



## microScan3

The rugged safety laser scanner – extremely intelligent

**SICK**  
Sensor Intelligence.

## Advantages



### High reliability thanks to innovative scanning technology

The microScan3 opens up new fields of application and represents a new standard for safety laser scanners: Thanks to the innovative safeHDDM<sup>®</sup> technology, ambient light, dirt and dust are reliably filtered out. This keeps the productivity of your machine high.



**safeHDDM<sup>®</sup> scanning technology:** enables the combination of compact design, large scanning range and high-precision measurement data  
Find out more

**High availability:** resistant to dirt, dust, ambient light and other laser scanners

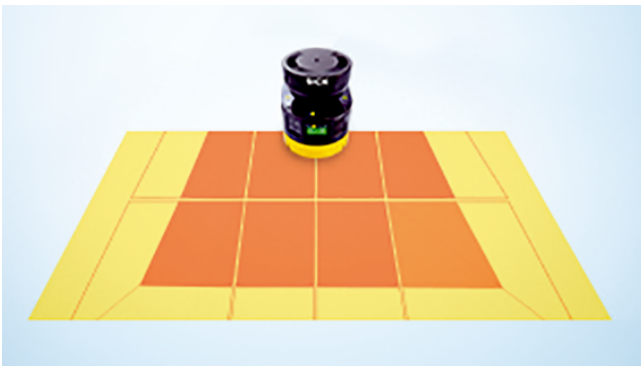


**High availability of the safety laser scanner: How to avoid machine downtime**

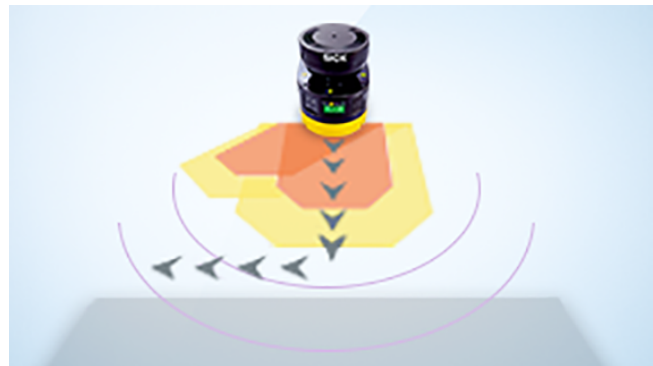


## Intelligent functions for countless possibilities

Safety and productivity go hand-in-hand with the intelligent functions of the microScan3. You can tailor the microScan3 to the requirements of your machine environment, thereby ensuring that processes run smoothly.



**High safety and efficient operation:** thanks to 128 freely configurable fields, 8 simultaneous protective fields and contour detection fields for monitoring the machine environment



**Cost-efficient solution:** You only need one device to get accurate measurement data in order to safeguard the application and support the navigation of your mobile application



**Individual configuration: Experience a high level of flexibility**



## Smart integration can be simple

The microScan3 is remarkably easy to integrate into your application: Quick to mount, easy to wire, and safe to integrate into industrial networks.



**Simple machine integration and fast device change:** thanks to a wide range of accessories, pluggable system connector as well as integrated configuration memory and standardized connection technology



**High productivity:** thanks to remote diagnostics and safe integration into your industrial network, for example via EtherNet/IP™ CIP Safety™, PROFINET PROFIsafe, EtherCAT® FSoE, I/O. Or use the intelligent SICK EFI-pro system



**Simple mounting and commissioning: This is how you save time and money**

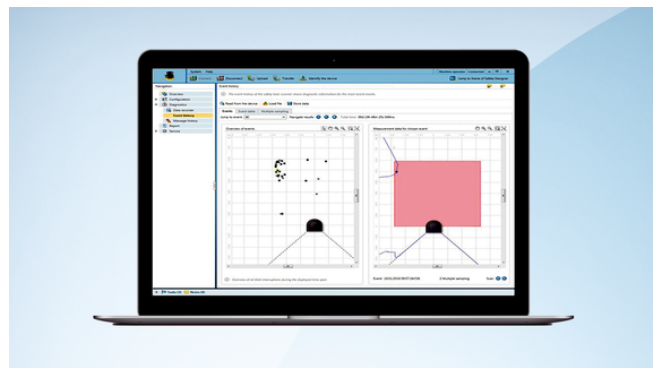


## Intuitive operation of intelligent sensor technology

The Safety Designer software makes it possible to configure the microScan3 quickly and easily and to retrieve detailed diagnostic information. Important diagnostic data is also available directly on the device display.



**Prevent machine downtime:** Measurement data can be stored and analyzed, helping you optimize processes and configurations



**Simple configuration and diagnostics:** with the convenient step-by-step configuration aid in the Safety Designer and quick error analysis, which you can also run with the EventCam, for example



**Clever technology: Benefit from a high level of usability**



Technical data overview

<b>Application</b>	Indoor
<b>Protective field range</b>	4 m ... 9 m (depending on type)
<b>Warning field range</b>	40 m / 64 m (depending on type)
<b>Scanning angle</b>	275 °
<b>Number of fields</b>	4 ... 128 (depending on type)
<b>Number of monitoring cases</b>	1 ... 128 (depending on type)
<b>Response time</b>	≥ 70 ms (depending on type)
<b>OSSD pairs</b>	1 0 4
<b>Integration in the control system</b>	Local inputs and outputs (I/O) CIP Safety™ over EtherNet/IP™ PROFINET PROFI-safe EFI-pro EtherCAT® FSoE (depending on type)
<b>Safety level</b>	PL d, SIL 2, Type 3

Product description

The microScan3 safety laser scanner stands for the protection of very different applications: from stationary to mobile, from simple to complex. The innovative safeHDDM® scanning technology makes the microScan3 extremely resistant, even to dust and ambient light, and delivers high-precision measurement data. It increases the productivity and availability of machines. The different variants of the microScan3 can be integrated simply and safely into countless networks. In addition, the safety laser scanner offers standardized connectivity for time-saving commissioning. The microScan3, the easy handling of its Safety Designer configuration software and its diagnostic options combine user-friendly operation, innovation and very high performance.



reddot award 2016 winner



At a glance

- Innovative safeHDDM® scanning technology
- High-precision measurement data via Ethernet interface
- Protective field range: up to 9 m, scanning angle: 275 °
- Up to 128 freely configurable fields and up to 8 simultaneous protective fields
- Standardized communication interfaces
- System plug with configuration memory

Your benefits

- Very high machine availability and productivity thanks to the patented safeHDDM® scanning technology
- Flexibility for safe automation processes due to simultaneous protective fields, contour detection fields and detailed data output
- Safe integration into different control systems via I/O, EFI-pro, EtherNet/IP™ CIP Safety™ or PROFINET PROFI-safe, EtherCAT® FSoE, etc.
- Saves time during commissioning and diagnostics thanks to the intuitive Safety Designer software, multi-color display and system plug

Fields of application

- Hazardous area, hazardous point and access protection of stationary applications
- Safety and localization for mobile platforms and mobile robots
- Simultaneous protection of several hazardous areas

## Ordering information

Other models and accessories → [www.sick.com/microScan3](http://www.sick.com/microScan3)

Integration in the control system	Sub product family	Protective field range	Number of fields	Number of monitoring cases	Connection type	Type	Part no.
Local inputs and outputs (I/O)	microScan3 Core I/O	4 m	8	2	M12	MICS3-AAAZ40AZ1P01	1075842
		5.5 m	8	2	M12	MICS3-AAAZ55AZ1P01	1075843
		9 m	8	2	M12	MICS3-AAAZ90AZ1P01	1089492
	microScan3 Core I/O AIDA	4 m	4	1	M12 AIDA	MICS3-AAAZ40BZ1P01	1083078
		5.5 m	4	1	M12 AIDA	MICS3-AAAZ55BZ1P01	1083079
		9 m	4	1	M12 AIDA	MICS3-AAAZ90BZ1P01	1089493
	microScan3 Pro I/O	4 m	128	128	M12	MICS3-CAAZ40AN1P01	1133818
		5.5 m	128	128	M12	MICS3-CAAZ55AN1P01	1133820
		9 m	128	128	M12	MICS3-CAAZ90AN1P01	1133822
Local inputs and outputs (I/O), EFI-pro	microScan3 Pro I/O - EFI-pro	4 m	128	128	M12	MICS3-CAAZ40AA1P01	1110035
		5.5 m	128	128	M12	MICS3-CAAZ55AA1P01	1110033
		9 m	128	128	M12	MICS3-CAAZ90AA1P01	1110037
CIP Safety™ over EtherNet/IP™	microScan3 Core - EtherNet/IP	4 m	8	8	M12	MICS3-ABAZ40IZ1P01	1082015
		5.5 m	8	8	M12	MICS3-ABAZ55IZ1P01	1082016
		9 m	8	8	M12	MICS3-ABAZ90IZ1P01	1094457
	microScan3 Pro - EtherNet/IP	4 m	128	128	M12	MICS3-CBAZ40IZ1P01	1092542
		5.5 m	128	128	M12	MICS3-CBAZ55IZ1P01	1092543
		9 m	128	128	M12	MICS3-CBAZ90IZ1P01	1094461
EtherCAT® FSoE	microScan3 Core - EtherCAT	4 m	8	8	M12	MICS3-ABAZ40EN1P01	1108230
		5.5 m	8	8	M12	MICS3-ABAZ55EN1P01	1108232
		9 m	8	8	M12	MICS3-ABAZ90EN1P01	1108234
	microScan3 Pro - EtherCAT	4 m	128	128	M12	MICS3-CBAZ40EN1P01	1108226
		5.5 m	128	128	M12	MICS3-CBAZ55EN1P01	1103950
		9 m	128	128	M12	MICS3-CBAZ90EN1P01	1108228
EFI-pro	microScan3 Core - EFI-pro	4 m	8	8	M12	MICS3-ABAZ40ZA1P01	1092539
		5.5 m	8	8	M12	MICS3-ABAZ55ZA1P01	1092538
		9 m	8	8	M12	MICS3-ABAZ90ZA1P01	1094455
	microScan3 Pro - EFI-pro	4 m	128	128	M12	MICS3-CBAZ40ZA1P01	1091037
		5.5 m	128	128	M12	MICS3-CBAZ55ZA1P01	1091038
		9 m	128	128	M12	MICS3-CBAZ90ZA1P01	1094465

Integration in the control system	Sub product family	Protective field range	Number of fields	Number of monitoring cases	Connection type	Type	Part no.
PROFINET PROFIsafe	microScan3 Core - PROFINET	4 m	8	8	SCRJ push-pull AIDA	MICS3-ACAZ40LZ1P01	1100384
					RJ45 push-pull AIDA	MICS3-ACAZ40PZ1P01	1083012
					M12	MICS3-ABAZ40PZ1P01	1100404
		5.5 m	8	8	SCRJ push-pull AIDA	MICS3-ACAZ55LZ1P01	1100386
					RJ45 push-pull AIDA	MICS3-ACAZ55PZ1P01	1083010
					M12	MICS3-ABAZ55PZ1P01	1100406
		9 m	8	8	SCRJ push-pull AIDA	MICS3-ACAZ90LZ1P01	1100388
					RJ45 push-pull AIDA	MICS3-ACAZ90PZ1P01	1094459
					M12	MICS3-ABAZ90PZ1P01	1100408
	microScan3 Pro - PROFINET	4 m	128	128	SCRJ push-pull AIDA	MICS3-CCAZ40LZ1P01	1100398
					RJ45 push-pull AIDA	MICS3-CCAZ40PZ1P01	1100390
					M12	MICS3-CBAZ40PZ1P01	1092720
		5.5 m	128	128	SCRJ push-pull AIDA	MICS3-CCAZ55LZ1P01	1100400
					RJ45 push-pull AIDA	MICS3-CCAZ55PZ1P01	1100392
					M12	MICS3-CBAZ55PZ1P01	1092721
9 m		128	128	SCRJ push-pull AIDA	MICS3-CCAZ90LZ1P01	1100402	
				RJ45 push-pull AIDA	MICS3-CCAZ90PZ1P01	1100394	
				M12	MICS3-CBAZ90PZ1P01	1094463	



## 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)