

Gocator 3100 SERIES

ALL-IN-ONE 3D SMART SNAPSHOT SENSORS

The Gocator 3100 series is the first family of 3D smart sensors to combine 3D point cloud acquisition and measurement tools in a single industrial package. With a rich set of built-in tools, Gocator sensors are ideal for a wide variety of non-contact, in-line inspection applications. Gocator sensors are simple to setup, quick to integrate and highly reliable.

- CAPTURE 3D POINT CLOUDS IN A SINGLE SNAPSHOT
- FAST SCAN CYCLES (up to 5Hz)
- EXTREMELY ACCURATE 3D MEASUREMENT WITH BLUE LIGHT PROJECTION
- BUILT-IN 3D MEASUREMENT TOOLS



FAST AND ACCURATE

The Gocator 3100 series performs high-resolution non-contact measurement at up to 5Hz. These sensors are ideal for dimensional measurement of many features such as holes, slots, studs, gap and flush.

STANDALONE OR NETWORKED

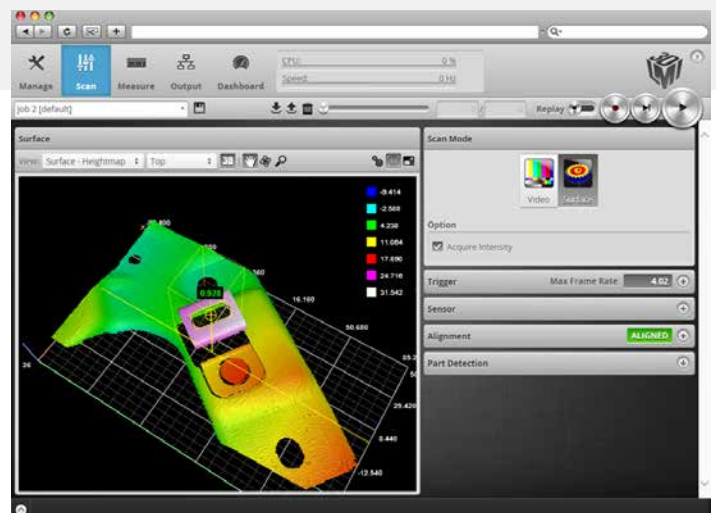
Single sensors require no additional controllers or PCs to produce 3D measurements. Synchronize multiple sensors in the same network to expand your sensors field of view using a LMI Master.

RELIABLE AND REPEATABLE DATA

Structured blue light and stereo scanning technology add extra levels of ambient light immunity; producing reliable data even in challenging lighting conditions.

RUGGED, COMPACT, AND LIGHT WEIGHT

Gocator's IP67 housing, small form factor, and less than 1.5kg weight make it ideal for fitting into small spaces and mounting on robots.



Gocator's browser-based graphical user interface

EASY TO USE

Gocator's built-in GUI provides users with an intuitive setup experience, using any web browser, computer or operating system. With no additional software to install, Gocator can work with any computer and operating system.

Model	3109	3110
Clearance Distance (CD) (mm)	157	150
Measurement Range (MR) (mm)	70	100
Field of View (mm)	67 x 86 - 93 x 88	60 x 105 - 90 x 160
Linearity Z (+/- % of MR)	0.038	0.050
Resolution Z (mm)	0.023 - 0.044	0.035 - 0.108
Resolution XY (mm)	0.065 x 0.071 - 0.091 x 0.092	0.090 x 0.100 - 0.150 x 0.160
Dimensions (mm)	49 x 100 x 155	49 x 74.4 x 276
Weight (kg)	1.04	1.35

Linearity Z values and Resolution Z are typical values.

Field of View and Resolution XY are specified as [X] x [Y], near to far.

Refer to specifications in the Gocator 3100 Series user manual for more details.

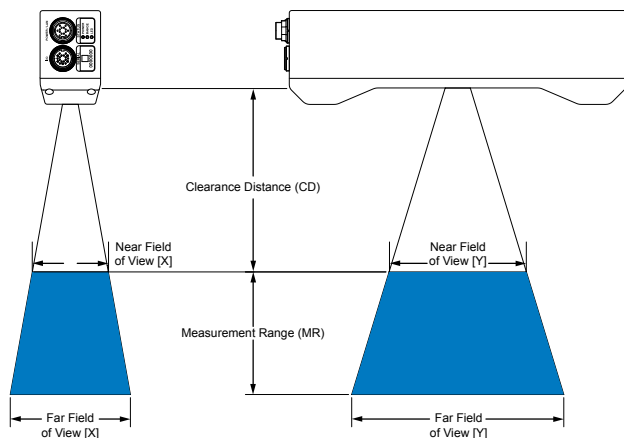
All 3100 Series Models

Scan Rate	Up to 5 Hz
Light Source	Blue LED (465 nm)
Interface	Gigabit Ethernet
Inputs	Differential Encoder, Light Safety Enable, Trigger
Outputs	2x Digital Output, RS485 Serial (115 kbaud), 1x Analog Output (4 - 20 mA)
Input Voltage (Power)	+24 to +48 VDC (25 Watts); RIPPLE +/- 10%
Housing	Gasketed Aluminium Enclosure, IP67
Operating Temp	0 to 50 °C
Storage Temp	-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

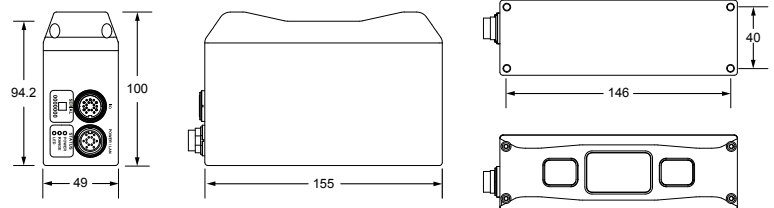
Software and Built-in 3D Measurement Tools

3D Feature Tools	Openings (holes, slots), Cylinders, Studs (threaded and non-threaded), Plane
3D Volumetric Tools	Volumes, Areas, Bounding boxes, Positions (min, max, centroid), Ellipses, Orientations
Measurement Accuracy	+/- 50 um
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.

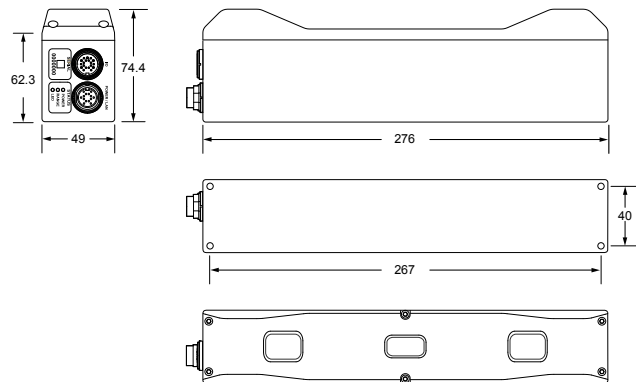
Differential Encoder requires the use of Master 400/800/1200/2400.



Gocator 3109



Gocator 3110



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