

● LaserGauge RS763 Sensor



RS763 Sensor

Overview

With unique Cross-Vector scanning technology, the **RS763** provides more surface information around the edges of surfaces than any other end-of-arm laser profiler. It is used primarily for measuring the gap and flush between assembled panels.



The RS763 sensor is a complete measurement system. No external components are needed except an Ethernet interface to an external PC, robot controller or PLC. Utilizing a powerful 1GHz processor, measurements take less than one second.

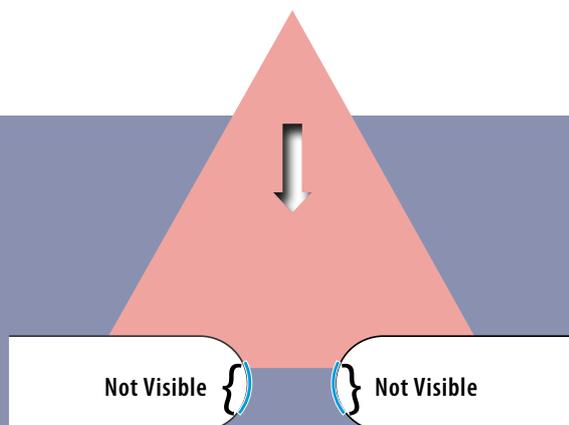
Operating Features

Cross-Vector Scanning – Traditional laser profilers utilize a single laser stripe coupled with a single imager to capture surface scans. But a single view cannot see

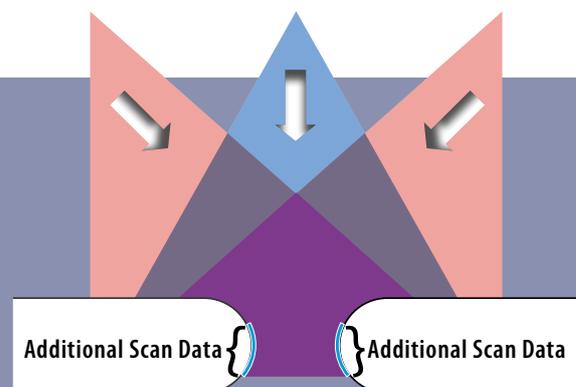
surface points around the radius on the edge of the gap. The Cross-Vector sensor utilizes 2 red lasers, 1 blue laser and multiple views at crossing angles. This allows the sensor to see around edges of the radius to the vertical tangent and beyond. The result is a complete surface profile and the most accurate gap measurements.

Blue Laser Technologie

Blue Laser Technology - A problem that has always existed is that the scan cannot be acquired if the laser cannot trace the surface feature. A red laser penetrates transparent or translucent surfaces... windshields, headlights, etc. so features around these types of surfaces are difficult to measure. However, blue laser light is scattered 4x more than the red laser. Origin Technologies has resolved this challenge by utilizing a blue laser coupled with the traditional red lasers. The LaserGauge® RS763 sensor incorporates both blue lasers for the translucent surfaces and red lasers for the features on solid body panels.



Standard Scanning



Cross-Vektor Scanning

LaserGauge RS763 Sensor



Advantages

■ **Speed** – The scanning process is completed, measurements calculated, and values sent to controlling system, all in less than one second.

■ **Flexibility** – Compatible with all LaserGauge products and measurement methods.



■ **Powerful** – All of the processing power to acquire measurements is contained in the sensor. There is no need for an external PC.

■ **Communications** – An Ethernet interface allows an extra device (robot controller, PLC or PC) to communicate to the sensor through the AnyBus X-Gateway. The AnyBus module allows the sensor to be interfaced to any existing robot controller.

■ **Supporting Software** – Includes Windows applications that provide feedback to the user for optimum measurement position and orientation, robot emulator and real-time monitoring and diagnostic feedback for sensor operation and functionality during use..

■ **Power** – Standard 24VDC @ 1 Amp power

Sensor Specifications

■ Type	▶ DSP – Robot-mounted
■ Size	▶ 5.7" (w) x 6.75" (l) 3.7" (h) (144mm x 171mm x 94mm)
■ Weight	▶ 3.4 lbs (1.5 kg)
■ User Interface	▶ None on sensor. Windows application is provided for virtual interface to the sensor.
■ Communications	▶ Ethernet
■ Processor	▶ 1GHz Speed
■ Memory	▶ 8GB of data/scans/routines
■ Battery	▶ None
■ FOV Options / Horizontal Scanning Resolution / Depth Accuracy	▶ 2.0" (50mm) / 0.0015" (60µm) / ± 0.0015" (60µm)
■ Shock Protection	▶ Cast urethane housing, crash detection protection available
■ Environment	▶ 0° – 70° C



9238 Madison Boulevard, Building 1, Suite 845 • Madison, Alabama 35758 USA
Phone 256.461.1313 • Fax 256.461.1390

Our continuing commitment to quality products may mean a change in specifications without notice.

© Origin Technologies Corporation • This system complies with 21 CFR Chapter I, Subchapter J.

www.origintech.com

