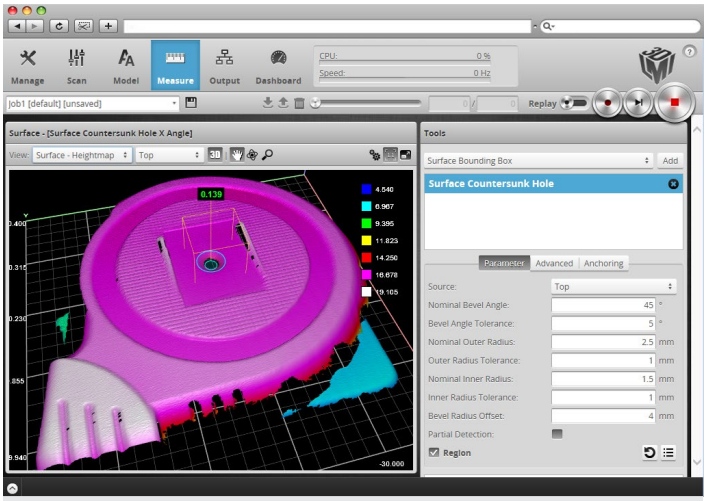
LMI TECHNOLOGIES



Gocator® 2100 Series

BEST-VALUE 3D SMART PROFILE SENSORS



Gocator's browser-based graphical user interface

The Gocator 2100 series of 3D smart sensors is an all-in-one solution that lets factories improve efficiencies in product validation at a fraction of the cost of other sophisticated solutions. Providing the same measurement tools and output support available in high-end sensors, Gocator 2100 series systems can easily scale up to larger systems or higher resolutions.

- **Built-in tools, no programming**
- **Direct integration to plc**
- **Multiple-sensor network ready**
- **Scalable to higher resolution series**
- **Setup & control via web browser**

PROFINET® Modbus EtherNet/IP ASCII

POWERFUL BUILT-IN MEASUREMENT TOOLS

Providing the same growing set of measurement tools and real-time visualization as LMI's high-performance sensors, the Gocator 2100 series lets you solve complicated inspection problems at a much lower cost.

FLEXIBLE INTEGRATION

With its extensive output support on Gigabit Ethernet, digital and analog out, the Gocator 2100 series directly communicates with existing production line systems, minimizing engineering and maintenance costs. Built-in PLC protocols greatly simplify integration with PLCs.

STANDALONE & SCALABLE

Single sensors require no additional controllers, amplifiers or PCs. Using LMI Master hubs, you can effortlessly scale Gocator systems to multiple sensors to handle wider targets. Gocator 2100 is also fully compatible with Gocator 2300. Systems can be easily upgraded to higher resolution sensors with no adaptation or additional learning required.

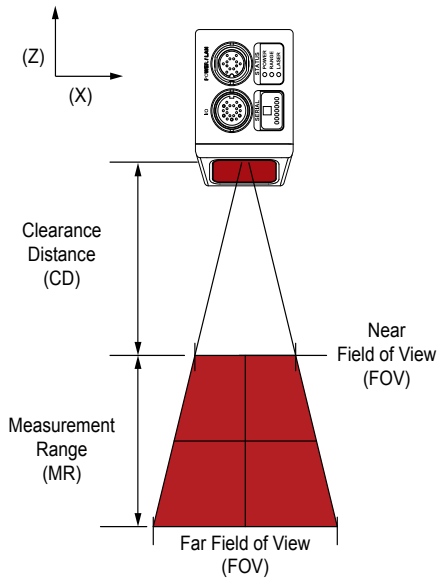
EASY TO USE

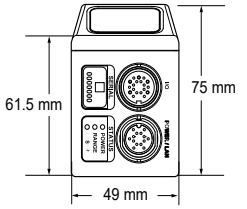
Gocator's built-in, intuitive GUI lets you configure profiling settings and measurement tools using any web browser, computer or operating system. With no additional software to install, Gocator's out-of-the-box setup and configuration is fast and easy.

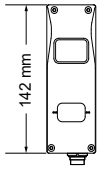
GOCATOR 2100 SERIES MODELS	2120	2130	2140	2150	2170	2175	2180
Data Points / Profile	1280	640	640	640	640	640	640
Linearity Z (+/- % of MR)	0.01	0.01	0.01	0.01	0.04	0.03	0.04
Resolution Z (mm)	0.0018 - 0.0030	0.006 - 0.014	0.013 - 0.037	0.019 - 0.060	0.055 - 0.200	0.175 - 0.925	0.092- 0.488
Resolution X (mm) (Profile Data Interval)	0.028 - 0.042	0.088 - 0.150	0.19 - 0.34	0.3 - 0.6	0.55 - 1.10	0.51 - 1.58	0.75 - 2.20
Repeatability Z (µm)	0.4	0.8	1.2	2	8	12	12
Clearance Distance (CD) (mm)	40	90	190	300	400	650	350
Measurement Range (MR) (mm)	25	80	210	400	500	1350	800
Field of View (FOV) (mm)	18 - 26	47 - 85	96 - 194	158 - 365	308 - 687	324 - 1010	390 - 1260
Laser Classes	2, 3R	2, 3R	2, 3R, 3B	2, 3R	2, 3R	2, 3R	2, 3R
Dimensions (mm)	Side Mount 35x120x149.5	Top Mount 49x75x142	Top Mount 49x75x197	Top Mount 49x75x272	Top Mount 49x75x272	Top Mount 49x75x272	Top Mount 49x75x272
Weight (kg)	0.8	0.74	0.94	1.3	1.3	1.3	1.3

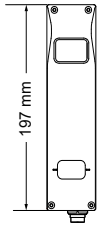
Optical models, laser classes, and packages can be customized. Contact LMI for more details.
Specifications stated are based on standard laser classes. Linearity Z, Resolution Z, and Repeatability Z may vary for other laser classes.
Refer to specifications in the Gocator Line Profile Sensor user manual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

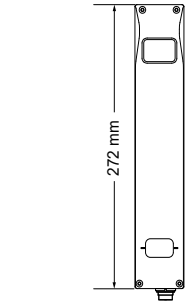
ALL 2100 SERIES MODELS	
Scan Rate	Approximately 170 Hz to 5000 Hz
Interface	Gigabit Ethernet
Inputs	Differential Encoder, Laser Safety Enable, Trigger
Outputs	2x Digital output, RS-485 Serial (115 kBaud)
Factory Communication	PROFINET, Modbus, EtherNet/IP, ASCII, Gocator
Input Voltage (Power)	+24 to +48 VDC (13 Watts); Ripple +/- 10%
Housing	Gasketed aluminum 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.

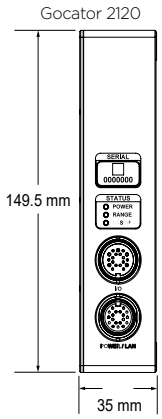


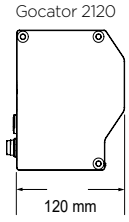


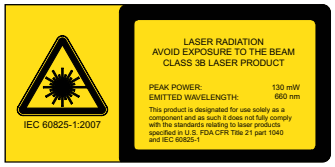












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