DATASENSING
easing automation challenges

NEW!

LGS-N25
COMPACT LIDAR SCANNER
FOR VEHICLES GUIDANCE AND OBJECT PROFILING

Very Compact, reliable and rugged Lidar for navigation of automated guided vehicles and for object profiling available also for outdoor applications. Very easy to install and use.

APPLICATIONS
- Automated Guided Vehicles (AGV)
- Automated Mobile Robots (AMR)
- Automated Guided Forklifts (AGF)
- Automated manufacturing machines

CE UKCA TÜV SÜD

- ToF technology on infrared laser
- 2D Measurement data for natural navigation and for object profiling
- 360° measurement for all-round scanning
- Very Compact design suitable also for smaller machines
- High precision and reliable measurement up to 25 meters
- Up to 225000 measured points per second
- Up to 25 Hz selectable rotation frequency
- 0.25° angle resolution
- Dimensions: 65 x 65 x 70 mm

CODE DESCRIPTION

LGS - N 25

series	**LGS**	Lidar
model	**N**	Lidar guidance scanner for navigation
max measurement range	**25**	25 m (with 80% reflectivity)

TECHNICAL SPECIFICATIONS

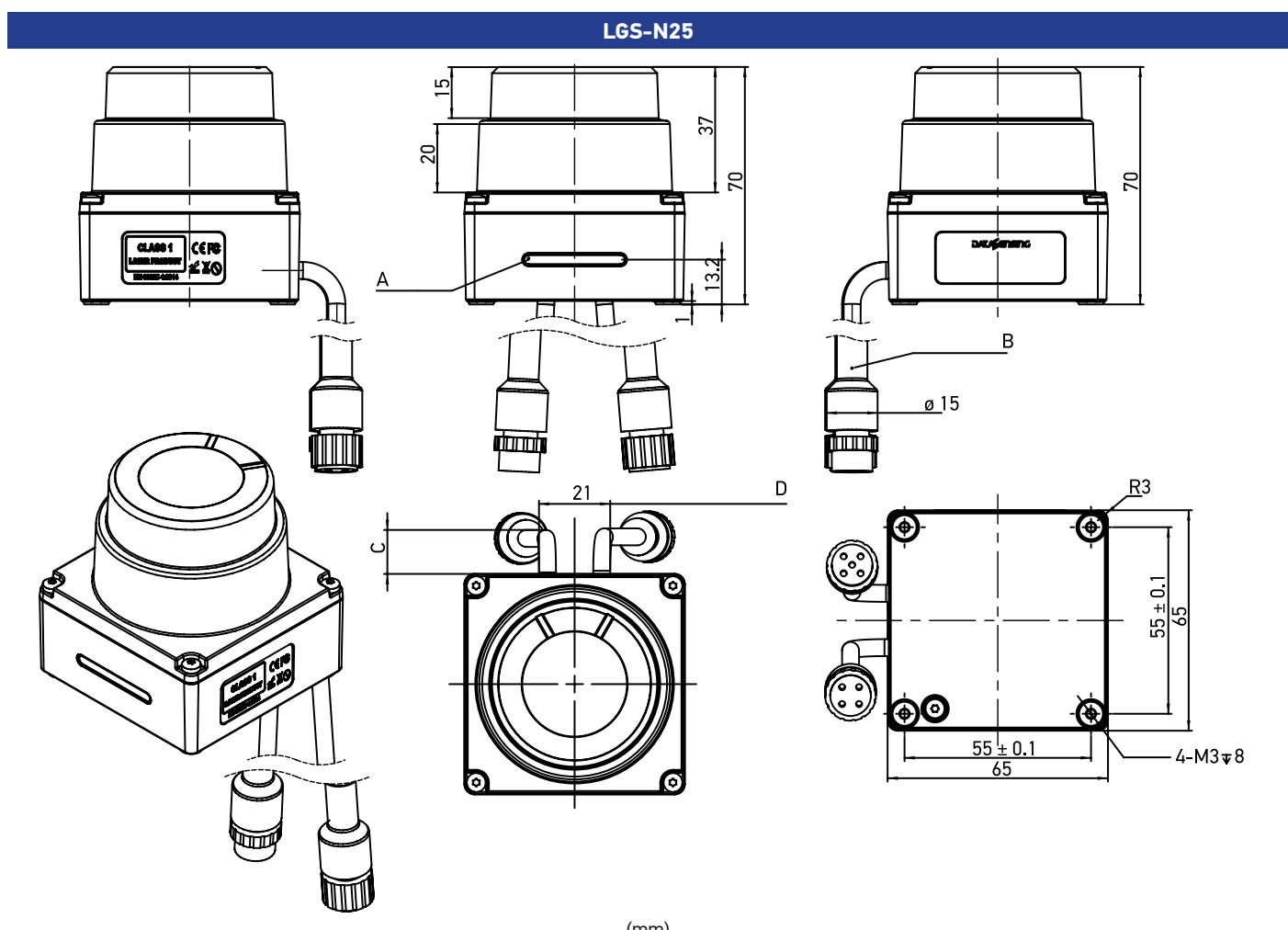|	LGS-N25
GENERAL DATA	
Operating principle	Lidar / pulsed TOF
Description	LGS-N25
Diagnostic	Motor / Temperature / Voltage
Transmitted Data	angle of each measuring point
	distance of each measuring point
	signal strenght of each measuring point
	time stamp in ms each 24h/cycle
DETECTION CAPABILITIES	
Nominal sensing distance	25 m
range @ 10% of remission	0.1 ... 10 m
range @ 80% remission	0.1 ... 25 m
Scan Angle	360 °
Minimum distance of detection	0.1 m
Measurement accuracy	± 30 mm @ 80% (0.4-25 m)
Repeatability	≤20 mm @ 80% (0.4-25 m)
Angular resolution	0.25° @10Hz / 0.5° @15Hz / 1° @25Hz
EMISSION DATA	
Laser wavelenght	905 ± 20 (IR) nm
Emission	Laser Infrared
FUNCTIONS	
Selectable scanning frequency	10/15/25 Hz
Sensitivity adjustment	GUI
INPUT/OUTPUT	
Output type	IEEE 802.3u 100Mbps Ethernet
COMMUNICATION	
Communication protocol	TCP/IP
Measurement data transfer protocol	UDP
Ethernet connector	M12 4P Female, KEY D
Network Interface	10/100 Mbit/s Ethernet
HMI/UI	
Configuration and monitoring interface(s)	LGS-view viewer and - web browser interface
LED indicators	Power (Green) / Fault (Red)
ELECTRICAL DATA	
Supply voltage	9 ... 30 Vdc
Maximum consumption	5W
MECHANICAL DATA	
Dimensions	65 x65 x70 mm
Material	Metal - Aluminium / PC
Connections	M12 4 p MALE
Weight	<500 g
Rotanional speed	25 Hz 1500 rpm
ENVIRONMENTAL DATA	
Operating Temperature	-10 ... 60 °C
Mechanical Protection	IP67
Storage temperature max.	-20 ... 70 °C
Ambient light immunity	80000 lux

AVAILABLE MODELS

Description	Model
LGS-N25 compact lidar	**LGS-N25** (958200002)

PLUGS

POWER				
Brown	1	Vdc		
White	2	NC		
Blue	3	GND		
Black	4	NC		

ETHERNET				
	1	TX+		
	2	RX+		
	3	TX-		
	4	RX-		

MECHANICAL DRAWINGS

LGS-N25

(mm)

Model	A	B	C	D
LGS-N25	LED user interface	min 15~20	It's recommended to install the threading opening > 20x20	Cable length 150 ~ 200

ACCESSORIES TO BE ORDERED SEPARATELY (MANTEINANCE)

Description	Model
Liquid cleaner antistatic in bottle (1 lt)	**SLS-CLEANER** (95ASE2990)
Cleaning cloth (22 cm x 22 cm), 100 pcs.	**SLS-CLEANER** (95ASE3000)

ACCESSORIES TO BE ORDERED SEPARATELY (CABLES)

Description	Cables poles connections	Dimensions	Model
power cable	M12 4-poles F – free wires	3 m lenght	**CS-A1-02-U-03** (95ASE1120)
		5 m lenght	**CS-A1-02-U-05** (95ASE1130)
		10 m lenght	**CS-A1-02-U-10** (95ASE1140)
		15 m lenght	**CS-A1-02-U-15** (95ASE1150)
		25 m lenght	**CS-A1-02-U-25** (95ASE1160)
Ethernet to host cables	M12 4-poles M, Key D Ethernet – RJ45	1 m lenght	**CAB-ETH-M01** (93A051346)
		3 m lenght	**CAB-ETH-M03** (93A051347)
		5 m lenght	**CAB-ETH-M05** (93A051348
		10 m lenght	**CAB-ETH-M10** (93A051391)