

LED Lighting for Machine Vision
and General LED Lighting



LED Lighting for Machine Vision

About LATAB

LAT elektronik AB (LED Array Technology) was founded in 1988 in Stockholm, Sweden. Starting as a consultancy for image processing technology, the company soon became a specialist for customer-specific lighting solutions in the area of machine vision.

As part of the German Polytec Organization (www.polytec.com), LATAB today offers an outstanding variety of standard products and is known for its high degree of flexibility and short lead times, even for customer-specific developments.



Why choose LATAB Products?

- All products are "Made in Sweden" and satisfy the highest quality demands.
- Individual requirements are largely met by the modularity of the standard program.
- All lights are available in steady state and strobe versions.
- Lights and controllers are easy and user-friendly to operate.
- Very flexible solutions.
- Very short delivery times.
- Application-orientated advice and long-term service.

Support

Integration into the international Polytec Organization guarantees world-wide support for LATAB products. Experienced Polytec engineers from the machine vision industry help customers make the best choice of products and if required provide support in the integration of machine vision systems.

Lighting Heads

The modular design of LATAB LED lighting solutions has made possible a range of more than 3,000 standard products.



Ring Lights

for shadow free lighting and reflecting objects



Dark Field Lights

for horizontal lighting and small objects



Spot Lights

for very high light intensity

The key selection criteria are steady state lighting or strobe mode, LED colors red/green/blue/white/IR/UV, and innumerable sizes, mounts and



Modular Line Lights

for individual lighting solutions



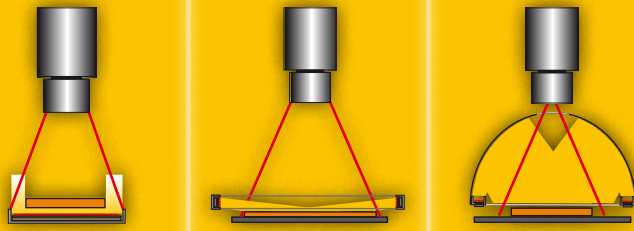
Coaxial Lights

for objects with highly reflecting surfaces

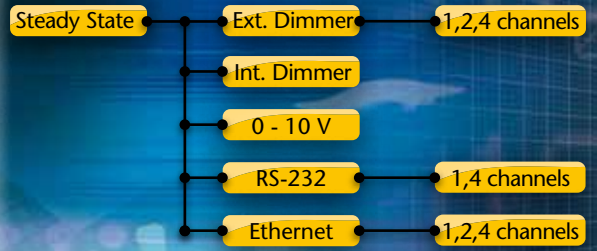
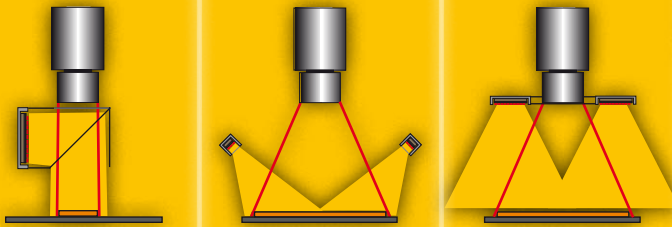


Front Lights

for directed light applications



Lighting Techniques



Controller Versions



cable-configurations. Accessories such as polarizing filters and racks also form part of the product range.



Back Lights
for outline and see through applications



Controllers

Reliable controllers are a prerequisite for efficient LED lighting. That's why LATAB has developed an extensive range of its own controllers.

These not only maximize the life time of the sensitive LEDs, but automatically adapt to the connected light head. The product features of the LATAB controllers are numerous: designs suitable for industrial use, adjustable



Dome Lights
for highly shadow and reflection free lighting



Tunnel Lights
for highly shadow and reflection free lighting

light intensity, up to 4 channels, PC operation via Ethernet or other interfaces, as well as stand-alone solutions, either for steady state operation or strobe mode, with adjustable pulse durations from 50 μ s to 1.5 ms.

Evaluation Kits

Different environmental conditions for machine vision applications can often make the choice of suitable lighting difficult. That's why in many cases "Try before you buy" is the way to go.

LATAB provides demonstration units of potentially suitable lighting heads and controllers to help you decide on the best lighting for your practical situation.

Try it out!

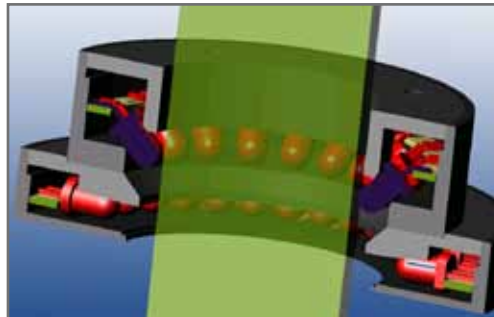


Customer-Specific Engineering

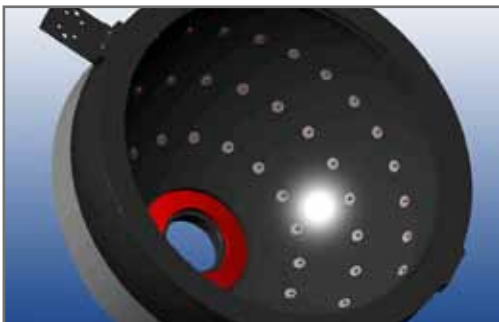
Customer-specific developments and adaptations are a core part of LATAB's business – at near-standard prices, of course, and with short project lead times. You name it, we'll make it!

Design skills

- CAD engineering
- Electronics development
- Optical design
- Thermal management



Customer-specific light in sectional view



Customer-specific dome light with integrated ring light in top section and three LED rings in dome



Modular high brightness LED components for various applications

General LED Lighting

In addition to LED lighting for the machine vision market, LATAB also offers general lighting solutions.

Examples include decorative lighting and object illumination, both indoors and out, using light modules based on high brightness or ultra-bright LEDs. LATAB's extensive experience in meeting the requirements of industrial applications paired with many years of design skills are the key to its successful LED engineering.



Intelligent interior illumination



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Picture credits:

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