



## LUTM

Small, intelligent luminescence sensor

**SICK**  
Sensor Intelligence.



### Technical data overview

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



<sup>1)</sup> From leading edge of lens.

<sup>2)</sup> Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

<sup>3)</sup> With light/dark ratio 1:1.

<sup>4)</sup> 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](http://www.sick.com/LUTM)

- **Light source:** LED, UV
- **Communication interface:** -

Sensing distance	Switching output	Switching mode	Light spot size	Light spot direction	Light emission	Connection type Detail	Type	Part no.
≤ 12.5 mm	NPN	Light/dark switching	2 mm x 2.5 mm	Vertical	Long side	Cable with M12 male connector, 4-pin	LUTM-UN81162P	1067296
	PNP	Light/dark switching	2 mm x 2.5 mm	Vertical	Long side	Cable with M12 male connector, 4-pin	LUTM-UP81162P	1067295

- **Light source:** LED, UV
- **Communication interface:** IO-Link

Sensing distance	Switching output	Switching mode	Light spot size	Light spot direction	Light emission	Connection type Detail	Type	Part no.
≤ 12.5 mm	PNP	Light/dark switching	2 mm x 2.5 mm	Vertical	Long side	Cable with M12 male connector, 4-pin	LUTM-UP817A2P	1067297
						Male connector M8, 4-pin	LUTM-UP817A1P	1087463

## 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](http://www.sick.com)