products. Nora offers one of the industry's most comprehensive lines of LED luminaires, including: commercial, architectural and residential downlights; track and rail lighting; panels and troffers; MLS (multi-lighting systems); linear and under cabinet lighting; RLM, pendants and cylinders; tape lights; step lights; and emergency / exit signs.

**For more information, visit Noralighting.com**

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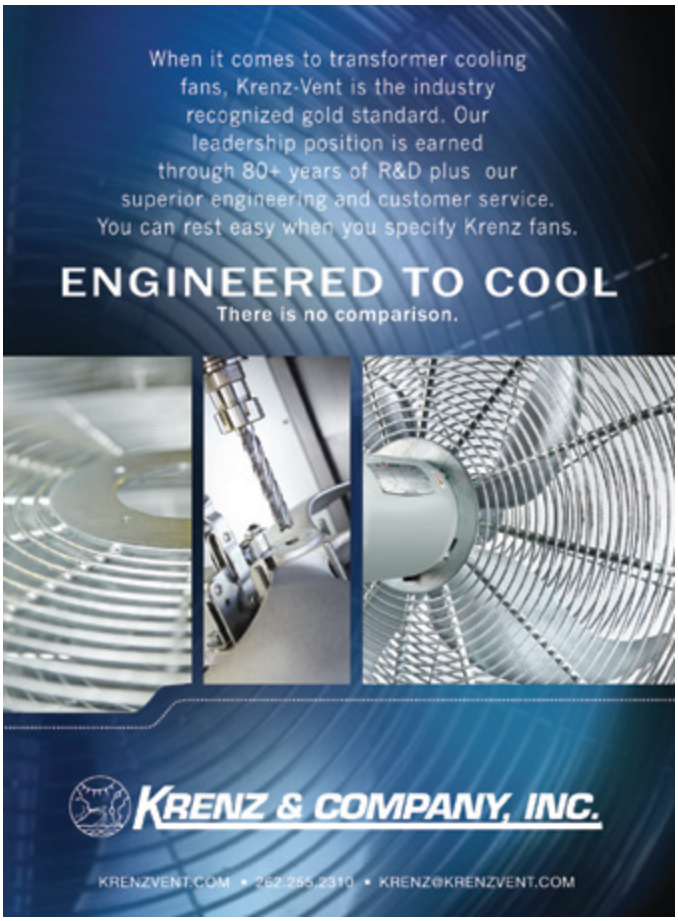
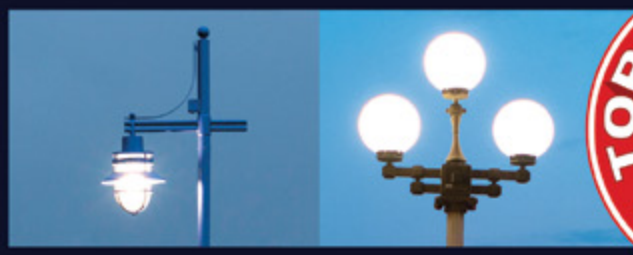
| HILTI INC | 17 | TENMAT INC | 31 |
| KOLBI PIPE MARKER COMPANY | 32 | UNDERGROUND DEVICES | 25 |



# OmniMax™

## LED Replacement Lamps

Beautiful light with the performance and connectivity today's cities demand. Its compact, omnidirectional design means OmniMax installs effortlessly into your existing decorative fixtures.



TOP PRODUCTS Electrical Products & Solutions 2020

No other LED retrofit does what OmniMax can do: Photocontrol Failsafe, Bluetooth controls, a wide range of CCT and a 10-year warranty will make this your best lighting investment of 2021.

- silicone optics for diffuse, low-glare light
- installs in any direction: up, down, horizontal
- active cooling & 4 layers of thermal management
- dimmable with ConnectLED, set dimming schedule
- offered in 6 CCT: 2000K-5000K
- 20kV-10kA surge protection
- radial light engine emulates HID burn center using the refractor's optical design the way it was intended!

Refurbish decorative streetlights with Evluma's

## Build-Your-Own Acorn

featuring

OmniMax

evluma

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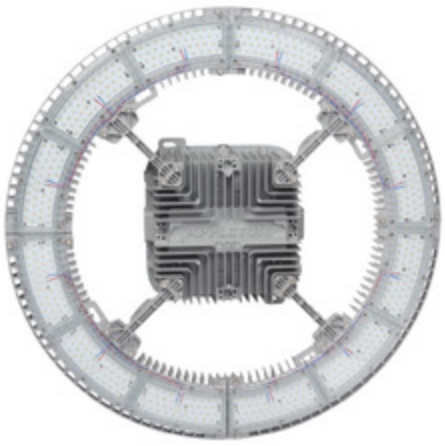

# Lighting Your Way at Greater Heights

The Appleton™ IHC LED Luminaire by Emerson is the ideal solution to deliver light from mounting heights of 50 to over 100 feet. With outputs up to 90,000 lumens, an IP66 marine and wet location rating, and an ambient temperature range of -40 °C (-40 °F) to 75 ° C (167 °F), the IHC was designed to meet the demands of your harsh industrial environment and lighting requirements.

Learn more at: **masteringled.com**

APPLETON™

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