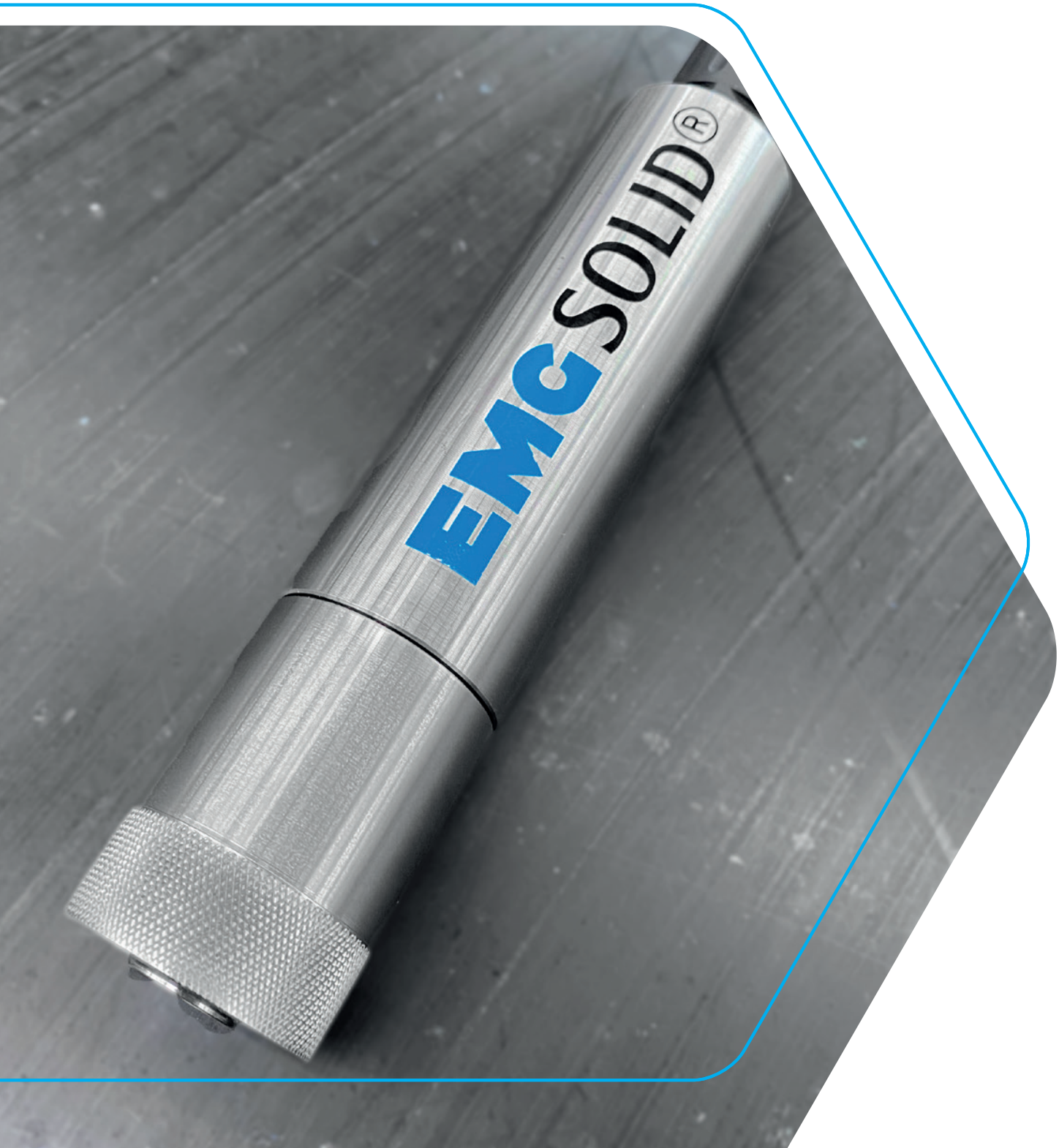
EMG
an ELEXIS company

Seeing in the dark

EMG SOLID® LIF
Cleanliness measurement



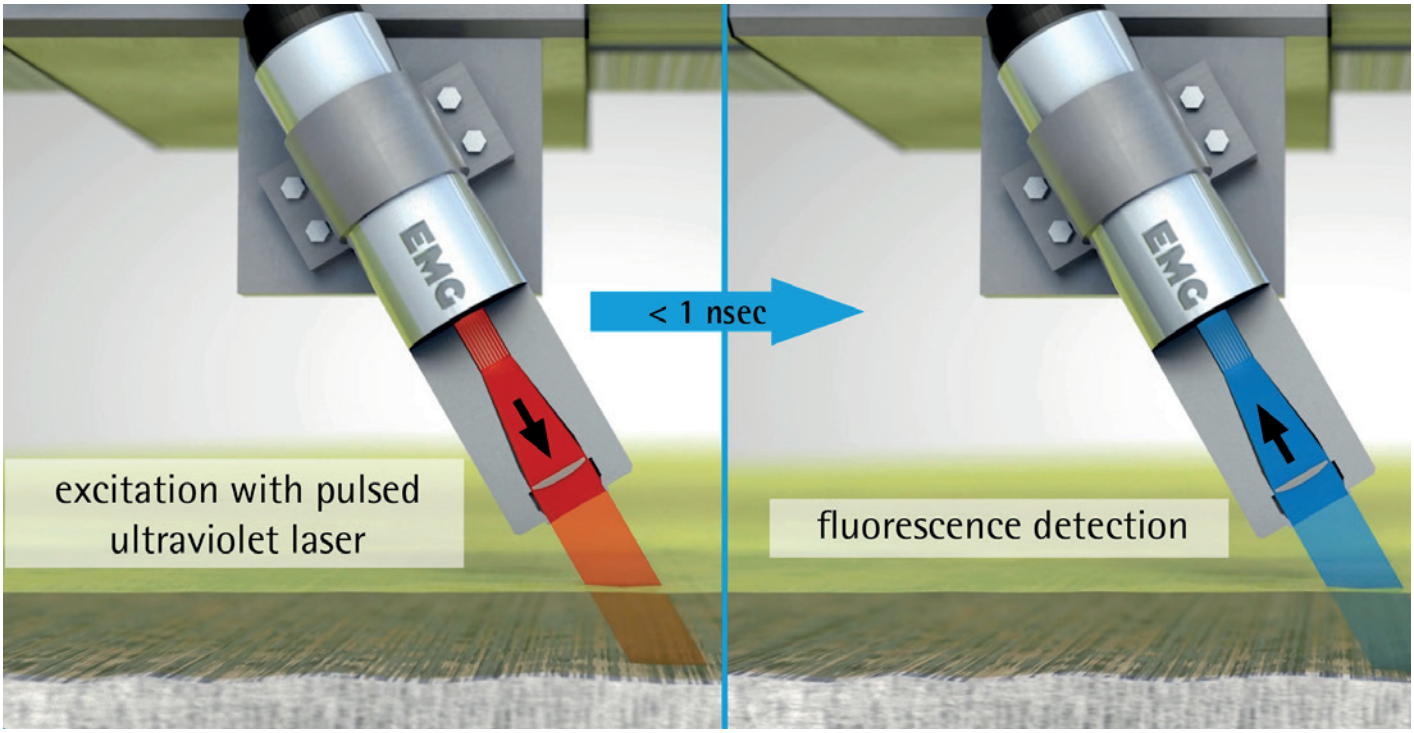
EMG SOLID® LIF

Cleanliness measurement

Functional principle

The energy emitted by a molecule or atom immediately after optical excitation has a spectral intensity distribution that is substance-specific and can be clearly detected even at very low concentrations.

- Special solid state laser delivers 10.000 single pulses per second and stimulates the molecules to glow.
- The more molecules lie on the material surface, the stronger the glowing effect.
- A micro controller controls the analysing system, manages the system calibrations and calculates the results.



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Transparency about quality features

Technical data

Measuring method	Laser-induced fluorescence spectroscopy
Measured variable	Fluorescence intensity [RFU]
Detectable substances	Oils, greases, waxes, hot melts, rolling aids, skin pass agents, cooling lubricants, emulsions, release agents, transparent lacquers, polymers, primers, adhesives and other substances on request.
Measuring head weight	< 800 g
Measurement head size	35 mm diameter, 180 mm length
Measurement spot	8 mm diameter
Strip temperature	+5°C up to +75°C (at constant strip temperature)
Operating distance	40 mm
Strip height deviations	+/- 20 mm
Ambient temperature	+5 °C up to +45 °C (extended temperature range with cooling/heating possible)
Measuring frequency	10 kHz

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Application fields

- Residual oil after cleaning lithium battery terminals, electronic components, air compressors, refrigeration machines, etc
- Residual oil on the exterior trim parts of cars, on sunroof ceramic, on solder joints of car parts, etc.
- Cleanliness of medical and laboratory equipment
- Cleanliness of wires, cables and terminals
- Cleanliness of other adhesive, welded and quick-connect joints

- Cleanliness on any kind of parts after production processes with use of lubricants

EMG SOLID® LIF

Your benefits

- Improved process stability and reliability
- Transparency of input quality and essential quality features
- Minimised scrap
- Secure production release
- Joint database and combined visualisation of the measured values possible
- Delivery and system integration from a single source
- Low influence of roughness and textures
- Only very small space required
- Special EMG solution for keeping the lens clean
- Very high measuring frequency (10 kHz) and high definition of measuring spot (Ø = 8 mm)

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