

# Light that Delivers

INNOVATIVE LIGHTING ADVANCEMENTS MAKE LAST-MILE DELIVERY FASTER, SAFER, AND EASIER

 WITH SUCH A WIDE VARIETY OF SHAPES, SIZES, PRICES, AND RAW LUMEN OUTPUTS RANGING FROM 1,000 TO 20,000, OPTRONICS' ENTIRE FAMILY OF LED UTILITY AND WORK LIGHTS CAN MATCH ANY BUDGET AND ANY APPLICATION.



Any way you slice it, last-mile delivery is booming, and that's good for workers, fleets, and customers alike. However, with longer schedules and many deliveries in dark and lowlight conditions, safety, efficiency, and worker satisfaction issues can negatively impact this otherwise bright spot in the economy.

Without proper lighting, even the most diligent delivery professional can be slowed, frustrated, and otherwise encumbered before even leaving the cargo hold. Home deliveries in particular present a host of environmental variables that await workers once they exit

their vehicles, and that's before you add oncoming traffic.

"Seeing is an essential part of doing any job," says Marcus Hester, vice president of sales and marketing for Optronics International. "Without adequate lighting, you're turning the friction meter up and the productivity meter down."

The key is having an adequate amount of high-quality lighting both inside and outside the vehicle. Today's LED lighting provides the perfect combination of high illumination and low power consumption.

Because LED lights are brighter and more energy efficient than

incandescent lights, a vehicle can easily support more lighting in more places, without overtaxing its batteries, alternator, and electrical system. LED lights also last more than 50 times longer than incandescent lights, so fleets and workers can be confident that the LED lights will be there and operating correctly when they need them.

"As an integrated power delivery and lighting solutions supplier for commercial vehicles, Optronics has been watching and rapidly responding to the growth in the last-mile delivery segment," Hester says. "Our objectives are to develop and deliver lighting that solves lighting problems inside, outside, and around vehicles."



 Optronics' high-mount combination stop and strobe light comes in a convenient easy-to-install kit that includes a 6-inch oval LED warning light, plug-and-play adaptor, and pre-terminated lead wire.

## INSIDE JOB

Until recently, most interior lighting in cargo holds has been centrally located, generally in the middle of the ceiling. This seems intuitive, until you start factoring in what goes on in the business end of a delivery vehicle.

“The payload area of any delivery truck is a very dynamic environment,” Hester insists. “You’ve got people, machines, like forklifts and pallet jacks, and of course, cargo of all shapes and sizes, and at times, it’s all moving.”

Lighting that is positioned in the middle of a ceiling can be damaged or destroyed by being inadvertently struck. Even surface-mount and low-profile lighting can be an unintended target.

Central lighting would also seem logical for purposes of distributing light evenly throughout a vehicle. However, once you add cargo of varying shapes, sizes, and heights, you start noticing that the farther you get from the center, the more the light is obstructed and the darker it gets.

Optronics’ ILL38CMB Corner-Mount Interior LED Lamp was designed to reorient interior lighting to ceiling corners and away from the central core of a vehicle, making it less susceptible to needless damage. The corner-mount location also provides the added benefit of cross-directional lighting that helps minimize shadows and darkness, even when cargo is densely packed. The lights also come complete with passive infrared (PIR) sensing.

“By working with our clients and studying the last-mile delivery market, we realized that delivery folks will often just switch interior lights on and leave them that way throughout their shift,” Hester says. “PIR sensing makes life easier for workers because the lights turn on when a human is present and otherwise, stay off.”

## STRIP LIGHTING

Hester notes that another trend Optronics has seen is the proliferation of LED strip lights in delivery vehicles. These type of lamps are usually designed for standalone applications.

“When multiple LED strip lights are used together, each must be wired in a sequence, or ‘daisy-chained’ together,” Hester says. “It takes a lot



 The MCL80RCB lamp can be used anywhere an ID bar is mounted, and because that’s usually up high, a customer can use it to light cargo, liftgates, and the ground below.



 The ILL38CMB Corner-Mount Interior LED Lamp comes with a passive infrared (PIR) sensor that provides flexibility to the user and can be programmed to trigger either individual light segments or a vehicle-wide interior lighting array.

of time to install strip lights using this method, and the wiring usually ends up looking terrible.”

Optronics’ modular ILL23CB Modular LED Strip Light is 17.25-inches long and only 0.75-inches thick and can be mated together to form a solid, linear light source measuring 6.939 ft in length. Its design makes it easy to install, even in corners, and its automotive styling and end caps give the light a clean, finished look.

Each lamp comes with a power cap on one end and trim finish cap on the other. Both caps are detachable, revealing modular connecting ports that enable up to six of the lamps to plug together, giving the resulting lamp configuration a long, clean, seamless look.

According to Hester, Optronics has not only promoted the expanded use of PIR technology in commercial vehicle lighting, but has also pioneered the use of “smart” lamps that not only employ



↗ The ILL02 and ILL03 Opti-Brite Diamond Series Lamps offer four activation options. Users can choose SmartTouch with its dimming and memory feature, PIR with its infrared motion-sensing feature, a manual on and off switch, or a no-switch design.

PIR, but that can also be dimmed and can remember preferred settings.

“Our Opti-Brite Diamond Series LED Interior Lamps are thin, surface-mount lamps that are dimmable and able to remember previous intensity settings,” Hester says. “The lamps are designed for broad interior application flexibility and can be wired to operate manually or use their PIR sensors to automatically illuminate in the presence of human movement.”

## OUTSIDE THE BOX

Whether it’s daytime or nighttime, once workers emerge from the inside of vehicle, their eyes take a moment to adjust. During the day, the area surrounding the vehicle is lit by the sun, but at night, not only are eyes still adjusting, but the dark can be disorienting.

The situation can be exacerbated because workers, driven by performance expectations, are moving with all

deliberate speed. Liftgates, ramps, steps, and the surrounding terrain can all become hazardous if they can’t be seen.

“Delivery folks are often rushing to meet tight schedules and may be met with a variety of otherwise unseen obstacles,” Hester says. “Optronics believes that lighting the area surrounding the vehicle is just as important as lighting its interior.”

Optronics resolved to address the exterior lighting problem with a couple of solutions. Its product offering enables fleets to put bright, white LED light precisely where it’s needed, and in one case, without adding additional lights.

Optronics’ UCL41 Series Scene Light is engineered to deliver an intense beam pattern at a 45-degree angle to its mounting location. The lamp’s position and mounting height determines the size and shape of the scene area that will be illuminated.

The Optronics new MCL80RCB LED Combination ID Light Bar and Utility Light enables a vehicle’s light bar to serve double duty as a utility and scene light, whether it’s mounted high or low. Using the ID light already required for vehicles measuring 80 inches or more in width as a platform, the MCL80RCB LED Combination ID Light Bar and Utility Light incorporates two seven-diode white LED utility lights.



↗ Each ILL23CB Modular LED Strip Light comes with a power cap on one end and trim finish cap on the other. Both caps are detachable, revealing modular connecting ports that enable up to six of the lamps (almost 7 ft) to plug together, giving the resulting lamp configuration a long, clean, seamless look.

## VARIOUS APPLICATIONS

Optronics also recently introduced eight new LED utility and work

lights, expanding its total category offering by 40%. The new lamps range from utility and work lights to scene lights and even include a freestanding, rechargeable, cordless, multifunctional LED lamp. The products enable users to address a vast array of auxiliary lighting applications.

"It just makes sense that the more LED lighting you have illuminating the exterior of a delivery vehicle, the better," Hester says. This goes for the delivery workers and for the folks that may be on the road with them."

One of the most impactful advancements in vehicle lighting is a new category of high-mount combination stop and strobe light, which was just recently created by FMCSA. These supplemental lamps combine initial strobe pulses and then stay on, helping to alert drivers following delivery vehicles that they are coming to a stop.

"Delivery vehicles are constantly stopping to make deliveries, and this can take others on the road by surprise," Hester says. "Optronics has created an aftermarket kit that can allow fleets to easily retrofit existing vehicles.

## PACKAGE DEAL

Availability, ease of installation, and warranty are critical when considering which lighting supplier to choose. With more than 3,000 lighting products, Optronics has one of the broadest arrays of vehicle lighting products available anywhere. The company designs lighting and electrical systems that are easy to install and highly durable.

Many of Optronics' LED lamps, lenses, and housings are made of tough polycarbonate material that is sonically welded. Optronics' LED lamps also employ a solid-state, surface-mount device (SMD) design that protects their electronics against moisture, shock, and vibration.

Virtually all LED products from Optronics come with a no-hassle, one-diode lifetime warranty. This means

that Optronics will replace the lamp if even one diode fails.

Hester muses that with online purchases showing no signs of slowing down anytime soon, delivery vehicles are going to continue to be ubiquitous. "Everybody enjoys getting packages delivered," he says. "Optronics' overarching objective now

is to keep folks as safe as possible in the process." ♦

### FOR MORE INFORMATION

Find out more about Optronics' LED lighting, visit [www.optronicsinc.com](http://www.optronicsinc.com).

**TRIM-LOK INC.**  
TRIMS AND SEALS

Experts in Plastic and Rubber Profile Extrusions

**NEW PRODUCT**  
**PEEL & STICK Fender Flare**

**EASY INSTALLATION  
NO DRILLING!  
NO BOLTS!**

Part No. DD6234BT

<b>Edge Trims</b> Part No. 10063K1/8	<b>Rubber Seals</b> Part No. X1458BT	<b>Co-Extruded Flap Seals</b> Part No. DD6126
<b>Trim Seals</b> Part No. 4100B31/8C	<b>Locking Gaskets</b> Part No. LK1536	<b>Co-Extruded Trim Seals</b> Part No. DD6209

**Same Day Shipping on Thousands of Parts**

**FREE SAMPLES!**  
Contact Us Today!  
**800-349-5887**

HEADQUARTERS  
9855 HERMOSA CIRCLE  
BUENA PARK, CALIFORNIA 90620

MIDWEST MANUFACTURING  
1642 GATEWAY COURT  
ELKHART, INDIANA 46514

WWW.TRIMLOK.COM  
INFO@TRIMLOK.COM