

Your Name in Lights

PATENTED TECHNOLOGY SLASHES THE COST OF INCORPORATING GRAPHICS INTO VEHICLE LIGHTING.

By Dustin Smith

For a long time, commercial vehicle lighting has fulfilled a strictly utilitarian purpose. The traditional four-inch round and six-inch oval stop, tail and turn lights have reliably served vehicles across America's highways, but they've rarely offered much beyond their core safety functions. While automotive lighting has evolved dramatically with distinctive signature designs becoming central to brand identity, the commercial vehicle sector has largely watched from the sidelines - until now.

A NEW BRAND OF LIGHTING

Optronics brought automotive styling to the commercial vehicle market in 2014 with its GloLight family of lighting. In 2019, Optronics introduced its first custom logo lighting solutions, which incorporated text and graphics with the company's GloLight technology. These lights integrated a company's

brand identity directly into functional vehicle lighting, creating a unique visual signature. The lamps garnered a lot of interest over the years, but the challenge has always been making this technology accessible to companies beyond large OEMs who could afford the significant upfront tooling costs and high minimum order quantities.

Optronics new STL104 Series custom logo lights address previous drawbacks, featuring patented technology that reduces cost of entry and production timelines. It opens the door for OEMs, fleets, upfitters and specialty vehicle manufacturers to incorporate branded lighting into their vehicles at a price point comparable to standard commercial vehicle lighting options.

ENGINEERING ACCESSIBILITY

The new custom logo lights come from a manufacturing process that maintains all the safety and visibility



benefits of traditional lighting while incorporating brand elements, without the prohibitive tooling costs that previously kept many companies from entertaining custom lighting.

STL104 Series features 29 SMD LEDs: 10 paired with optics and 19 further illuminating the logo portion of the light during stop and turn functions. This four-inch stop/turn/taillight is fully FMVSS compliant for under 80-inch applications and may be used in over 80-inch applications when properly installed. It offers an industry-standard PL3 connection and grommet mounting, with other connection and mounting options available.

This light allows for reduction in setup costs and tooling investments, and a simplified process that can take a custom lighting project from concept to delivery in approximately 120 days.

BRANDING, SAFETY AND VISIBILITY

GloLight technology creates a highly visible lighting signature that stands out prominently both day and night. The logo portion of the light remains visible even when the light is off. As a bonus, the logo portion of the light



Optronics introduced its first custom logo lighting solutions in 2019, which incorporated text and graphics with the company's GloLight technology, but they were expensive to produce.

glows brighter when stop and turn functions are engaged.

The lights undergo rigorous testing to ensure they meet all DOT requirements while maintaining their aesthetic appeal. Each custom logo design is individually tested for photometric compliance, shock and vibration resistance and all other FMVSS 108 requirements, ensuring that these lights perform reliably in the demanding commercial vehicle environment.

SIMPLIFIED AND STREAMLINED

The process of creating custom logo lights has been streamlined to make it accessible to more companies. Customers provide a high-resolution image of their logo, and the team creates a visualization of how the logo will appear in the light. Once approved, the design undergoes testing to ensure conformity with all regulations. If modifications are needed to ensure compliance, work with the customer is done to make necessary adjustments without compromising brand identity.

BROAD PRACTICAL APPLICATIONS

The applications for logo lights span many sectors of the commercial vehicle market. OEMs can extend their branding beyond body-mounted insignias. Heavy-duty fleets can enhance trailer and cab branding graphics. Work truck fleets can use them to enhance brand visibility while maintaining the required lighting functions. Specialty vehicle and trailer

manufacturers can incorporate them into custom builds to differentiate their products.

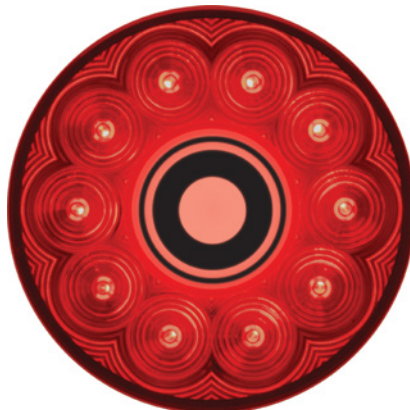
With minimum order quantities starting at 500 pieces and volume-based pricing tiers beginning at 2,500 units annually, these lights are accessible to operations of many sizes. The grommet-mounted four-inch round light is available, with surface-mount and six-inch oval versions in development, ensuring compatibility with a wide range of vehicle types.

THE RETURN ON INVESTMENT

From a branding perspective, the number of impressions generated by vehicles traveling America's highways is substantial. Unlike vinyl graphics or conspicuity tape, these lights draw a viewer's eyes directly to them. From an operational standpoint, the price differential between the new logo lights and standard lighting is minimal, and the branding benefit comes at no premium.

AN INDELIBLE IMPRESSION

As we look to the future, the integration of brand identity into functional lighting represents just the beginning of a new era in commercial vehicle design. Just as LED technology revolutionized the industry by providing better performance and longevity compared to incandescent predecessors, custom logo lighting is poised to transform how companies think about their brand's visual identity.



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The limitations of technology are primarily related to design complexity rather than technical capabilities. The logo area in a four-inch round light is particularly well suited for distinctive brand icons or simplified elements of larger logos.

When expanding to include the six-inch oval version, the increased linear space will allow for text and more complex designs, further expanding the creative possibilities.

COMMITMENT TO INNOVATION

From the beginning, every commercial vehicle on the road has represented not just a functional machine, but a communication platform for the company it served. Some companies used that platform better than others. Now, with custom logo lighting, companies can literally shine a light on their brand day and night, turning required safety equipment into a powerful branding asset at a price point that makes sense for businesses of all sizes. ●



A reimagined manufacturing process maintains all the safety and visibility benefits of traditional lighting while incorporating brand elements.

ABOUT THE AUTHOR

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