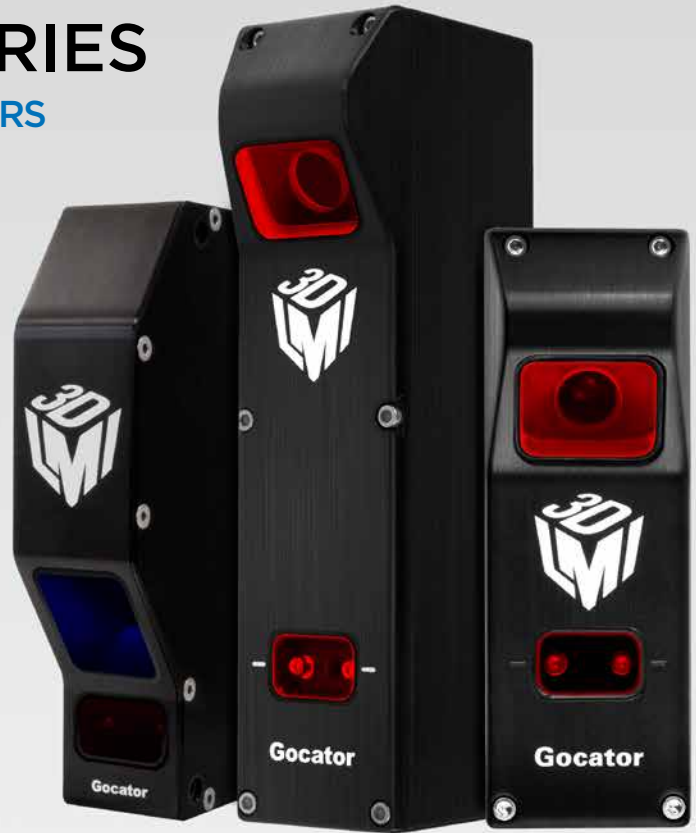


# Gocator® 2300 SERIES

## ALL-IN-ONE 3D SMART PROFILE SENSORS

The Gocator 2300 series of 3D smart sensors are designed for the demanding industrial conditions of the factory floor. Gocator's simple and flexible design enables factories to reduce costs and maximize profitability by improving efficiencies in product validation. The Gocator 2300 series comes in five standard models but can also be customized to suit specific factory automation requirements.

- PRE-CALIBRATED TO SCAN MICRON-LEVEL DETAILS
- HIGH SPEED & LOW LATENCY
- SETUP & CONTROL VIA WEB BROWSER
- BUILT-IN TOOLS, NO PROGRAMMING
- OPEN SOURCE SDK



**Gocator 2320**

**Gocator 2340**

**Gocator 2330**

### MEGAPIXEL RESOLUTION

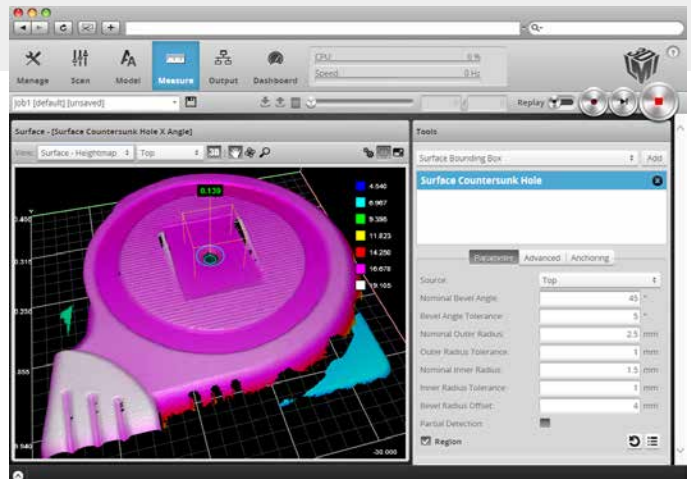
Gocator 2300 sensors measure micron level features leveraging megapixel resolution while maintaining large fields of view. Gocator can now screen parts for very small defects, raising the bar for quality inspection.

### STANDALONE & SCALABLE

Single sensors require no additional controllers, amplifiers or PCs. Gocator systems can effortlessly scale to multiple sensors using LMI Master hubs. Masters take care of power distribution, laser safety interlock, encoder and digital input handling, and microsecond synchronization.

### COMPACT & LIGHT WEIGHT

Gocator's small footprint and less than 1.5 kg weight make it ideal for fitting into tight spaces and mounting onto robotic arms.



*Gocator's browser-based graphical user interface*

### EASY TO USE

Gocator's built-in GUI allows for flexible configuration of 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 2300 SERIES MOD-ELS                  | 2320                       | 2330                   | 2340                   | 2350                   | 2370                   | 2380                   |
|--|----------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Data Points / Profile                        | 1280                       | 1280                   | 1280                   | 1280                   | 1280                   | 1280                   |
| Linearity Z (+/- % of MR)                    | 0.01                       | 0.01                   | 0.01                   | 0.01                   | 0.04                   | 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          | 0.092 - 0.488          |
| Resolution X (mm)<br>(Profile Data Interval) | 0.014 - 0.021              | 0.044 - 0.075          | 0.095 - 0.170          | 0.150 - 0.300          | 0.275 - 0.550          | 0.375 - 1.100          |
| Repeatability Z (µm)                         | 0.4                        | 0.8                    | 1.2                    | 2                      | 8                      | 12                     |
| Clearance Distance (CD) (mm)                 | 40                         | 90                     | 190                    | 300                    | 400                    | 350                    |
| Measurement Range (MR) (mm)                  | 25                         | 80                     | 210                    | 400                    | 500                    | 800                    |
| Field of View (FOV) (mm)                     | 18 - 26                    | 47 - 85                | 96 - 194               | 158 - 365              | 308 - 687              | 390 - 1260             |
| Recommended Laser Class                      | 2M                         | 2M                     | 3R                     | 3R                     | 3B                     | 3B                     |
| Other Laser Classes                          | 3R                         | 3R, 3B                 | 2M, 3B                 | 3B                     |                        |                        |
| Dimensions (mm)                              | Side Mount<br>35x120x149.5 | Top Mount<br>49x75x142 | Top Mount<br>49x75x197 | Top Mount<br>49x75x272 | Top Mount<br>49x75x272 | Top Mount<br>49x75x272 |
| Weight (kg)                                  | 0.8                        | 0.74                   | 0.94                   | 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 2300 & 2880 Series user manual for more details.

#### ALL 2300 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), 1x Analog Output (4 - 20 mA)   |
| 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. |

