

## DATASENSING LIDAR COMPACT NAVIGATION GUIDANCE SCANNER

LGS-N25

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958200002 LIDAR Compact Navigation Guidance Scanner, ToF, 360°, 25m

- Scanning Angle Of 360°
- Distance Up To 25 Meters
- For Natural Navigation And Object Profiling
- Based On Time-Of-Flight Infrared Laser Technology



### PRODUCT DESCRIPTION

The Datasensing LGS-N25 is a compact, rugged, and high-performance 2D LiDAR scanner designed for precise navigation, environment mapping, and object profiling in industrial applications. Its robust design ensures reliable operation in both indoor and outdoor settings, making it ideal for Automated Mobile Robots (AMRs), Automated Guided Vehicles (AGVs), forklifts, and automated manufacturing equipment.

#### Key Features:

- **Advanced Time-of-Flight (ToF) Technology:** Utilises infrared laser ToF technology to deliver accurate 2D measurements for natural navigation and detailed object profiling.
- **Comprehensive 360° Scanning:** Provides full-circle environmental scanning, ensuring complete situational awareness for enhanced navigation and safety.
- **High Precision and Speed:** Measures distances up to 25 meters with high accuracy, capturing up to 225,000 data points per second. Selectable rotation frequencies up to 25 Hz and an angular resolution of 0.25° at 10 Hz allow for detailed and rapid data acquisition.
- **Compact and Lightweight Design:** With dimensions of 65 x 65 x 70 mm and weighing less than 500 grams, the LGS-N25 is suitable for integration into smaller machines and tight spaces.
- **Robust Construction:** Features an IP67-rated enclosure, ensuring protection against dust and water ingress, and operates reliably in temperatures ranging from -10 to +60°C.
- **Seamless Integration:** Equipped with an M12 4-pin M Key D Ethernet connection supporting IEEE 802.3u 100Mbps Ethernet, facilitating easy integration into existing systems. The device transmits detailed data, including angle, distance, signal strength, and timestamps for each measuring point.

The LGS-N25 is user-friendly, offering configuration and monitoring through a generic web browser or the LGS Viewer interface. Its advanced features and reliable performance make it an excellent choice for enhancing the efficiency and safety of automated systems in various industrial environments.

### TECHNICAL DATA

<b>Dimension (mm)</b>	65 x 65 x 70
<b>IP class</b>	IP67
<b>LED indicator</b>	Yes
<b>Material of body</b>	Aluminium, Polycarbonate
<b>Measurement range</b>	0.1-10m (@ 10% remission), 0.1-25m (@ 80% remission)

<b>Power consumption</b>	5 W
<b>Reading speed</b>	225,000 points per second
<b>Sensing distance max</b>	25 m
<b>Storage temperature max</b>	70 °C
<b>Storage temperature min</b>	-20 °C
<b>Supply voltage</b>	9-30 V DC
<b>Temperature operational max</b>	60 °C
<b>Temperature operational min</b>	-10 °C
<b>Type of light</b>	Laser
<b>Weight</b>	500 g
<b>Viewing angle</b>	360°