

# 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. Gocators 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



Gocator

3110

#### **FAST AND ACCURATE**

The Gocator 3100 series performs high-resolution noncontact 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

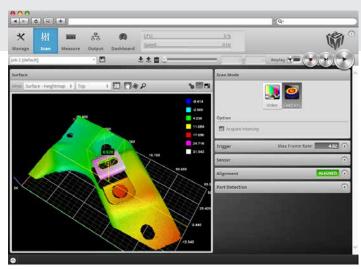
Single sensors require no additional controllers or PCs to produce 3D measurements. Synchronize multiple sensors in the same network to expand your sensors field of view using a LMI Master.

### **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**

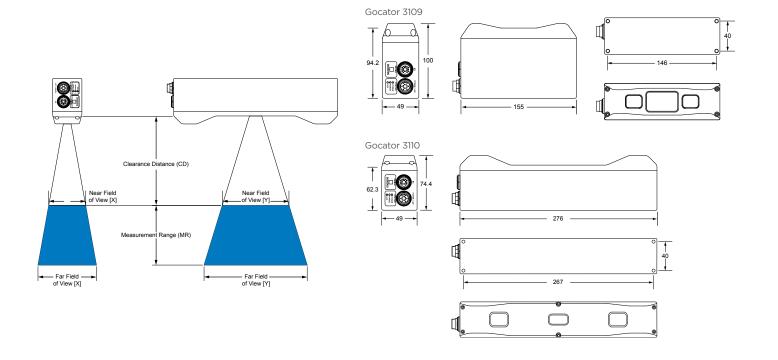
Gocator's built-in GUI provides users with an intuitive setup experience, using any web browser, computer or operating system. With no additional software to install, Gocator can work with any computer and operating system.

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.

	are specified as [X] x [Y], near to far. ator 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 Measur	ement 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.



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