

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, Gocators 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 systems 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 | | | | | |
| Recommended Package Dimensions (mm) | Side Mount (3R) 30x120x149 | Side Mount 30x120x149 | Side Mount 30x120x149 | Side Mount 30x120x220 | Side Mount 30x120x149 | Side Mount 30x120x149 | Side Mount 30x120x277 |
| Other Package Dimensions (mm) | Top Mount (3B) 49x75x162 | | Top Mount 49x75x162 | | | | |
| Weight (kg) | 0.75 / 0.8 | 0.75 | 0.75 / 0.8 | 1.0 | 0.75 | 0.75 | 1.25 |

Resolution Z based on averaging 128 samples.

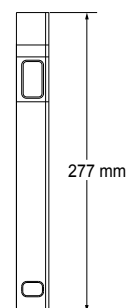
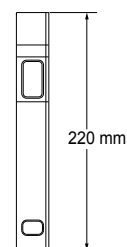
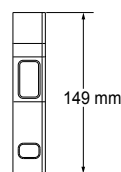
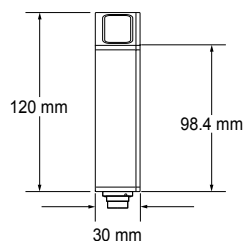
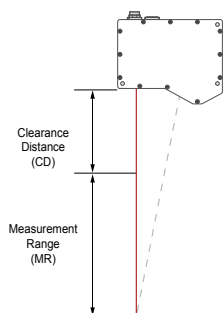
Optical models, laser classes, and packages can be customized. Contact LMI for more details.

Specifications stated are based on standard laser classes. Resolution Z and Linearity Z may vary for other laser classes.

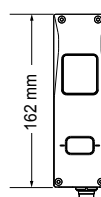
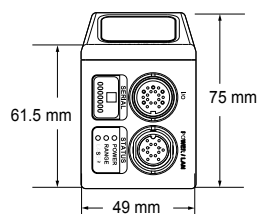
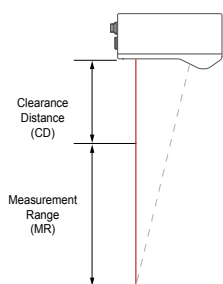
Refer to specifications in the Gocator 1300 Series user manual for more details.

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

AMERICAS
LMI Technologies Inc.
Delta, BC, Canada

EMEAR
LMI Technologies GmbH
Teltow/Berlin, Germany

ASIA PACIFIC
LMI (Shanghai) Trading Co., Ltd.
Shanghai, China



LMI Technologies has offices worldwide. All contact information is listed at lmi3d.com/contact/locations