



# CS8

High-performance color sensing

COLOR SENSORS

**SICK**  
Sensor Intelligence.



### Technical data overview

<b>Sensing distance</b>	12.5 mm <sup>1)</sup> 60 mm <sup>1)</sup>
<b>Light spot size</b>	2 mm x 4 mm 13 mm x 13 mm
<b>Switching frequency</b>	1 kHz / 3 kHz / 6 kHz / 0.5 kHz / 1 kHz / 3.5 kHz (depending on type)
<b>Response time</b>	500 µs, 160 µs, 85 µs <sup>2)</sup> 1,000 µs, 500 µs, 145 µs <sup>2)</sup>
<b>Output (channel)</b>	1 color / 4 colors (depending on type)
<b>Adjustment</b>	Static 1-point teach-in
<b>Connection type</b>	Male connector

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

<sup>2)</sup> Signal transit time with resistive load.

### Product description

The ability to teach up to four colors can lead to faster changeovers and shorter downtime. The CS8 series offers high switching speeds – as fast as 6 kHz (85 µsec) – enabling higher throughput. And, the sensor maintains the extreme precision of the lightspot; this sharp, well-defined spot provides tighter process control and more consistent object detection. A bar graph display enables easy setup and provides information about the color quality and detection reliability.

### At a glance

- One (CS8-1) or four (CS8-4) colors can be saved
- 12.5 mm or 60 mm sensing distance
- Fast response time up to 85 µs
- High resolution color
- Bar graph display shows the correlation of the colors
- Extremely precise light spot and high resolution
- Metal housing with two light exits (interchangeable)

### Your benefits

- Identify and store up to four colors. No need to reprogram the sensor for changeovers, reducing downtime.
- High resolution colors can be matched exactly for better process reliability
- Maintains the extreme precision of the light spot, enabling a consistent object detection
- A bar graph display provides information about the color quality and detection reliability, ensuring simple process monitoring
- Broad spectrum of color tolerances enables more flexible use
- Fast response times at high speeds for reliable detection
- Detection reliability is not affected by varying temperatures

## Ordering information

Other models and accessories → [www.sick.com/CS8](http://www.sick.com/CS8)

Sensing distance	Switching output	Light spot size	Connection type Detail	Type	Part no.
≤ 12.5 mm	NPN	2 mm x 4 mm	Male connector M12, 5-pin	CS81-N1112	1028228
			Male connector M12, 8-pin	CS84-N1112	1028230
	PNP	2 mm x 4 mm	Male connector M12, 5-pin	CS81-P1112	1028224
			Male connector M12, 8-pin	CS84-P1112	1028226
≤ 60 mm	NPN	13 mm x 13 mm	Male connector M12, 5-pin	CS81-N3612	1028229
			Male connector M12, 8-pin	CS84-N3612	1028231
	PNP	13 mm x 13 mm	Male connector M12, 5-pin	CS81-P3612	1028225
				CS81-P3612S02	1054795
	Male connector M12, 8-pin	CS84-P3612	1028227		

## 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)