

Metaphase

Technologies Inc.

LED APPLIED TECHNOLOGIES

CUSTOM DESIGN

EXCEPTIONAL PRODUCT PERFORMANCE

OVER 4,000 EXISTING PRODUCTS

SPECIALTY LIGHT APPLICATION

PRODUCTS OPERATE WITH:

*BUILT-IN DRIVER
BUILT-IN STROBE
UNIVERSAL CONTROLLER*

IN-HOUSE EXPERTISE IN:

OPTICAL • MACHINE VISION • ELECTRICAL
MANUFACTURING • MECHANICAL • DESIGN

MISSION

At *Metaphase Technologies, Inc* our mission is to continue to provide the most comprehensive selection of high quality lighting solutions at an affordable cost.

WHAT WE DO

Metaphase Technologies, Inc is an ever-expanding LED lighting technology company providing over 4,000 products used in thousands of installations around the world.

For over 18 years *Metaphase* has been focused on developing products that harness “The Quality of Light™”, by engineering and manufacturing innovative LED illumination fixtures for the Machine Vision, Military, and Specialiity Markets. Today our MetaLight™ and MetaBright™ LED lighting solutions are enhancing the capability of imaging systems around the world. Our innovative lighting fixtures are key components in inspections systems that help manufacturers to improve upon their existing high quality standards. Our versatile designs are continuously being upgraded to utilize the latest in LED, thermal management, optical and electronic technologies available.

Metaphase is located just outside of Philadelphia, PA, with technical sales offices throughout the world. *Metaphase* continues to respond to the typical and unique vision inspection requirements of our domestic and international markets. All *Meta-phase* lighting systems are designed and manufactured in the United States.

WE PROVIDE

The most extensive product line

Service to many fortune 500 companies

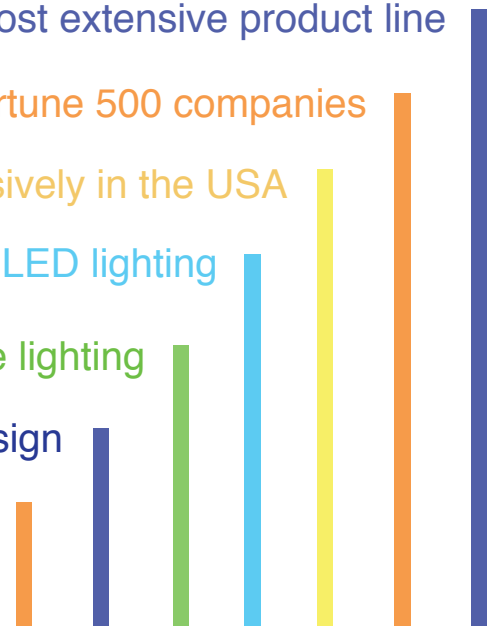
Products designed and built exclusively in the USA

The best performance LED lighting

The most cost effective lighting

Custom design

Free testing



POWER SUPPLY AND CONTROLLERS

BUILT-IN DRIVER

Metaphase offers many of its lights with built-in driver and dimming control. This feature allows for stable and optimal LED illumination without the need for a separate controller.

DC CONTROLLER

Single or Dualchannel continuous mode controllers for *Metaphase* LED lights. Intensity can be controlled by knob(s) on front panel or via serial communication.



BUILT-IN STROBE CONTROLLER

This space-saving feature provides “power boosted” (high current) strobe control of the LED illuminator is built directly into the LED light fixture. This built-in feature eliminates power loss from the cable to an external strobe controller.

*** NEW ***

UNIVERSAL LED CONTROLLER

Utilizing the most innovative techniques, the Universal LED Controller (ULC), controls the timing and intensity of multiple LED lights in a safe, precise and stable manner. The ULC controls the LED lighting in both strobe mode with Power boosting (max current resulting in max intensity) and DC mode. Unit is programmed & controlled via built-in LCD menu driven software or included software used with the controller’s built-in Ethernet & USB port.

IN-LINE OPTIONS

Metaphase offers in-line versions of both dimming and strobe control for space constraint applications. Using these in-line options, circuits are enclosed outside the light unit which allows for a more compact LED light.

STROBE CONTROLLER WITH BUILT-IN POWER SUPPLY

Provides front panel control of the strobe operation of *Metaphase* Lights. The unit not only controls the light’s strobe timing & intensity but also provides the necessary power for Power Boosted operation (max intensity). The controller allows the unit to strobe using internal or external trigger.

IN-LINE DIMMER

The in-line dimming option offers a potentiometer intensity control. Simply requires supply voltage for the light.

IN-LINE STROBE

No external strobe controller is required, only voltage and trigger signal for the light to strobe required.

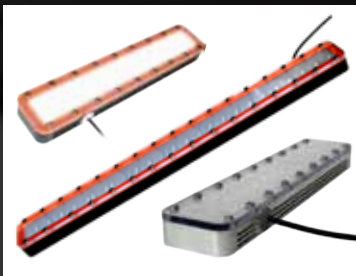


DIFFUSE DOME AND TUBE LIGHTS



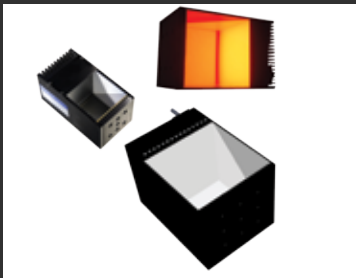
Featuring high intensity and uniformity ($\pm 5\%$), *Metaphase* Diffuse Dome Lights are ideal for inspection of reflective, specular, rough, or topographic surfaces. Optical grade reflector coating returns 99.9% of light for optimum diffuse output. *Metaphase* Diffuse Tube Lights are structured to address the needs of lighting specular surfaced objects with high aspect ratios (wide or thin) profiles.

ROBOLIGHT



The RoboLight is designed for harsh, wet environments. Available in lengths of 6" to 24" and ideal for Robotic workcells as well as washdown applications. Options include stainless steel housings as well as various beam angles.

DIFFUSE AXIAL LIGHT



These illuminators employ beam splitter technology for shadowless and uniform co-axial illumination on-axis with camera aperture. Ideal for specular or reflective surfaces. Available in sizes 1"x1" to 8"x8".

LAW-ENFORCEMENT LIGHTING



Designed to replace high-power xenon lights. Far field or near field, DC or Strobe operation. Perfect for license plate reading and surveillance.

CUSTOM LIGHTING



Hundreds of custom lighting solutions have been developed & manufactured by our experienced in-house engineering and production staff. Contact us regarding your custom lighting needs.

LINE LIGHTS



Standard approach to using a row of LEDs

Beam shaping micro-lens

METABRIGHT™ LINE LIGHT



Metaphase offers the industry's breakthrough performance line lights for imaging, web, and high-speed line scan applications requiring ultra-high intensity and uniformity. We produce the largest selection of standard length line lights available (from 1" to 120"). Options include various lengths, housing profiles, cooling, lensing, beam widths, and working distances.

METALIGHT™ LINE LIGHT



MetaLight™ line lights are designed as lean fixtures that can be easily integrated into vision systems, featuring lower lumen output for applications requiring less intensity than our MetaBright™ versions. Thousands of these lights are currently operating in applications around the world.

COMPACT DIFFUSE TUBE LINE LIGHT



Low profile version of *Metaphase's* diffuse tube lights with an aperture designed for line scan applications. Ideal for inspecting highly specular reflective materials with line scan cameras. Currently available in lengths up to 80".

COLLIMATED LINE LIGHT



A specialty version of the line light that provides an exceptionally long working distance and a highly collimated line of light.

DIFFUSE AXIAL LINE LIGHT



Using beam-splitter technology, these fixtures produce co-axial illumination, on-axis with the camera aperture in line scan applications. Supports an unintrusive lighting scenario, ideal for applications involving highly reflective surfaces.

LED FLUORESCENT REPLACEMENT LINEAR LIGHT



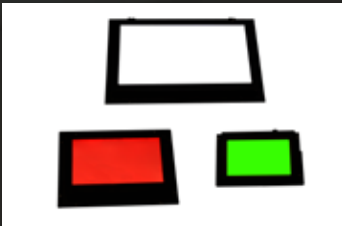
ExoLight™ series of LED illuminators are direct replacements of typical high frequency fluorescent tube lights historically used in machine vision applications. These lights use patented technology providing illumination 3X brighter than a fluorescent lamp. These low cost fixtures have a built-in constant current source driver so no special power supply is required to operate. Lengths are available in 8", 14", 23", 48", and 65". Additional sizes are available upon request.

LED HALOGEN REPLACEMENT WASHDOWN SPOTLIGHT



These low cost, intense, high-pressure washdown capable spotlights are 6X brighter than halogen lamp spotlights. Different emitting angles available to meet various coverage area and working distance requirements.

HIGH EFFICIENCY ECONOMICAL BACKLIGHTS



Metaphase Economical Backlights combine the latest high brightness LEDs with patent-pending laser-edged *Lumiform* technology, to produce highly uniform (+/-5%) illumination in one of *Metaphase's* most affordable lighting models.

HARSH ENVIRONMENT WASHDOWN LIGHTS



All *Metaphase* illuminators are offered in various IP (Ingress Protection) rated versions for wash-down, dust-proof, FDA compliance, watertight, etc. We use only top grade materials (316 stainless steel, FDA certified gaskets, NEMA 4X rated connectors and cable glands, etc.)

FRONT AND FLOOD LIGHTS



Front and flood lights come in a wide array of sizes, shapes, color spectrum, and mode of operation (DC and strobe). Custom versions are available.

LED LIGHT ENGINE



The Metaphaser™ is a *Metaphase* LED light engine generally operative as a high intensity fiber optic illuminator. Ideal replacement for Halogen and high brightness Metal Halide light sources. Equip with patent-pending refractive optics and proprietary digital-optical dimming control. Lower power versions available for microscope applications.

LED LASER PROJECTION REPLACEMENT



These LED lighting modules use special lensing and optics to project highly focused, structured light patterns typically found with laser points. Patterns include a series of parallel lines, dots matrix, cross-hairs, etc.

BACKLIGHTS



Metaphase offers the most densely LED populated, high intensity backlights available. *Metaphase* Backlights are offered in a variety of profiles to suit the needs of various applications: area, linear, narrow, and highly compact thin backlights.

RING LIGHTS



Metaphase Ring Lights are available in a large array of sizes, LED angles (for near and off-axis illumination) and a number of concentric rings per light. Mounting brackets are available for the more popular machine vision cameras.

BUILT-IN STROBE LIGHT



LED lights with built-in strobe capability allow for Power Boost Operation (high intensity). No external strobe controller is required. Simply provide supply voltage for the light and trigger-in signal.



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