

# Gocator 3210

## 3D SMART SNAPSHOT SENSOR

Gocator 3210 provides a large field of view and measurement range, letting you perform quality inspection on multiple features with a single snapshot. The all-in-one smart snapshot sensor offers high resolution for accurate measurements down to 34  $\mu\text{m}^*$  using a stereo camera and an industrial projector to deliver long lifetime and uniform lighting throughout the measurement volume.

- » 3D POINT CLOUDS IN A SINGLE SNAPSHOT
- » ACCURATE 3D MEASUREMENT WITH BLUE LIGHT PROJECTION
- » INDUSTRIAL DESIGN FOR LONG LIFE

\* Based on VDI/VDE 2634, Part 2



**Gocator 3210**

### HIGH ACCURACY

The sensor's 2-megapixel stereo camera provide accurate, full-area measurements suited for analyzing many features at once with a single exposure. With snapshot sensors, the target is stationary during acquisition effectively minimizing the cost of expensive motion system components (such as encoders) and the associated errors due to vibration.

### INLINE INSPECTION READY WITH FASTER PROCESSING

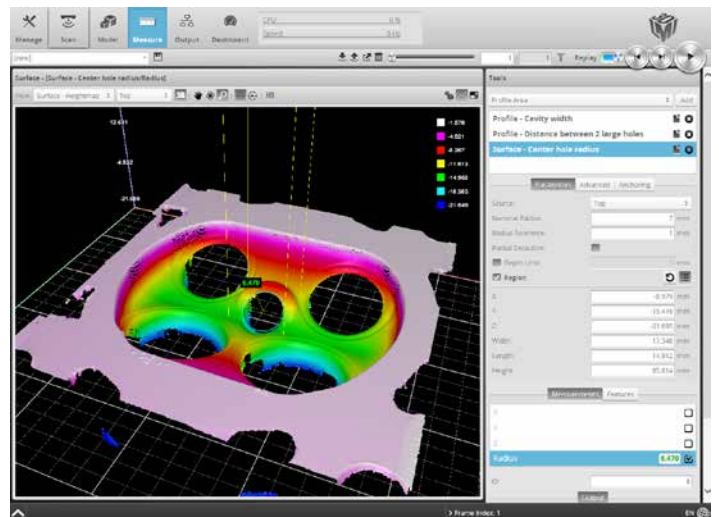
The sensor's new dual core controller and onboard hardware acceleration allows for inline production speeds. For time-critical applications, Gocator 3210 can be further accelerated up to 4x faster using a PC running Gocator Accelerator (GoX).

### EASY TO USE

Gocator's built-in GUI provides an intuitive setup experience, using any web browser, computer or operating system. No additional software is required.

### INDUSTRIAL PACKAGE, COMPACT, AND LIGHTWEIGHT

Gocator's rugged IP67 housing, small form factor, and light weight make it ideal for fitting into small spaces and mounting on robots.



*Gocator's browser-based graphical user interface showing the scan coverage of an automotive cylinder head*

### INDUSTRIAL PROJECTOR FOR LONG LIFETIME

The sensor's LED light source makes it easier to work with than lasers. The bright LED and industrial design enables shorter exposures so you get measurements faster with an expected lifetime of up to 10 years of continuous operation.

Gocator 3210 Specifications	
Scan Rate (Hz)	4
Imagers (megapixels)	2
Clearance Distance (CD) (mm)	164.0
Measurement Range (MR) (mm)	110.0
Field of View (mm)	71.0 x 98.0 - 100.0 x 154.0
Repeatability Z ( $\mu\text{m}$ )	4.7
Resolution XY (mm)	0.060 (CE) - 0.090 (FE)
VDI/VDE Accuracy (mm)*	0.034
Dimensions (mm)	49 x 142 x 190
Weight (kg)	1.7
Light Source	Blue LED (465 nm)
Interface	Gigabit Ethernet
Inputs	Differential Encoder, 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 Temperature	0 to 45 °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

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
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.

\* Based on 2634, Part 2

