Gocator® 1300 SERIES

ALL-IN-ONE 3D SMART DISPLACEMENT SENSORS

The Gocator 1300 series of smart laser displacement sensors are the next generation of high speed (32kHz) distance measuring devices. Compact and light weight, Gocator sensors are simple to network and integrate. These sensors are ruggedly designed to handle industrial applications and are ready to use for your most demanding on-line inspection applications, right out of the box.

- PRE-CALIBRATED AND READY TO MEASURE
- SCALABLE TO A SYNCHRONIZED MULTIPLE SENSOR NETWORK
- SMALL FOOTPRINT – FITS INTO TIGHT SPACES
- SETUP & CONTROL VIA WEB BROWSER
- RICH I/O & PLC SUPPORT
- OPEN SOURCE SDK

Gocator 1320

BUILT ON SELCOM & OPTOCATOR SUCCESS

Gocator leverages the latest digital technologies to deliver higher flexibility and performance, and easily integrates into existing systems and delivers ranges over Ethernet, analog, serial, or Selcom Interface.

HIGH SPEED AND ACCURATE

The Gocator 1300 Series samples at a 32kHz scan rate at the highest resolution over a large measurement range (up to 2000mm). These sensors are ideal for dimensional and surface roughness measurements.

STAND ALONE AND SCALABLE

Designed to be truly standalone, single sensor sytems do not require any additional controllers, or PCs. Gocator systems can effortlessly scale to multiple sensors using LMI Master hubs. Masters take care of power distribution, laser safety interlock, I/O handling, and microsecond synchronization.

Gocator's browser-based graphical user interface

EASE OF USE

Gocator's built-in GUI allows for flexible configuration of range settings using any web browser, computer or operating system. With no additional software to install, Gocator's out of the box setup and configuration is fast and simple. The Gocator 1300 Series is available in two housing package options for easy implementation into any application.

Model	1320	1340	1350	1365	1370	1380	1390
Scan Rate (Hz)	32,000	32,000	32,000	32,000	32,000	32,000	32,000
Clearance Distance (mm)	40	162.5	200	562	237.5	127	500
Measurement Range (mm)	20	95	200	375	412.5	1651	2000
Linearity Z (+/- % of MR)	0.05	0.05	0.05	0.11	0.07	0.18	0.1
Linearity Z (+/- mm)	0.01	0.05	0.1	0.4	0.3	3.0	2.0
Resolution Z (mm)	0.0004 - 0.0004	0.0005 - 0.0010	0.0015 - 0.0035	0.0025 - 0.0040	0.0025 - 0.0070	0.0100 - 0.0450	0.0250 - 0.0600
Spot Size (mm)	0.11	0.37	0.50	1.80	0.90	2.60	2.60
Recommended Laser Class	3R	3B	3B	3B	3B	3B	3B
Other Laser Class	3B	2M, 3R			2M		
Recommended Package Dimensions (mm)	Side Mount (3R) 30x120x149	Side Mount 30x120x149	Side Mount 30x120x149	Side Mount 30x120x220	Side Mount (3B) 30x120x149	Side Mount 30x120x149	Side Mount 30x120x277
Other Package Dimensions (mm)	Top Mount (3B) 49x75x162		Top Mount 49x75x162		Top Mount (2M) 49x75x162		
Weight (kg)	0.75 / 0.8	0.75	0.75 / 0.8	1.0	0.75 / 0.8	0.75	1.25

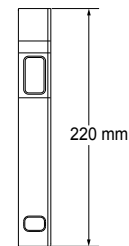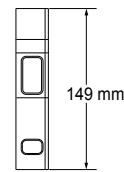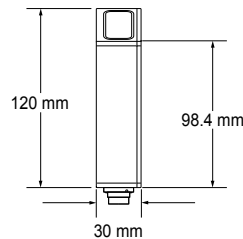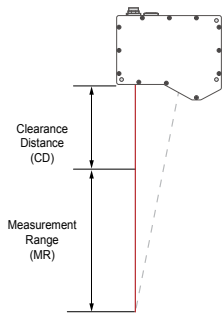Resolution Z based on averaging 128 samples.
Optical models, laser classes, and packages can be customized. Contact LMI for more details.
Specifications stated are based on standard laser classes. Resolution Z and Linearity Z may vary for other laser classes.
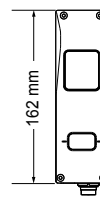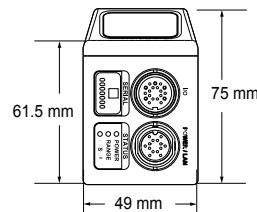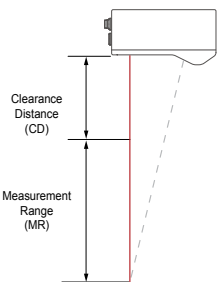Refer to specifications in the Gocator 1300 Series user manual for more details.

All 1300 Series Models	
Interface	Gigabit Ethernet
Inputs	Differential Encoder, Laser Safety Enable, Trigger
Outputs	2x Digital Output, RS-485 Serial, Selcom Serial, 1x Analog Output (4-20mA)
Input Voltage (Power)	+24 to +48 VDC (13 Watts); Ripple +/- 10%
Housing	Gasketed Aluminium Enclosure, IP67
Operating Temperature	0 to 50 °C
Storage Temperature	-30 to 70 °C
Vibration Resistance	10 to 55 Hz, 1.5 mm double amplitude in X, Y and Z directions, 2 hours per direction
Shock Resistance	15 g, half sine wave, 11 ms, positive and negative for X, Y and Z directions
Scanning Software	Browser-based GUI and open source SDK for configuration and real-time 3D visualization. Open source SDK, native drivers, and industrial protocols for integration with user applications, third-party image processing applications, and PLCs.
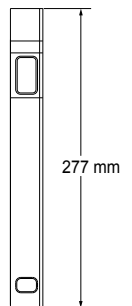
Recommended Package - Side Mount

Other Package - Top Mount

LASER RADIATION
AVOID EXPOSURE TO THE BEAM
CLASS 3B LASER PRODUCT

PEAK POWER: 130 mW
EMITTED WAVELENGTH: 660 nm

This product is designated for use solely as a component and as such it does not fully comply with the standards relating to laser products specified in U.S. FDA CFR Title 21 part 1040 and IEC 60825-1

IEC 60825-1:2007

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