

## 2D 270° Laser Scanners



## LSC Series CATALOG

**For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.**

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Major Features

- Wide detection range up to 270°, 25 m
- Supports flexible field configuration with a total of 16 field sets (1 set: 3 fields)
- Accurate and stable object detection by supporting various filter functions
- Small size (L 60 × W 60 × H 86 mm) suitable for various installation environments
- Supports Ethernet communication
- Supports atLiDAR dedicated software
- Sold separately
  - Ethernet cable (C18-2R-A, C18-5R-A, C18-10R-A, C48-2R-A, C48-5R-A, C48-10R-A)
  - Power I/O cable (CID-2-VG, CID-5-VG, CID-10-VG, CLD-2-VG, CLD-5-VG, CLD-10-VG)

### Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

**LSC - C ① C T3 - ET**

#### ① Detection distance

5: 5 m  
10: 10 m  
25: 25 m

### Product Components

- Product
- Instruction manual
- M3 × 8 mm bolt (SUS) × 4
- Connector cap × 1

### Software


Download the installation file and the manuals from the Autonics website. Supported devices are different for each software version.

#### ■ atLiDAR (V2.0 or later)

atLiDAR is the management program for laser scanner parameter settings, status information and monitoring data, etc.

This program communicates with the laser scanner via Ethernet communication.

## Specifications

Model	LSC-C5CT3-ET	LSC-C10CT3-ET	LSC-C25CT3-ET
Environment of use	Indoor		
Emitting property	Infrared laser		
Laser class	CLASS 1		
Wave length band	905 nm		
Max. pulse output power	6 W		
Beam conversion angle	9.5 mrad		
Scanning frequency	15 Hz		
Response time	Typ. 67 ms		
Detection distance range	0.05 to 5 m	0.05 to 10 m	0.05 to 25 m
Max. detection distance of 10 % reflector	5 m	8 m	
Detection distance error	System error: Typ. $\pm 60$ mm, statistical error: Typ. 20 mm (1 $\sigma$ )		
Min. object size <sup>01)</sup>	At detection distance of 8 m: $\approx 121$ mm		
Angular resolution	0.33°		
Aperture angle	270°		
Object reflectivity	> 4 %		
Number of field sets	16 (1 set: Consists of subfields 1, 2, 3)		
Number of field sets that can be used concurrently	1		
Unit weight (package)	$\approx 228$ g (314 g)		
Approval	CE, 		

01) Even objects smaller than the set min. object size can be detected depending on the environment.

Power supply	9 - 28 VDC $\equiv$
Power consumption <sup>01)</sup>	< 4 W
Input	4 Photocoupler inputs - H: $\geq 9 - 28$ VDC $\equiv$ , L: $\leq 3$ VDC $\equiv$
Output signal	NPN-PNP open collector output setting (software)
Load voltage	9 - 28 VDC $\equiv$
Load current	$\leq 100$ mA
Residual voltage	$\leq 3.0$ VDC $\equiv$
Insulation resistance	$\geq 5$ M $\Omega$ (500 VDC $\equiv$ megger)
Dielectric strength	500 VAC $\sim$ 50 / 60 Hz for 1 minute
Vibration	10 sweep cycles in each X, Y, Z axes at sine wave, 10 to 500 Hz, acceleration 5 G
Vibration (malfunction)	10 minutes in each X, Y, Z axes at sine wave, 10 to 500 Hz, acceleration 5 G
Vibration (irregular)	5 hours in each X, Y, Z axes at 5 to 250 Hz, 42.4 m/s <sup>2</sup> RMS
Shock	3 times in each X, Y, Z axes at sine half wave, acceleration 50 G, duration 11 ms
	1000 times in each X, Y, Z axes at sine half wave, acceleration 25 G, duration 6 ms
	5000 times in each X, Y, Z axes at sine half wave, acceleration 50 G, duration 3 ms
Shock (malfunction)	6 times in each X, Y, Z axes at sine half wave, acceleration 50 G, duration 11 ms
Ambient illuminance	$\leq 80,000$ lx
Ambient temperature	-10 to 50 °C, storage: -30 to 70 °C (no freezing or condensation)
Ambient humidity	0 to 95 %RH, storage: 0 to 95 %RH (no freezing or condensation)
Protection structure	IP67 (IEC standard)
Connector specification	Power I / O: M12 12-pin, Ethernet: M12 8-pin
Material	Case: AL, Window: PC

01) Excluding power supplied to the load

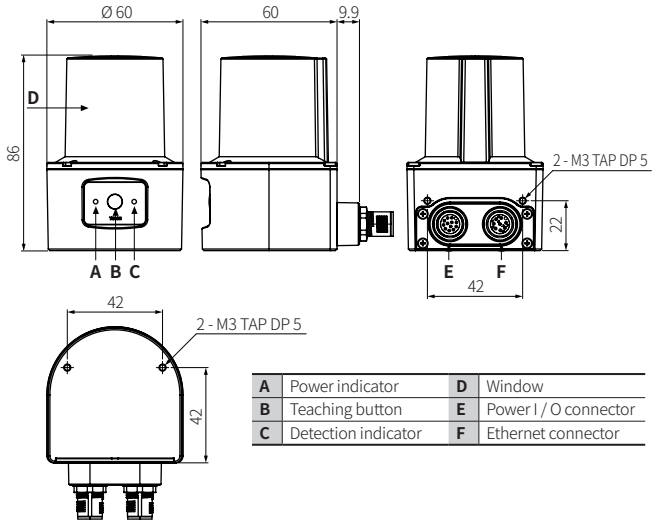
## Communication Interface

### ■ Ethernet

Communication protocol	TCP/IP
Communication speed	100BASE-TX
Baud rate	100 Mbps

## Dimensions

• Unit: mm, For the detailed drawings, follow the Autonics website.

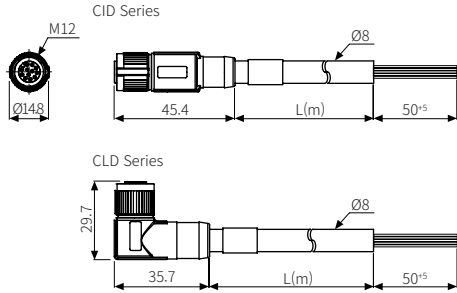


## Sold Separately

- Power I / O cable: CID-□-VG, CLD-□-VG
- Ethernet cable: C18-□R-A, C48-□R-A

## Sold Separately: Power I/O Cable (CID-□-VG, CLD-□-VG)

- Unit: mm, For the detailed drawings, follow the Autonics web site.
- Cable length L (m): 2 m, 5 m, 10 m



## Sold Separately: Ethernet Cable (C18-□R-A, C48-□R-A)

- Unit: mm, For the detailed drawings, follow the Autonics web site.
- Cable length L (m): 2 m  $\pm 45$  mm, 5 m  $\pm 45$  mm, 10 m  $\pm 45$  mm

