



CSM

Mini, easy, smart

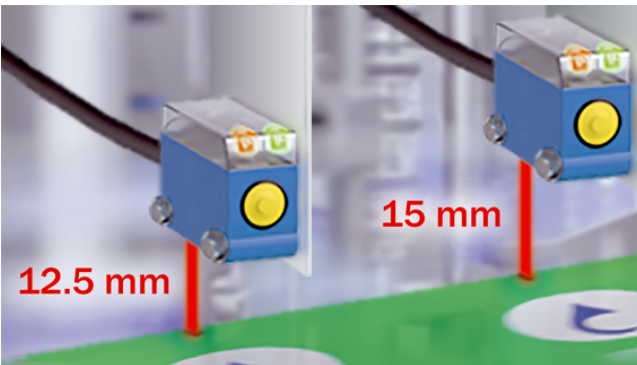
SICK
Sensor Intelligence.

Optic



New rugged optics

With new, improved optics, the CSM increases RGB homogeneity and ensures a more uniform light spot, resulting in improved accuracy and stable detection. The optics of the CSM feature a new collimation structure, which makes a larger sensing distance and wider tolerance zones possible. The remission factor is also optimized and the overall performance improved.



Variant with larger sensing distance of 15 mm and extended tolerance of ± 4 mm as well as a standard version with 12.5 mm and improved stability available.



Precise and reliable detection of different color shades thanks to the improved optics.



The CSM offers optimum performance and reliability for color detection, ensuring optimal machine throughput

Dynamic teach-in and IO-Link



IO-Link, static and dynamic teach-in

The new teach-in algorithm of the CSM offers both the static 1-point teach-in method and the dynamic teach-in method, where multiple points are scanned to achieve a more complete and comprehensive teach-in. This ultimately improves detection reliability and performance.



The IO-Link capability of the CSM also provides flexibility for remote configuration and monitoring via the Smart Sensor profile.



Intuitive teach-in methods via integrated pushbuttons ensure a better user experience and ease of operation.



Thanks to the various teach-in functions, remote configuration and monitoring options, the CSM offers complete freedom and flexibility, even in demanding applications



Technical data overview

Sensing distance	12.5 mm / 15 mm (depends on variant)
Light spot size	1.9 mm x 9.4 mm 4.9 mm x 10.1 mm
Switching mode	Light/dark switching
Output (channel)	1 color / 8 colors via IO-Link (depends on variant)
Adjustment	Teach-in static/dynamic, ET: Teach-in dynamic
Connection type	Male connector Cable with male connector Cable (depends on variant)

Product description

The new CSM color sensor in the miniature housing offers accurate color detection and is IO-Link-capable. It is perfectly suited for applications in which color features need to be reliably detected while taking up as little installation space as possible. The sensor detects and monitors objects based on object color. The small CSM color sensor can be easily configured using simple static or dynamic teach-in methods. This can be done on site via the teach-in button or remotely via IO-Link, which offers intelligent diagnostic and visualization options as well as simple configuration. With a sensing distance of 12.5 mm up to 15 mm in the extended variant, the CSM can be used in many applications without any problems.

At a glance

- Color sensor in a miniature housing that saves valuable installation space
- Static and dynamic teach-in methods using intuitive teach-in button
- Remote teach-in by means of IO-Link provides visualization, configuration and diagnostic options
- Sensing distance of 12.5 mm or 15 mm for easy adaptation to different application requirements
- New optics system with larger sensing distance, higher tolerance, sturdier design and uniform RGB detection

Your benefits

- Quick, seamless integration into existing applications thanks to the miniature housing saves time and money
- Sensing distance from 12.5 mm up to 15 mm in new extended variants
- Scanning of multiple points for accurate and uniform detection across the entire object using a static as well as a new dynamic teach-in method
- Intelligent diagnostics, visualization, quick job format change and remote configuration – all thanks to the integrated IO-Link functions
- Better detection, higher sensing distance tolerances and uniform RGB detection thanks to the new, improved optics system
- A better user experience and greater ease of use thanks to the intuitive teach-in method
- Short installation time thanks to quick and easy commissioning

Fields of application

- Detection of object color for sorting or inspection with sensing distance of 12.5 mm or 15 mm. Regularly used in many production or manufacturing processes, for instance in the packaging industry, in bottling systems or in filling and sealing machines.
- Presence monitoring and identification of labels and cartons, even in tight spaces
- Quality control in the filling process due to inspection of the color of bottle caps and labels

Ordering information

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

- **Housing design:** small
- **Communication interface:** -
- **Sensing distance:** ≤ 12.5 mm

Switching output	Light spot size	Light spot direction	Light emission	Connection type Detail	Type	Part no.
NPN	1.9 mm x 9.4 mm	Vertical	Long side of housing	Cable open end, 4-wire	CSM-WN111C4P	1122729
				Cable with M12 male connector, 4-pin	CSM-WN111C2P	1122728
PNP	1.9 mm x 9.4 mm	Vertical	Long side of housing	Cable with M12 male connector, 4-pin	CSM-WP111C2P	1122731
				Male connector M8, 4-pin	CSM-WP111C1P	1122730

- **Housing design:** small
- **Communication interface:** -
- **Sensing distance:** ≤ 15 mm

Switching output	Light spot size	Light spot direction	Light emission	Connection type Detail	Type	Part no.
NPN	4.9 mm x 10.1 mm	Vertical	Long side of housing	Cable open end, 4-wire	CSM-WN1B1C4P	1122735
				Cable with M12 male connector, 4-pin	CSM-WN1B1C2P	1122734
PNP	4.9 mm x 10.1 mm	Vertical	Long side of housing	Cable with M12 male connector, 4-pin	CSM-WP1B1C2P	1122737
				Male connector M8, 4-pin	CSM-WP1B1C1P	1122736

- **Housing design:** small
- **Communication interface:** IO-Link
- **Sensing distance:** ≤ 12.5 mm

Switching output	Light spot size	Light spot direction	Light emission	Connection type Detail	Type	Part no.
PNP	1.9 mm x 9.4 mm	Vertical	Long side of housing	Cable with M12 male connector, 4-pin	CSM-WP117A2P	1122733
				Male connector M8, 4-pin	CSM-WP117A1P	1122732

- **Housing design:** small
- **Communication interface:** IO-Link
- **Sensing distance:** ≤ 15 mm

Switching output	Light spot size	Light spot direction	Light emission	Connection type Detail	Type	Part no.
PNP	4.9 mm x 10.1 mm	Vertical	Long side of housing	Cable with M12 male connector, 4-pin	CSM-WP1B7A2P	1122739
				Male connector M8, 4-pin	CSM-WP1B7A1P	1122738

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