



LUTM

Small, intelligent luminescence sensor

LUMINESCENCE SENSORS

SICK
Sensor Intelligence.



Technical data overview

Sensing distance	12.5 mm ¹⁾
Type of light	LED, Ultraviolet light ²⁾
Light emission	Long side
Switching frequency	6 kHz ³⁾
Response time	80 µs ⁴⁾
Adjustment	2-point teach-in static/dynamic
Connection type	Cable with M12 male connector, 4-pin, 0.2 m Male connector M8, 4-pin



¹⁾ From front edge of lens.

²⁾ Average service life: 100,000 h at T_U = +25 °C.

³⁾ With light/dark ratio 1:1.

⁴⁾ Signal transit time with resistive load.

Product description

Enhanced performance for fluorescent materials: The new LUTM luminescence sensor from SICK features a novel miniature housing combined with an IO-Link function. The LUTM is ideal for all applications where fluorescent marks need to be reliably detected in confined spaces. Even when the level of luminescence is low, the LUTM detects the relevant marks using its enhanced system sensitivity. This mini luminescence sensor can be set using a straightforward teach-in method. The innovative IO-Link function enables enhanced, intelligent diagnostics and visualization of sensor parameters, as well as provide quick and easy format changes. Thanks to an increased switching frequency of up to 6 kHz, the LUTM is also suitable for high machine production capacities.

At a glance

- Luminescence sensor in a miniature housing
- Static and dynamic teach-in methods in a single variant
- Reliable detection even at a low level luminescence
- Switching frequency: 6 kHz
- Operating range: 8 ... 20 mm
- IO-Link function
- Compatibility with older LUT sensors thanks to cable with male connector M12

Your benefits

- Miniature housing enables installation in small spaces
- Quick and easy commissioning saves time and costs
- Increased switching frequency for improved machine productivity
- Enhanced, intelligent diagnostics and visualization of sensor parameters, as well as quick and easy format changes, thanks to IO-Link function

Fields of application

- Detection of visible and invisible marks with a high level of luminescence on labels, documents, and products that illuminate under UV light.
- Detection of knot holes in the wood industry
- Presence monitoring for labels and package inserts in the pharmaceutical industry
- Detection of invisible marks in the luxury food industry
- Detection of luminescent marks for positioning labels and presence detection of labels in the packaging industry
- Detection of visible and invisible marks with a high level of luminescence on labels, documents, and products that illuminate under UV light.
- Detection of knot holes in the wood industry

Ordering information

Other models and accessories → www.sick.com/LUTM

- **Communication interface:** -
- **Light source:** LED, Ultraviolet light (Average service life: 100,000 h at $T_U = +25\text{ °C.}$)

Sensing distance	Switching output	Light spot size	Connection type Detail	Type	Part no.
≤ 12.5 mm	NPN	2 mm x 2.5 mm ¹⁾	Cable with M12 male connector, 4-pin	LUTM-UN81162P	1067296
	PNP	2 mm x 2.5 mm ¹⁾	Cable with M12 male connector, 4-pin	LUTM-UP81162P	1067295

¹⁾ At sensing distance.

- **Communication interface:** IO-Link
- **Light source:** LED, Ultraviolet light (Average service life: 100,000 h at $T_U = +25\text{ °C.}$)

Sensing distance	Switching output	Light spot size	Connection type Detail	Type	Part no.
≤ 12.5 mm	PNP	2 mm x 2.5 mm ¹⁾	Cable with M12 male connector, 4-pin	LUTM-UP817A2P	1067297
			Male connector M8, 4-pin	LUTM-UP817A1P	1087463

¹⁾ At sensing distance.

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com