

Luminescence

## LUT Luminescence scanners: Seeing what no-one else can



LUT luminescence scanners can detect luminophores (both natural and those that have been deliberately added or attached for product identification purposes) which are invisible to the naked eye. These substances become luminous when the UV light source of the LUT excites the electrons of the luminophores. The visible light produced in this way is used to detect the target object. The background on which the luminophores are attached has no effect on the reliability of detection.

Special features:

- A semi-conductor light source is used in the LUT 3 series – no lamp change required.
- Interchangeable lenses allow scanning distances of 10, 20, 50 and 90 mm.
- Filters allow the spectral sensitivity to be limited so that the sensor can be adapted to detect certain luminophores.
- The high switching frequency of 1500/s permits fast machine cycle times.
- Adjustable time delay, analogue output, PNP and NPN switching outputs.

Checking packaging processes, controlling wood-working machines and monitoring the application of a material coating – just a few examples of applications where luminophores are reliably detected by LUT luminescence scanners.





✓ Label present or not: the LUT 3-8 knows the answer (here being used in the pharmaceutical industry).

▼ LUT 1-4 luminescence scanners used to ensure that brake callipers for vehicles are correctly fed in.

▲ Luminescence scanners being used to align aerosol cans.

► Reliable attachment of labels: The LUT 3 luminescence scanner checking whether the label has been transferred from the gluespreading roller to the bottle.







▲ Once a fluorescent marking has been applied during quality control, tiles can be sorted automatically into quality categories using a luminescence scanner.



✓ LUT 3-8 luminescence scanner with filter for detecting markings used to control a circular saw.