

SC-LD300

Laser Positioning Sensor
Compact & Economical



- High Absolute Accuracy
- High Reliability
- Easy to Setup
- Ambient Light Immunity
- CANopen, RS485

PRODUCT INTRODUCTION

Basic Principle

Automate Matrix's SC-LD300 series Laser Positioning Sensor based on the dToF technology is a economical and competitive positioning solution. It provides value to customers in the cost & size sensitive applications.

Technical Specifications

Up to 150m, with 100Hz refresh rate & 3mm accuracy.

Application Scenarios

Meets various environmental requirements in industrial measurement.

SUITABLE MODELS

Product Model	Measurement Range(m)	Repeatability (mm)	Communication Interface	Operating Temperature
SC-LD312 50	50m	±3mm	RS485 + CANopen	-10°C to 55°C
SC-LD312 50W	50m	±3mm	RS485 + CANopen	-40°C to 75°C
SC-LD312 100	100m	±3mm	RS485 + CANopen	-10°C to 55°C
SC-LD312 100W	100m	±3mm	RS485 + CANopen	-40°C to 75°C
SC-LD312 150	150m	±3mm	RS485 + CANopen	-10°C to 55°C
SC-LD312 150W	150m	±3mm	RS485 + CANopen	-40°C to 75°C

TECHNICAL SPECIFICATIONS

Parameter		
Distance Measurement Parameters	Product Model	SC-LD300 Series
	Measurement Range	20m/50m/100m/150m
	Repeatability	±3mm
	Measuring frequency	100Hz
	Type. light spot size (distance)	≤30mm/≤60mm/≤100mm/≤150mm
	Response time	Static: 30ms; Dynamic: 10ms
	Resolution	0.1mm/1mm Adjustable
	Temperature drift	≤0.15mm/K
	Moving speed	≤10m/s
Optical Parameters	Setup time	6s
	Emitter	Laser, Infrared
Electrical Parameters	Wavelength	905nm + 650nm
	Operating voltage	18V - 30V DC
RS485 Interface Parameters	Operating current	≤120mA/24V DC
	Baud rate (bit/s)	9600/19200/38400/57600/115200
	Data bits	8
	Parity bit	None
CANopen Interface Parameters	Stop bits	1
	Baud rate (kbps)	20/50/57.143/100/125/250/500/1000
Mechanical Parameters	Dimensions	104.5 x 83 x 70mm
	Housing material	Aluminum alloy
	Lens	Glass
	Weight	Approximately 600g
	IP rating	IP55
Environmental Parameters	Ambient light immunity	Sunlight: 100kLux
	Operating Temperature	-20°C to 70°C
	Storage Temperature	-40°C to 85°C