



## Gocator 2490

## 3D SMART LASER LINE PROFILE SENSOR



- 2.5 mm XYZ resolution for complete dimensional measurement (W×H×D) at conveyor speeds of 2 m/s
- Built-in measurement tools and PLC interfaces result in lower total system cost

Gocator® 2490 is designed to scan large targets in packaging & logistics, automotive manufacturing, and food processing applications. The sensor leverages an ultra-wide field of view and large measurement range to achieve an extensive scan area, allowing engineers to perform complete dimensional gauging and high-resolution 2D/3D quality inspection of large targets at inline production speed.

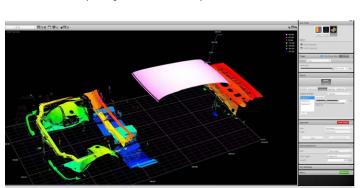


## HIGH-RESOLUTION 3D SCANNING AT PRODUCTION SPEED

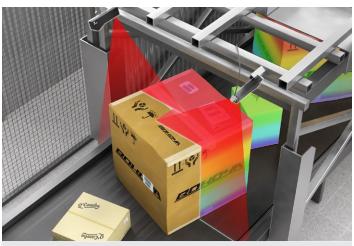
For packaging & logistics applications, the 2-megapixel imager allows Gocator 2490 to scan and measure 1 m × 1 m packages at a rate of 800 Hz and resolutions of 2.5 mm in all three dimensions, even at conveyor speeds of 2 m/s. Competing systems typically offer just 3-5 mm resolution in the X, Y, and Z axes.

## **LARGE SCAN AREA**

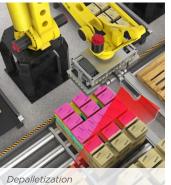
The combination of wide field of view and large measurement range enables engineers to cover a scan area up to 1 m × 2 m for handling a variety of large targets (e.g., automotive body frame inspection and transverse board scanning). In addition, high Z resolution (for height measurement) makes the 2490 well suited to applications such as food quality control and optimization.



Single 2490 scan of a car body frame



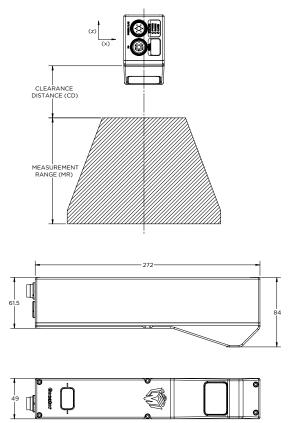
Package volume measurement and sorting

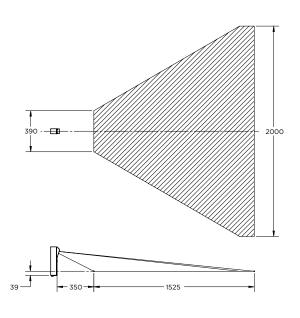


Depalletization



| GOCATOR 2490                                 |  |
|--|--|
| Data Points / Profile                        | 1920   |
| Resolution X (mm)<br>(Profile Data Interval) | 0.25 - 1.1   |
| Linearity Z (+/- % of MR)                    | 0.04%  |
| Repeatability Z (µm)                         | 12   |
| Clearance Distance (CD) (mm)                 | 350  |
| Measurement Range (MR) (mm)                  | 1525   |
| Field of View (FOV) (mm)                     | 390 - 2000   |
| Laser Class                                  | 2, 3R  |
| Dimensions (mm)                              | 49x85x272  |
| Weight (kg)                                  | 1.5  |
| Scan Rate                                    | 370 Hz (full view), 800 Hz (configured for 1 m x 2 m field of view) 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. |





**AMERICAS** 

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