

Gocator® 2510/2520

3D SMART LINE PROFILE SENSORS



BLUE
LASER

- PRE-CALIBRATED TO SCAN OUT-OF-THE-BOX
- X RESOLUTION DOWN TO 8 μm
- 10,000 PROFILES PER SECOND INCLUDING 3D MEASUREMENT
- SETUP & CONTROL VIA WEB BROWSER OR SDK
- BUILT-IN TOOLS, NO PROGRAMMING
- EXTEND WITH GDK AND GOMAX

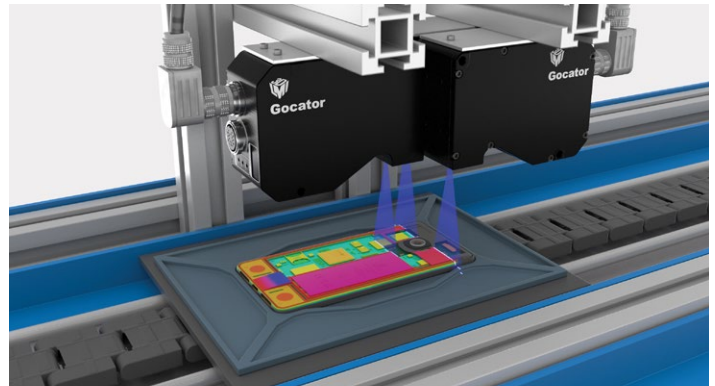
Gocator 2510 and 2520 3D smart sensors are the fastest, most compact, and advanced Gocator laser line profilers to date. Designed for high performance small parts inspection, these line profilers achieve fast scan speeds (up to 10 kHz), and high X resolution (8 μm). With a custom 2MP high-speed imager, advanced optical design, and blue laser light, Gocator 2510 and 2520 generate excellent data with highly repeatable results even on shiny surfaces.

INSPECT WITH SPEED AND PRECISION

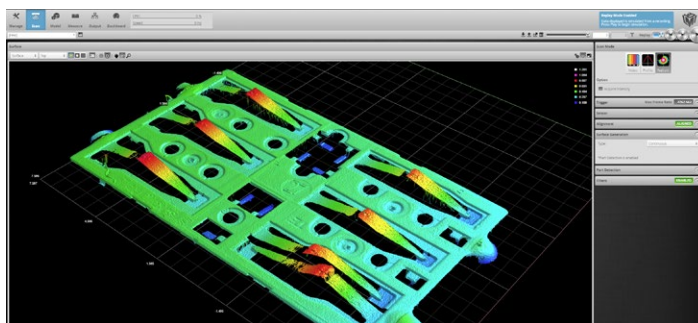
See and do more with micron resolution and faster scan rates. Take advantage of the higher speed by enabling multiple exposures to measure high-contrast targets at production speed. With an X resolution down to 8 μm , small features such as edges or gaps can be easily measured.

LARGE FIELD OF VIEW AND MEASUREMENT RANGE

Accomplish more with fewer sensors, while still capturing the finest surface and edge details with a large field of view. A large measurement range lets you handle a wider variety of parts.



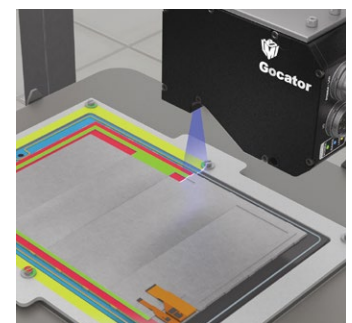
Phone component & frame inspection



Gocator's browser-based graphical user interface



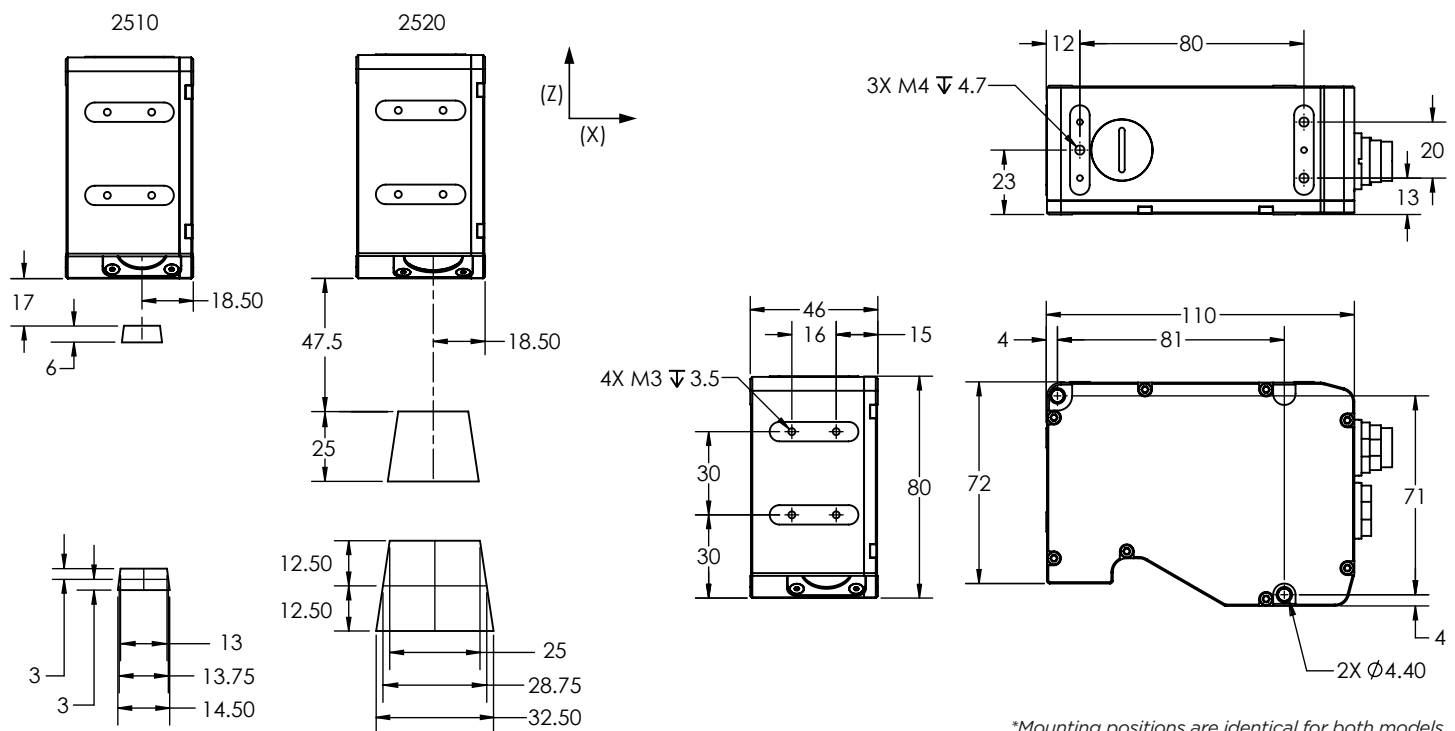
Phone bezel gap and flushness



Glue bead inspection

| GOCATOR 2500 SERIES MODELS | 2510 | 2520 |
|--|------------------|------------------|
| Data Points / Profile | 1920 | 1920 |
| Resolution X (µm) (Profile Data Interval) | 8.0 | 13.0 - 17.0 |
| Linearity Z (+/- % of MR) | 0.015% | 0.006% |
| Repeatability Z (µm) | 0.2 | 0.4 |
| Clearance Distance (CD) (mm) | 17.0 | 47.5 |
| Measurement Range (MR) (mm) | 6 | 25 |
| Field of View (FOV) (mm) | 13.0 - 14.5 | 25 - 32.5 |
| Laser Class | 2 (blue, 405 nm) | 2 (blue, 405 nm) |
| Dimensions (mm) | 46x80x110 | 46x80x110 |
| Weight (kg) | 0.65 | 0.65 |

| ALL 2500 SERIES MODELS | |
|------------------------|--|
| Scan Rate | 2.4 kHz (2510 full field of view) / 1.6 kHz (2520 full field of view) to 10 kHz |
| Interface | Gigabit Ethernet |
| Inputs | Differential Encoder, Laser Safety Enable, Trigger |
| Outputs | 2x Digital output, RS-485 Serial (115 kBaud) |
| Input Voltage (Power) | +24 to +48 VDC (15 Watts); Ripple +/- 10% |
| Housing | Gasketed aluminum enclosure, IP67 |
| Operating Temperature | 0 to 40°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, robots, and PLCs. |



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BLUE
LASER

Gocator® 2530

3D SMART LASER LINE PROFILE SENSOR

- UP TO 100 MM FIELD OF VIEW
- 28 MICRONS X RESOLUTION
- 0.5 MICRONS Z REPEATABILITY
- 10,000 PROFILES PER SECOND INCLUDING 3D MEASUREMENT
- SETUP & CONTROL VIA WEB BROWSER OR SDK
- BUILT-IN TOOLS, NO PROGRAMMING
- EXTEND WITH GDK AND GOMAX

Gocator 2530 continues the signature high speed 3D blue laser profiling and compact design of the 2500 series, with a wider field of view. This sensor is ideal for battery and consumer electronics inspection, and applications in rubber & tire scanning and factory automation.

Gocator 2530 line profilers achieve inspection speeds up to 10 kHz, at high resolutions and **fields of view up to 100 mm**. The custom 2 MP high-speed imager, advanced optical design, and blue laser light allow the 2530 to generate excellent 3D data with highly repeatable results on both **shiny and low contrast** surfaces.

INSPECT WITH SPEED AND PRECISION

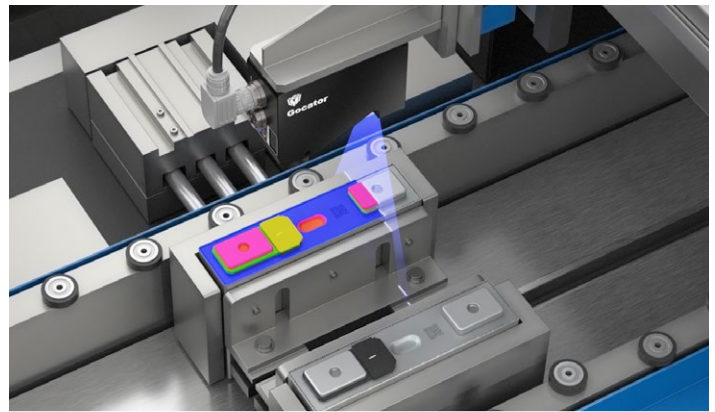
Take advantage of higher speeds by enabling multiple exposures to measure specular and low contrast surfaces simultaneously (e.g., shiny metal of battery cells, cell phone midplates, rubber). The sensor's speed is also a key advantage in achieving high Y resolution (spacing in direction of travel). Submillimeter X and Z resolutions deliver detailed inspection of small assembly features such as edges or gaps and accurate 3D height measurement of surface geometry and defects (such as scratches and pits).

WIDER FIELD OF VIEW AND LARGER MEASUREMENT RANGE

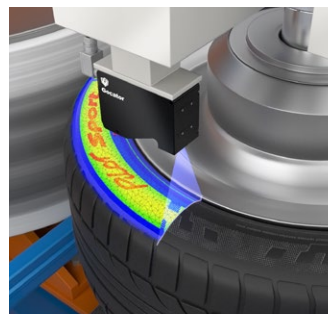
The 2530's wider field of view allows engineers to scan complete targets with a single sensor (e.g., cell phone midplate). Large field of view and measurement range allow the sensor to handle a wider variety of scan targets.

EASY INTEGRATION INTO TIGHT SPACES AND EXISTING SYSTEMS

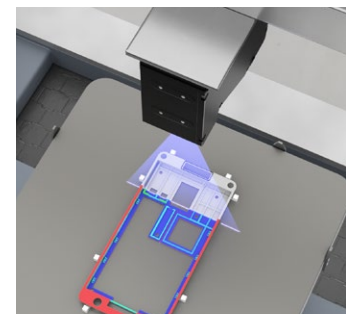
The Gocator 2530 has one of the smallest footprints in the industry while maintaining an IP67 rating. This allows the sensor to be mounted in virtually any machine environment.



Gocator® 2530 inspecting battery weld



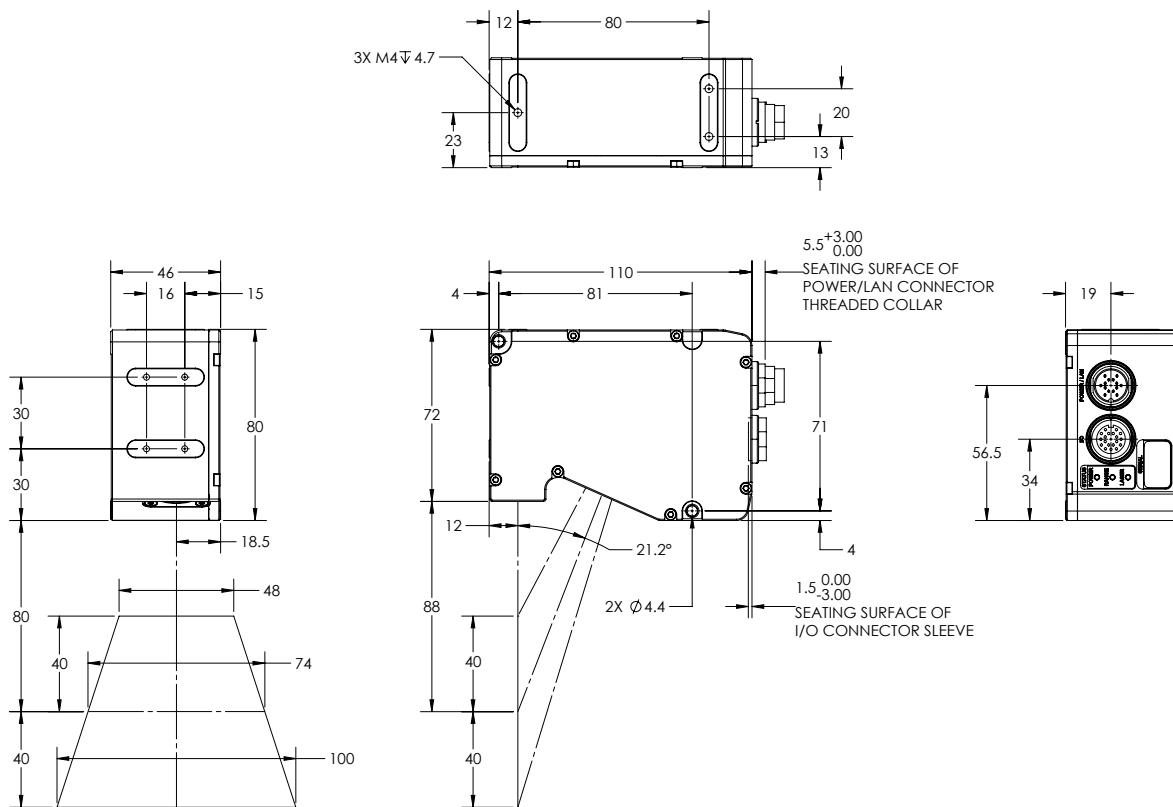
Tire sidewall uniformity inspection



Cell phone midplate inspection

| GOCATOR 2530 | |
|--|------------------|
| Data Points / Profile | 1920 |
| Resolution X (µm) (Profile Data Interval) | 28.0 - 54.0 |
| Linearity Z (+/- % of MR) | 0.01% |
| Repeatability Z (µm) | 0.5 |
| Clearance Distance (CD) (mm) | 40 |
| Measurement Range (MR) (mm) | 80 |
| Field of View (FOV) (mm) | 48 - 100 |
| Laser Class | 2 (blue, 405 nm) |
| Dimensions (mm) | 46x80x110 |
| Weight (kg) | 0.65 |

| ALL 2500 SERIES MODELS | |
|-------------------------------|--|
| Scan Rate | Up to 10 kHz |
| Interface | Gigabit Ethernet |
| Inputs | Differential Encoder, Laser Safety Enable, Trigger |
| Outputs | 2x Digital output, RS-485 Serial (115 kBaud) |
| Input Voltage (Power) | +24 to +48 VDC (15 Watts); Ripple +/- 10% |
| Housing | Gasketed aluminum enclosure, IP67 |
| Operating Temperature | 0 to 40°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 |
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| 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, robots, and PLCs. |



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