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# MODERN WorkTruck SOLUTIONS®

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UPGRADE YOUR TOW-BEHIND  
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# **Illuminate Your Work Space**

**LIGHTING SOLUTIONS  
FROM OPTRONICS**







▲ THE ILL38CMB  
CORNER-MOUNT  
INTERIOR LAMP  
COMES WITH A  
PASSIVE INFRARED  
(PIR) SENSOR AND  
CAN BE SPACED AS  
INDIVIDUAL LAMPS  
WITHIN A VEHICLE OR  
CONFIGURED AS ONE  
CONTINUOUS BAR.





**L**ED technology essentially changed the equation when it came to commercial vehicle lighting.

Compared to incandescent lamps, LEDs last 50 to 100 times longer, provide superior lighting characteristics, and enable far greater application flexibility.

The technology is continuously improving as LEDs get steadily brighter while costs decrease just as steadily. The demise of the incandescent lamp is imminent within the commercial vehicle marketplace, and this ushers in a wide variety of products that simply couldn't before exist.

"We're entering what I would basically call a 'golden age' of vehicle lighting," Brett Johnson, president and CEO of Optronics International, says. "Our design engineers can put more lighting power in smaller packages, can perform amazing optical feats, and can put light in places that it's never been before."

## NEW DIRECTION

In April of 2018, Optronics introduced its new UCL41 Series Scene Light. The lamp is the first of a new family of directional scene lighting that casts a more focused beam of LED light in a direction that is accurately defined simply by its placement. Priced at roughly half the cost of traditional nine-diode scene lights, the UCL41



**▲ The UCL41 Series Scene Light is engineered to allow end-users to determine the size and shape of the scene they prefer to illuminate.**

Series Scene Light uses 12 diodes and advanced optical engineering to focus its optimal beam pattern.



**▲ The MCL79RCB casts two bright white LED beam patterns, and because vehicle ID lights are located at the uppermost point and at the center of the rear of a vehicle, the lamp is perfectly positioned to illuminate the business end of a vehicle.**

Until now, scene lights have generally just flooded an area with illumination, without regard for how wide or deep the scene may be. The result of ultra-wide beam pattern scene lighting is less focused and offers less usable light in

areas that may be most critical—those directly adjacent to the vehicle.

Optronics' new UCL41 Series Scene Light is engineered to deliver an intense white LED beam pattern at a 45-degree angle to its mounting position. The

lamp enables OEMs, bodybuilders, and end-users to determine the size and shape of the scene they prefer to illuminate. Mounting the lamp higher creates a larger scene, while mounting it lower creates a smaller scene, and the lamps can be rotated before mounting to deliver light

that is oriented to a vehicle's front, rear, and sides.

"Our new UCL41 Series Scene Light is the first to be engineered with the scene in mind," Johnson says. "Our design enables the engineers and those using a vehicle to configure a custom lighting scenario that best fits the specific need."

The low-profile surface-mount lamp is easy to install and requires only two mounting fasteners. Once the UCL41 is secured, a black- or chrome-coated plastic bezel snaps into position, giving the lamp a clean, finished appearance.

The powerful lamp measures just 8.7 inches in width and 2.95 inches in height. The lamp is only 1.59-inches thick when installed, including its mounting plate and bezel. In order to maintain the lamp's low profile, the UCL41's lens is designed with a 15-degree angle, relying on its advanced optical design to enable the lamp to cast its unique 45-degree beam pattern.

Optronics is also preparing to introduce its new MCL79RCB Sealed ID Bar with Integrated Utility Lamps, which combines two directional LED scene lights with a standard sealed ID bar. The new lamp will fulfill a vehicle's basic FMVSS 108 legal requirement of a three-light central ID configuration but includes the added benefit of two 12-diode directional scene lights.

The MCL79RCB casts two bright white LED beam patterns at 45-degree angles. Because vehicle ID lights are located at the uppermost point and at the center of the rear of a vehicle, the collocated scene lights are perfectly positioned to illuminate one of the most active areas of many work trucks.

The low-profile surface-mount MCL79RCB is just 1.54-inches thick and measures 22.45 inches in width and 2 inches in height. Like the UCL41 Series Scene Light, the MCL79RCB accommodates both 12- and 24-volt electrical systems and is IP67 rated. Both lamps come complete with a 6-inch hard-wired lead and ground wires, and both require only a 3/4-inch hole for the wire feed.

"The UCL41 Series Scene Light and the MCL79RCB Sealed ID Bar with Integrated Utility Lamps will change the way body designers and end-users think of scene lighting," Johnson says. "With their unique precision optics, the new lamps will be a low-cost, high-value option for work trucks, emergency, fire and rescue applications, as well as recreational vehicles."

## CORNER-MOUNT LAMP

Work trucks are so named because people work in, on, and around them. And, even though LED lighting is far more durable than incandescent or fluorescent lighting, it can still be damaged if in contact with tools, cargo, or equipment.

One of the dilemmas with vehicle interior lighting design is that in order to illuminate an area most evenly, a central location is often preferred. However, the placement of even a low profile lamp on the ceiling of a

vehicle's cargo or work area can make it vulnerable to strikes of foreign objects.

Optronics' new ILL38CMB Corner-Mount Interior Lamp moves a vehicle's interior lighting source away from potential harm and relocates it to the corners of a vehicle's ceiling. The corner location not only keeps the lights out of the way of the majority of potential threats, but provides opposing directions of illumination that reduce shadows and dark areas, thus superior interior illumination.

The ILL38CMB Corner-Mount Interior Lamp attaches to both the ceiling and the wall and has a modular design that allows it to be spaced as individual lamps within a vehicle or configured as one continuous bar of light throughout the entire length of the vehicle. The lamps come with a passive infrared (PIR) sensor that triggers either individual light segments or an entire interior lighting array.

The ILL38CMB Corner-Mount Interior Lamp is compatible with 12- and 24-volt electrical systems. It is perfect for both refrigerated and non-climate-controlled vehicles and has an operational range of between -4 and 140 degrees Fahrenheit.

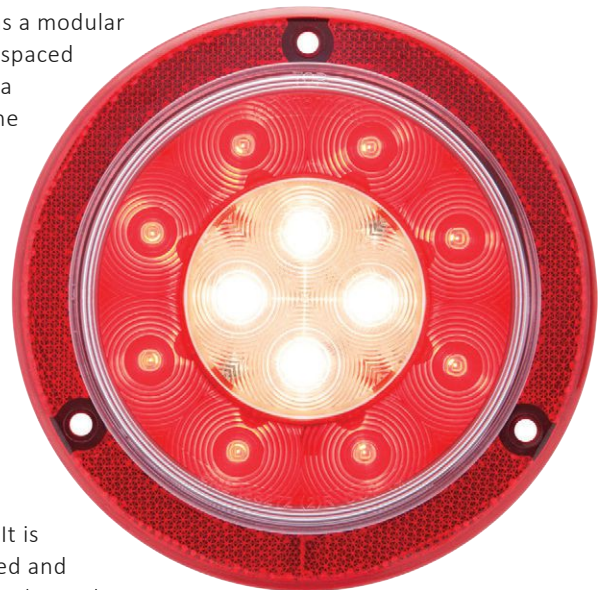
"Our new ILL38CMB Corner-Mount Interior Lamp takes interior lighting out of harm's way," Johnson says. "This light is a practical solution that provides a highly effective lighting environment and even knows when to turn itself on and off."

## REFLECTIVE FLANGES

In today's environment, delivery and service vehicles are on the road in increasing numbers and at all hours of the day and night. Whether carrying out duties in dense urban zones, neighborhoods, or rural areas, visibility and safety are paramount to both workers and those on the road around them.

Optronics responded by introducing several new LED lamps with high-visibility reflective mounting flanges. Like other vehicle conspicuity devices, the flanges help others on the road detect the presence, size, and shape of a vehicle whether its lamps are operating.

"The economy is booming and that means more vehicles are on the road both day and night," Johnson says. "Visibility has never been more important for the safety of vehicle operators and the driving public."



▲ The Fusion 4-inch round surface-mount combination stop, tail, turn, and backup lamp combines the functions of two lamps in one and also features Optronics' reflective safety flange.

The new STL201XRFHXB Fusion 4-inch round surface-mount combination stop, tail, turn, and backup lamp is two lights in one. The Fusion also features Optronics' reflective safety flange that provides a higher level of conspicuity.

The new STL13RFHXB seven-diode surface-mount 4-inch round LED stop, tail, and turn lamp and the STL413RFHXB four-diode surface-mount 4-inch round LED stop, tail, and turn lamp both feature Optronics' new reflective conspicuity mounting flange.

Optronics introduced its first line of multi-function surface-mount lamps in





2014 and is now a prolific producer of these versatile, low-profile LED lamps that require only a 1/2-inch wiring hole. Before the introduction of the surface-mount lamp, manufacturers had to design vehicles with 4-inch round or 6-inch oval mounting holes in body panels, frame posts, docking plates, or gussets to accommodate each separate lamp. The holes reduced structural integrity and allowed moisture, road debris, and other contaminants to enter into body cavities, promoting corrosion.

"Why design vehicles with 4- or 6-inch holes when a 1/2-inch hole is all that's needed?" Johnson says. "OEMs and bodybuilders understand the structural advantages of minimizing potential sources of corrosion while maximizing body strength. And, fitted with Optronics' reflective flanges, these lamps also promote safety by standing out not only in their performance as lamps, but even when they're off."

## COMPARTMENTALIZE

Work and service trucks are often called upon to perform 24-hour duty cycles. These vehicles often feature multiple compartments to hold tools and other equipment, and while highly functional during daylight hours, these compartments can present a safety challenge, particularly in dark and low-light environments.

Optronics' UCL07CB Heavy-Duty LED Silicone Rope Light brings reliable bright white LED light to otherwise dark and dangerous compartments. Earlier generations of linear strip lights that entered the market from offshore sources in 2008 had a reputation for being weak and undependable. Optronics understood that the rope light concept was sound but knew it needed to be engineered to withstand the rigors of the challenging commercial vehicle environment.

Optronics' new low-profile Heavy-Duty LED Silicone Rope Light is far more robust and, like all Optronics LED products, comes with a no-hassles



▲ Optronics' Heavy-Duty LED Silicone Rope Light lets workers avoid potential injuries from tools and sharp objects lurking in otherwise dark and unlit compartments.

lifetime warranty that replaces the lamp if even one LED fails. The Heavy-Duty LED Silicone Rope Light delivers a brighter and higher quality light than was previously possible, and the product employs some of the most advanced LED technology available today.

Optronics' tough new silicone rope light comes with a tenacious 3M adhesive backing and can be mounted virtually anywhere, allowing the tools, equipment, and other materials on shelves and in recessed areas to be clearly seen. Adequate lighting

promotes safety and reduces the risk of injuries to hands and arms while enhancing worker speed and efficiency.

"Our patented lighting technology is making the areas in, on, and around work trucks safer," Johnson says. "And I'm not aware of any fleet that doesn't want a safer workforce." ●

### FOR MORE INFORMATION

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