

DATASENSING LIDAR COLLISION AVOIDANCE GUIDANCE SCANNER

LGS-A10

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958200003 LIDAR Collision Avoidance Guidance
Scanner, ToF, 360°, 10m

- Scanning Angle Of 360°
- Sensing Distance Up To 25 Meters
- For Collision Avoidance & Object Detection
- Based On Time-Of-Flight Infrared Laser Technology



PRODUCT DESCRIPTION

The Datasensing LGS-A10 is a compact, reliable, and rugged 2D LiDAR scanner designed for collision avoidance and object detection, suitable for both indoor and outdoor applications. Utilising time-of-flight (ToF) technology with an infrared laser, it provides precise 360° measurements, making it ideal for automated guided vehicles (AGVs), automated mobile robots (AMRs), and various industrial automation systems.

Key Features:

- **High Precision Measurement:** Offers accurate measurements up to 25 meters, with a 10-meter detection range for object detection.
- **Compact Design:** With dimensions of 65 x 65 x 70 mm and weighing less than 500 grams, the LGS-A10 is suitable for installation in smaller machines and tight spaces.
- **Fast Data Acquisition:** Captures up to 225,000 measured points per second, with selectable rotation frequencies up to 25 Hz and an angular resolution of 0.25° at 10 Hz.
- **Robust Performance:** Operates reliably in various environments, featuring an IP67 mechanical protection rating and an operating temperature range of -10 to +60°C.
- **Easy Integration:** Equipped with an M12 4-pin M Key D Ethernet connection supporting IEEE 802.3u 100Mbps Ethernet, and configurable outputs with up to three simultaneous detection outputs.

The LGS-A10 is user-friendly, with a dedicated interface for quick setup and commissioning. It adopts a UDP standard via Ethernet connection to supply measurement data and offers a suite of physical I/O for monitoring detection and changing zone sets of monitored areas.

This LiDAR scanner is an excellent choice for enhancing safety and efficiency in automated systems, providing reliable collision avoidance and object detection capabilities.

TECHNICAL DATA

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|----------------|-------------------|
| Approvals | UL, CE, UKCA, TÜV |
| Connector | M12 |
| Dimension (mm) | 65 x 65 x 70 |
| Height | 70 mm |
| IP class | IP67 |
| LED indicator | Yes |
| Length | 65 mm |

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|------------------------------------|--|
| Material of body | Aluminium, Polycarbonate |
| Measurement range | 0.1-10m (@ 10% remission), 0.1-25m (@ 80% remission) |
| Output current max | 50 mA |
| Power consumption | 5 W |
| Reading speed | 225,000 points per second |
| Response time | 80ms |
| Sensing distance max | 25 m |
| Storage temperature max | 70 °C |
| Storage temperature min | -20 °C |
| Supply voltage | 9-30 V DC |
| Temperature operational max | 60 °C |
| Temperature operational min | -10 °C |
| Type of light | Laser |
| User interface | LGS PRO - configuration tool |
| Weight | 500 g |
| Width | 65 mm |
| Viewing angle | 360° |

