



LMI TECHNOLOGIES



BLUE
LASER

Gocator® 2522

3D SMART LASER LINE PROFILE SENSOR

- ~2x Larger specular field of view than Gocator® 2512
- Optimized optical design for superior data on glass and specular surfaces
- Scans specular and diffuse targets simultaneously
- Low sensitivity to target angle for increased flexibility of setup
- Handles a wide variety of materials and surface types

Gocator® 2522 is a large field of view (FOV) laser profiler precision-engineered for 3D scanning of glass and other specular materials, including polished metals and plastics. With nearly twice the FOV of the Gocator® 2512, the 2522 is the preferred solution in applications with larger scan surfaces, or where limited space demands the use of fewer sensors.

Like the Gocator® 2512, the Gocator® 2522 has the ability to scan **specular and diffuse** surfaces simultaneously, enabling it to capture a cell phone's cover glass and frame in fewer scans. Gocator® 2522 also delivers exceptional performance in GD&T measurement of component assemblies with various challenging surface finishes (e.g., transparent, glossy).

FOR LARGE FIELD OF VIEW SCANNING OF GLASS AND OTHER SPECULAR SURFACES

LARGE FIELD OF VIEW FOR GREATER SCAN COVERAGE

The Gocator® 2522 features a large specular field of view (25 mm)—combined with a smart all-in-one design—making this sensor a higher-performance, easier-to-use, and more cost-effective solution than competing glass scanning technologies such as confocal scanners.

HIGH-SPEED, HIGH-RESOLUTION SPECULAR SCANNING

Gocator® 2522 features an optimized optical design for superior glass scanning at 15 microns X resolution, 0.2 microns Z repeatability, and speeds up to 10 kHz (including scan, measure, and control).

SPECIALIZED LASER PROJECTION TECHNOLOGY

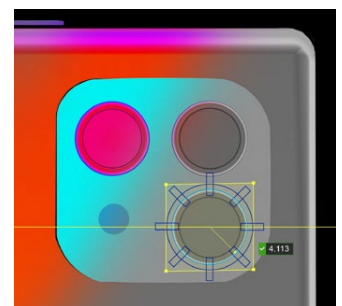
The sensor's laser projection technology can handle a wider range of surface angles, material types, and surface colors. Competing laser profilers use a collimated laser beam that does not offer the same target angle performance.



Gocator® 2522 scanning cell phone cover glass assembly



Generates high-resolution 3D data



Apply built-in measurement tools

GOCATOR 2522	
Data Points / Profile	1920
Resolution X (µm) (Profile Data Interval)	13 - 17
Linearity Z (+/- % of MR)	0.006%
Repeatability Z (µm)	0.4
Clearance Distance (CD) (mm)	17.75
Measurement Range (MR) (mm)	25
Field of View (FOV) (mm)	25.0 - 32.5 (diffuse); 25.0 (specular)
Laser Class	2 (blue, 405 nm)
Dimensions (mm)	46x110x110
Weight (kg)	0.65
Scan Rate	1.6 kHz (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.

