

# Gocator® 2430/40/50

## 3D SMART LINE PROFILE SENSORS



- Available in RED (2430/40) and BLUE (2430/40/50) laser
- Easily handle both rubber and shiny metal surfaces
- 2 MP imager, custom embedded processor, and optimized optics for faster scan rates and higher sensitivity
- Set up and control via web browser or SDK
- Built-in measurement tools, no programming required
- Extend with GDK and Accelerator

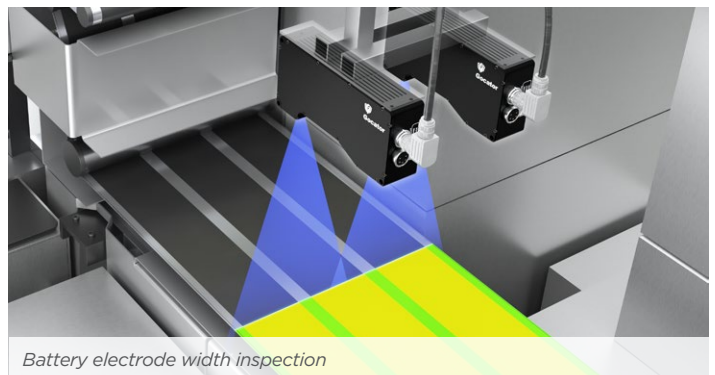
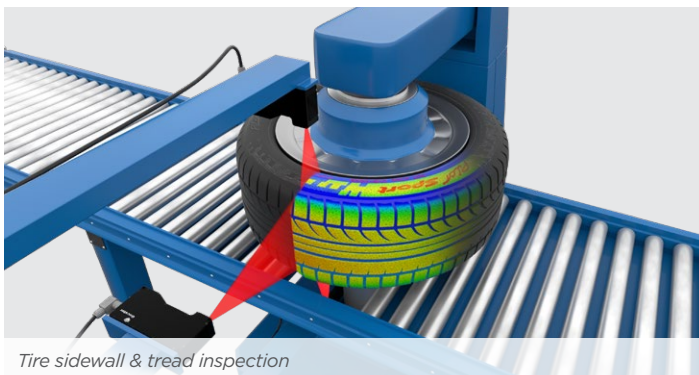
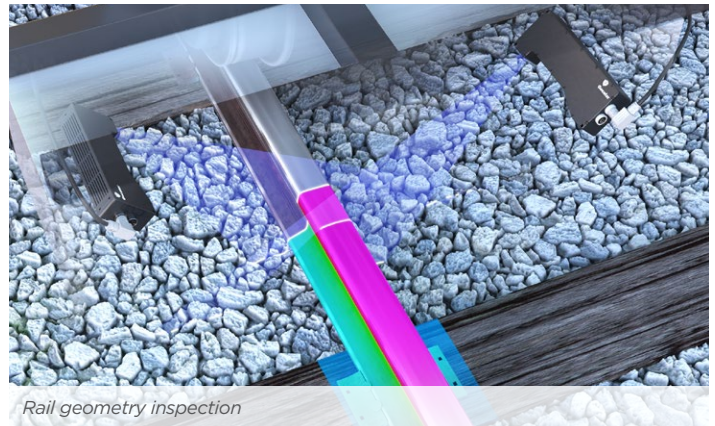
Gocator® 2430/40/50 line profilers provide high-speed, high-resolution 3D scanning of challenging surfaces. Use the 2430/40 **red laser** models to scan dark surfaces in rubber & tire applications. Or, choose one of the 2430/40/50 **blue laser** models for scanning shiny metals in electric vehicle (EV) battery manufacturing, rail inspection (rail geometry), and small to medium-size electronic and automotive parts.

### BLUE LASER FOR CLEANER DATA ON SHINY SURFACES

Due to its shorter wavelength, blue laser light performs better than red or green lasers when scanning specular surfaces. Blue laser generates “cleaner” profiles (i.e., less laser speckle) on shiny targets, allowing it to achieve higher measurement accuracy as a result. For example, Gocator® 2450 blue laser sensors are able to deliver high-quality 3D scan data of train rails even in full sunlight and when the track ballast is wet.

### INSPECT WITH SPEED, PRECISION, AND SENSITIVITY

Faster scanning and acquisition let you speed up your inline process and easily achieve higher resolutions. Sensor multiplexing capability makes these sensors easier to use (with more accurate results) at inline production speed.

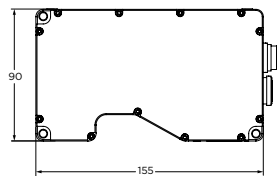
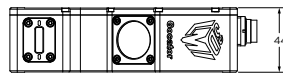


<b>GOCATOR 2400 SERIES MODELS</b>	<b>2430</b>	<b>2440</b>	<b>2450</b>
Scan Rate (Hz)	320 - 5000	310 - 5000	270 - 5000
Data Points / Profile	1500	1500	1800
Resolution X (µm) (Profile Data Interval)	37 - 57	90 - 130	100 - 255
Linearity Z (+/- % of MR)	0.01%	0.01%	0.01%
Repeatability Z (µm)	0.8	1.2	2.0
Clearance Distance (CD) (mm)	75	183	270
Measurement Range (MR) (mm)	80	210	550
Field of View (FOV) (mm)	47 - 85	96 - 194	145 - 425
Laser Class	2, 3R, 3B (red, 660 nm; blue, 405 nm)	2, 3R, 3B (red, 660 nm; blue, 405 nm)	2, 3R, 3B (blue, 405 nm)
Dimensions (mm)	44x90x155	44x90x190	44x90x240
Weight (kg)	1.0	1.2	1.2

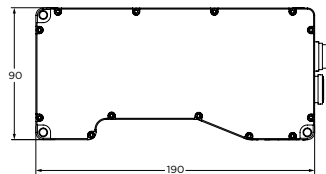
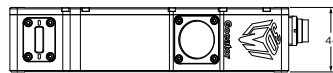
#### ALL 2400 SERIES MODELS

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 (9 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, robots, and PLCs.

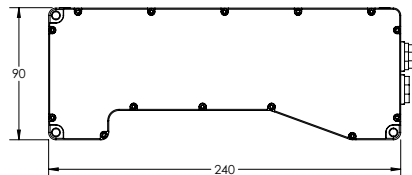
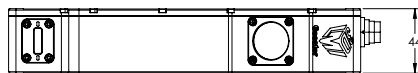
Gocator 2430



Gocator 2440



Gocator 2450



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