



GLS100

Flexible line guidance and grid localization by detecting color tapes and 2D codes

SICK
Sensor Intelligence.



Technical data overview

Focus	100 mm fixed focus
Reading distance	100 mm ... 100 mm
Enclosure rating	IP65
CANopen	✓
Serial	✓, RS-485
Weight	250 g



Product description

The cost-effective GLS100 sensor automatically navigates and localizes automated guided vehicles (AGVs) or mobile platforms. The integrated camera reliably detects and decodes colored tapes or tracks for optical line guidance as well as various types of 2D codes. These include QR codes, Data Matrix single codes and multicodes as well as code tapes. The 2D codes can also be applied in the form of a grid.

A higher-level controller – e.g. in the form of a PLC – relocalizes and repositions the AGV based on the data made available by the device.

Thanks to the detection of colored tracks and 2D codes, the GLS100 provides a flexible solution and enhancement options for navigating automated guided vehicle (AGV) systems.

At a glance

- Detection of colored tapes and 2D codes
- 160 x 120 mm field of view enables multiple codes or three lines to be detected in parallel
- Continuous acquisition of the x, y and z coordinates and angle
- Rugged housing: IP65, zinc die cast
- Small curve radius of ≥ 0.5 m

Your benefits

- Flexible solution for many applications: line guidance and grid localization in one device
- Accurate and reliable navigation method – independent of surrounding contours
- Cost-effective localization solution for automated guided vehicles
- Large reading field for variability in track laying and reliable position data output – even with damaged codes or lines
- Slim housing and wide variety of mounting options
- Easy commissioning: Plug and play solution with no specialized programming knowledge required

Fields of application

- Industry and logistics
- Flexible line guidance and grid localization of automated guided vehicles (AGVs)
- Combined use of colored tapes and 2D codes
- Implementation of a complete solution using a combination of hardware (GLS100) and software (e.g. CODE-LOC)

Ordering information

Other models and accessories → www.sick.com/GLS100

- **Reading distance:** 100 mm
- **Overrun speed:** ≤ 3.5 m/s
- **2D code types:** Data Matrix ECC200, QR code
- **Enclosure rating:** IP65

Communication interface	Type	Part no.
CANopen	GLS100L-1MEB1FZ	1141629
Serial Modbus RTU	GLS100L-1MEB1GZ	1141627

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