



# PeopleCounter

Anonymous and reliable people counting

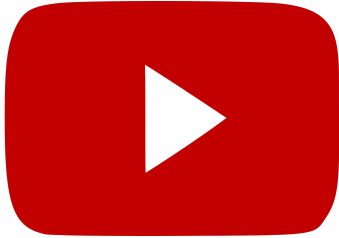
**SICK**  
Sensor Intelligence.

## Advantages

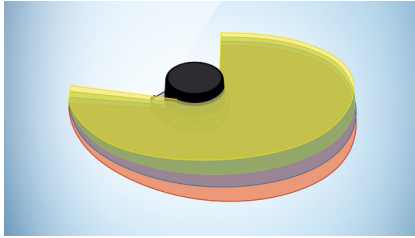


SICK has the solution for quickly, easily and anonymously identifying the exact number of people in a space: the PeopleCounter, a combination of an MRS1000 3D LiDAR sensor and a SensorApp. The PeopleCounter makes it possible for 3D-LiDAR sensors to count of people using artificial intelligence. With its four scan planes, the direction of movement of people is identified and people are detected as such by the SensorApp thanks to the detection of head and shoulder contours. This makes it possible reliably differentiate people from objects.

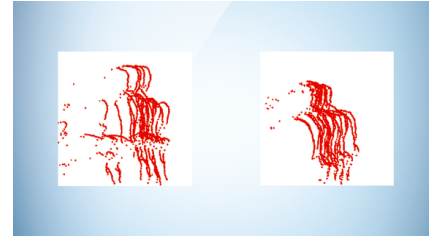
**PeopleCounter complete package: the MRS1000 3D LiDAR sensor generates the measurement data and the integrated SensorApp reliably identifies people using their contours.**



PeopleCounter in use – people are reliably detected and accurately counted



The four scan planes of the MRS1000 scan the direction of movement of people



The detection of head and shoulder contours ensures reliable differentiation of people from objects



**Anonymous people counting: Detection of people using contour data without taking pictures or recording personal information**



Thanks to the adjustment options of the SensorApp, the PeopleCounter can be applied in a wide range of areas: for example, operating entities of public as well as tourist facilities, restaurants and retail stores can profit from its use. In addition to mon-

Monitoring the current number of people in a space, different app functions enable the collection of additional information, such as the time at which most of the people entered or exited the space or the time of day at which the most people were situated in a pre-defined area.

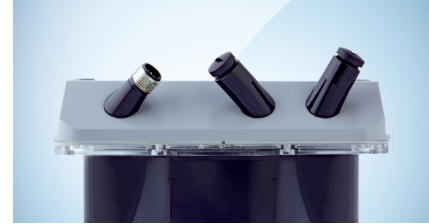
## The PeopleCounter features many functions and delivers useful information for processing the collected data.



PeopleCounter features a function that allows for more than 10 sensors to be connected to a system without an additional evaluation unit. It also enables the monitoring of several access points to a space and the monitoring of entry and exit areas of more than 10 m in width.



In real time, the MRS1000 detects the current number of people in the monitored area and evaluates the corresponding data. An additional computing unit is not necessary. Complete sets are available for quick commissioning.



The PeopleCounter outputs the collected data via measurement telegrams and digital outputs. The current space utilization can then be displayed directly on a monitor, or using a traffic light system as is sometimes used for regulating entry into businesses. The data is available for up to 30 days in the internal memory of the PeopleCounter.

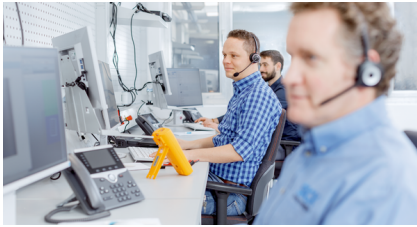


**Person detection with a counting accuracy of more than 98% – there is no risk of confusing people and objects such as shopping carts**

## SICK LifeTime Services

SICK's services increase machine and plant productivity, enhance the safety of people all over the world, provide a solid foundation for a sustainable business operation, and protect investment goods. In addition to its usual consulting services, SICK provides direct on-site support during the conceptual design and commissioning phases as well as during operation.

The range of services not only covers aspects like maintenance and inspection, but also includes performance checks as well as upgrades and retrofits. Modular or customized service contracts extend the service life of plants and therefore increase their availability. If faults occur or limit values are exceeded, these are detected at all times by the corresponding sensors and systems.



### **Consulting and design**

Application-specific advice on the product, its integration and the application itself.



### **commissioning and maintenance**

Application-optimized and sustainable – thanks to professional commissioning and maintenance by a trained SICK service technician.



### **service contracts**

Extended warranty, SICK Remote Service, 24-hour helpdesk, maintenance, availability guarantees and other modular components can be individually combined on request.



### Technical data overview

<b>Measurement principle</b>	HDDM <sup>+</sup>
<b>Integrated application</b>	People counting
<b>Aperture angle</b>	Horizontal 275° Vertical 7.5°, Over 4 scan layers
<b>Angular resolution</b>	0.25°
<b>Working range</b>	≤ 10 m, Width of the counting range
<b>Scanning range</b>	At 10% remission factor 16 m At 90% remission factor 30 m
<b>Amount of evaluated echoes</b>	3
<b>Scanning frequency</b>	50 Hz, 4 x 12.5 Hz
<b>Heating</b>	Self-heating
<b>Ambient operating temperature</b>	-30 °C ... +50 °C
<b>Ethernet</b>	✓
<b>Weight</b>	1.2 kg

### Product description

The PeopleCounter is a solution developed by SICK which enables differentiation of people from objects over large detection areas. Based on the hardware of the MRS1000 3D LiDAR sensor, which generates measurement data in the form of a point cloud, the integrated SensorApp processes the data. With the PeopleCounter, people can be reliably identified using their contours. This means only people are counted, while objects are blanked out. The process runs without recording personal data, ensuring anonymized data processing.

### At a glance

- Exact measurement data output via telegrams and digital outputs
- Intuitive user interface for representation and configuration of the application
- Large aperture angle and four layers of the MRS1000
- Shoulder-head-shoulder contour detection
- Pre-programmed, application-specific app based on a 3D LiDAR sensor

### Your benefits

- Anonymized people counting in public spaces
- Read out of current utilization of space
- Reliable identification of the direction of movement of people at entrances and exits
- Reliable differentiation between humans and objects: Humans are detected and objects are not considered due to their contours.
- Quick and easy commissioning

### Fields of application

- Shopping centers
- Airports
- Museums
- Cruise ships
- Amusement parks
- Train stations
- Trade fairs
- Concerts

## Ordering information

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

- **Integrated application:** People counting
- **Scanning frequency:** 50 Hz, 4 x 12.5 Hz
- **Aperture angle:** horizontal (275°), vertical (7.5°), Over 4 scan layers

Scanning range	Weight	Accuracy	Mounting method	Type	Part no.
At 10% remission factor 16 m At 90% remission factor 30 m	1.2 kg	> 98 %	Mounting height 2 m ... 5 m (typ. 2.5 m ... 3.5 m)	MRS1104A-111011S01	1112242

## 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)