

High-performance image processing solutions

CAMERA- AND LIGHTING SYSTEMS





To perform complex image processing tasks in quality control environments, it is essential that the camera- and lighting systems used are tailored to the application.

iCAM CAMERA SYSTEMS

iCAM camera systems from Laetus have been optimally designed for the range of inspection tasks performed on packaging machines. The systems identify defective products even at fast flow rates, and are highly flexible, recognizing different types of printed material with varying surface finishes.

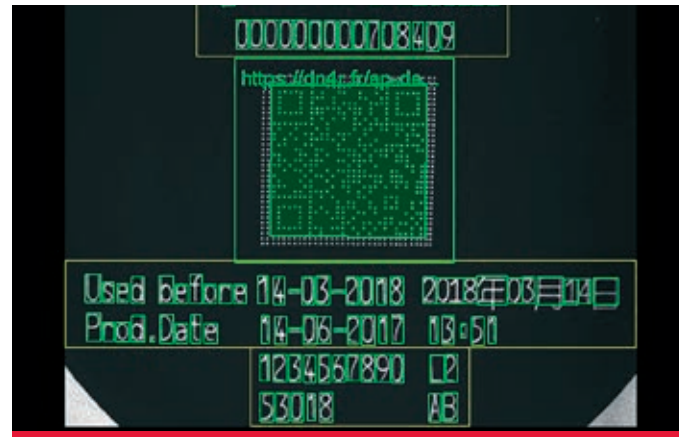
Highlights:

- Available as a S-mount version (with integrated light) or C-mount version (as a modular system)
- Durable, maintenance-free LED flash technology
- Available with various integrated lighting options
- Control of up to four light colors
- Interface in FireWire for rapid imaging
- Wide range of sensor resolutions available

Our large selection of fast digital cameras, available with various resolutions, lenses and light/lighting options, are cutting-edge solutions for challenging image processing applications in packaging control:

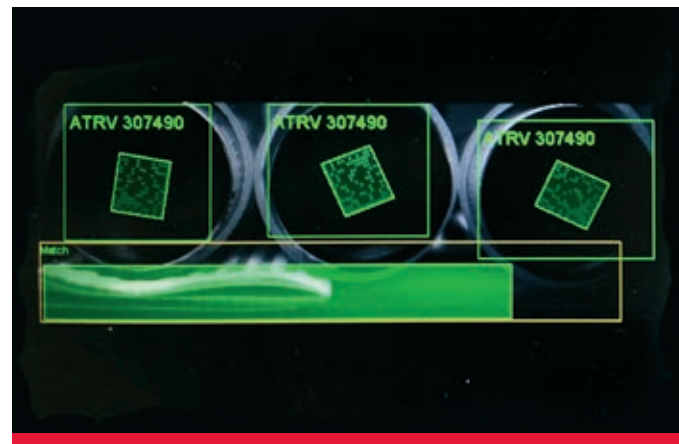
iCAM PAL

The iCAM PAL (Polarized Area Lighting) with integrated polarization filter illuminates both matt and gloss inspection surfaces virtually reflection-free. It is therefore ideal for code reading and plain writing control on most packaging, such as folding cartons, labels and pouches.



iCAM CAL (UV)

The iCAM CAL (Collimated Area Lighting) detects markings made in UV-active inks on matt or gloss surfaces. UV-active inks or dyes are usually invisible under normal lighting conditions, on light, dark, or transparent surfaces. UV light – also referred to as ‘black light’ – renders the dye visible to the naked eye and to the camera. The 365 nm LED wave length is compatible with the most commonly used UV inks and dyes.



iCAM DIL

The iCAM DIL (Diffuse Indirect Lighting) indirectly illuminates high-gloss inspection areas for reflection-free imaging. This makes the iCAM DIL the perfect solution for inspection applications involving high-gloss aluminum foils or other very shiny material.

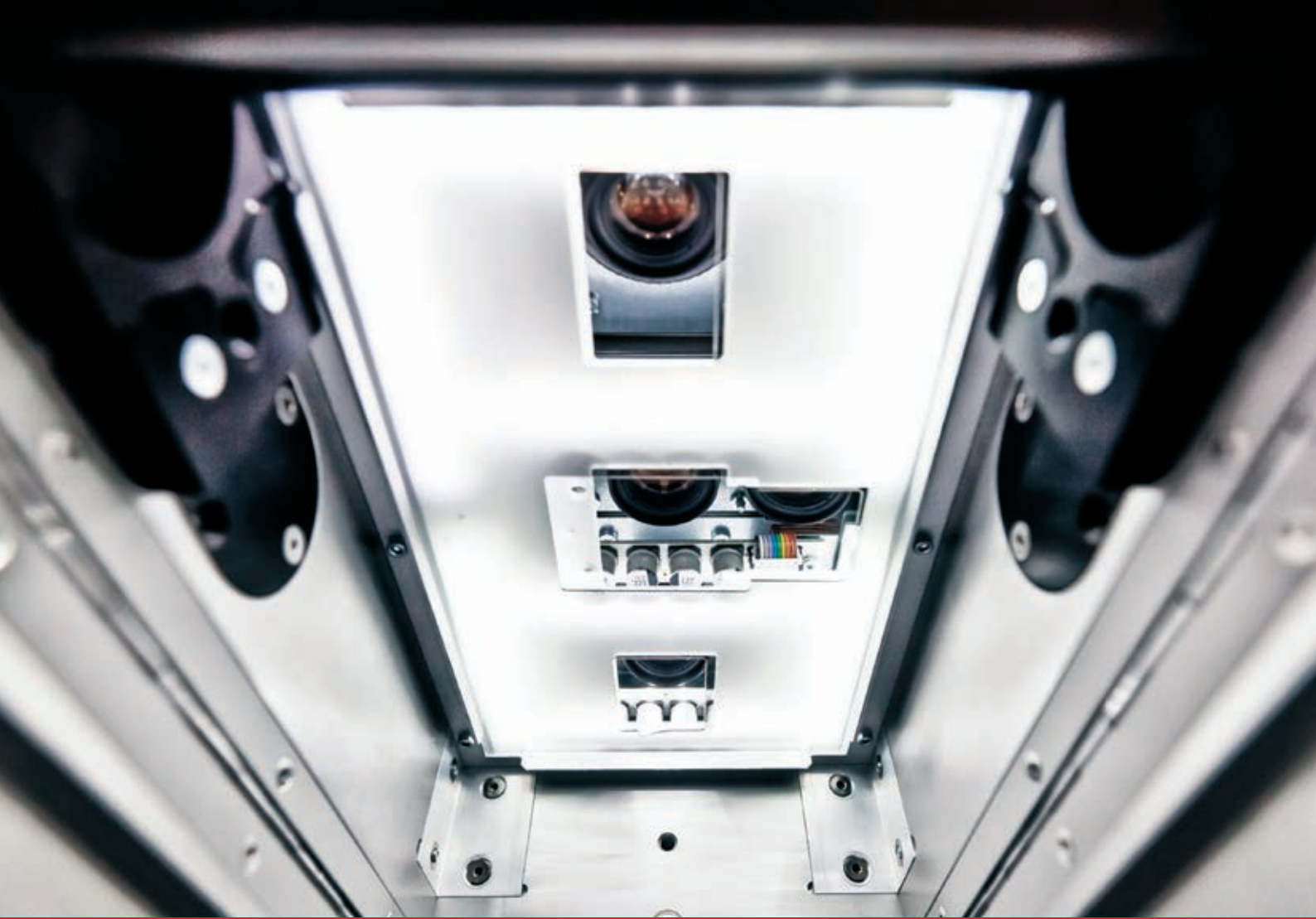




LIGHTING SYSTEMS

With an array of different options and models available, Laetus lighting systems are suitable for virtually any application, providing the ideal conditions for the camera to produce perfect results. In sensitive applications, the images are protected against unwanted influences. This guarantees optimum results in surface lighting and backlighting on a range of materials.

Thanks to the use of LEDs, Laetus lighting units are maintenance-free, and are cost-effective to run over their long service life. Temperature sensitive products will not be harmed; the flash mode enables the units to be used even with products that are affected by light. The bandwidth of the lighting options ranges from diffused indirect light to various polarized and multi-colored LEDs.



Highlights:

- Very stable and high light intensity
- Even distribution of light
- High color stability
- Ready to use immediately; no warm-up period
- Flash mode suitable for fast-moving objects
- No fans required for cooling
- Maintenance-free and long service life

MiraLux LIGHTING

With the MiraLux series, Laetus has set a new standard in functionality and ergonomics. MiraLux lighting units are available in various configurations. Each one features integrated variable connection technology.

MiraLux 2D and MiraLux 3D

MiraLux 2D works with one or two cameras and is the perfect addition to POLYPHEM Pro, the color blister monitoring system for reliable color-based blister inspection. MiraLux 3D – which uses the same housing, fitted with three cameras – supports the POLYPHEM 3D system with three-dimensional fill inspection in addition to reliable color-based control.

Thanks to its unique design, these two variants allow a quick format change. Both sides of the housing can be folded inwards for faster changeovers. The front flap allows the user to perform rapid and direct visual checks on the inspection area. The MiraLux is available in three sizes depending on your space requirements.

Highlights:

- Highly compact design
- Rapid changeovers thanks to foldable sides
- Direct inspection of reading area through front flap





MiraLux 360

The MiraLux 360 supports the cameras by full 360° inspections on round objects. The inspection is carried out through a combination of four cameras. The distance between cameras and objects can easily be adjusted, allowing for a large range of different sized products to be inspected without performing any system modification.

Highlights:

- One rotary button adjusts all four cameras simultaneously
- Easily replicable camera positioning
- Highly compact design
- Versatile mounting options

