



MINECIC

Driver assistance with active collision warning for commercial vehicles

OBJECT DETECTION SYSTEMS

SICK
Sensor Intelligence.



Technical data overview

Supply voltage	24 V DC (19.2 V DC ... 27 V DC) 24 V DC (19.2 V ... 28.8 V)
Application	Mining
Ambient operating temperature	-20 °C ... +50 °C
Integrated application	Driver assistance system for large mining excavators to avoid collisions with other vehicles and the highwall face / driver assistance system for large mining haul trucks to avoid collisions with other vehicles and mining infrastructure (depending on type)
Vehicles	Excavator Haul trucks Wheel loader, dozers Underground haul trucks (depending on type)
Monitored area	Vehicle rear end Vehicle front end Road profile (depending on type)
Warning zones	3 2 (RDW) 2
Functions	Audible and visual collision warning Loading assist Position assistance for haul trucks Front-end collision warning Reverse assist (depending on type)
Scope of delivery	3D LiDAR sensor LD-MRS HD Left / 3D LiDAR sensor LD-MRS HD Right / operator display / mounting set for operator display / mounting kit with shock mount for LD-MRS HD (2 x) / Control cabinet / Buzzer / GPS receiver / USB stick with operating instructions / Ethernet connection cable for LD-MRS HD (2 x) / Ethernet connection cable for display / power supply cable for LD-MRS (2 x) / connecting cables for operator display / 3D LiDAR sensor LD-MRS HD Front / 3D LiDAR sensor LD-MRS HD Rear / 2D LiDAR sensor LMS151 RDW / operator display / mounting set for operator display / mounting kit with shock mount for LD-MRS HD (2 x) / mounting kit with shock mount for LMS1xx / Control cabinet / Buzzer / GPS receiver / USB stick with operating instructions / Ethernet connection cable for LD-MRS HD (2 x) / Ethernet connection cable for LMS1xx / Ethernet connection cable for display / power supply cable for LD-MRS (2 x) / Power cable for LMS1xx / connecting cables for operator display (depending on type)

Product description

The MINESIC system monitors the tailored safety distance between the vehicle and surrounding objects and machines, or to the walls in a tunnel. When turning and reversing, the driver is actively supported by visual and acoustic warnings against the danger of a possible collision. Thanks to the combination of robust sensors and the visualization of critical obstacles via a display, the driver is efficiently and securely led through the site. SICK offers multiple system variants designed for various types of vehicles for open and deep mining.

At a glance

- Visual and acoustic warning
- Touchscreen display showing the vehicle outline and critical objects
- Variable safety distances and warning fields
- Full functionality across the entire speed range
- Open interface to the fleet management system via the event log
- Self-diagnostics function

Your benefits

- Avoiding collisions and accidents reduces repair costs and downtimes
- Efficient and seamless turning around, turning and reversing
- Support and relief for the driver, for secure driving, positioning and loading of the vehicle
- Recognition and identification of moving and static obstacles without the use of RFID transponders
- Active situation-dependent warning with low false alarm rate
- Configurable for the operational requirements in the mine site
- Simple installation and operation thanks to the integrated installation assistant
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Fields of application

- Mining vehicles, dump trucks and load haul dumps in deep mining
- Collision protection for large excavators in mining
- Front-end loaders, wheel loaders and bulldozers in open mining

Ordering information

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

Vehicle	Warning zones	Monitored area	Functions	Type	Part no.
Underground haul trucks	2	Vehicle front end, vehicle rear end	–	MINESIC100 TCW	On request
Excavator	3	Vehicle rear end	Audible and visual collision warning, loading assist, position assistance for haul trucks	EPS-10000	1054156
Haul trucks	3, 2	Vehicle front end, vehicle rear end, road profile	Audible and visual collision warning, front-end collision warning, reverse assist	TPS-30100	1053097
Wheel loader, dozers	3	Vehicle rear end	–	MINESIC100 WPS	On request

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