OES TECHNOLOGIES

LPA56B LASER PROFILE ANALYSIS
For Strip and Seal Inspection

For Integration on Automatic Wire Processing Machines

Non-Contact
- Dynamic optical sensor inspects for wire strip and/or seal defects
- High resolution image profile captured, analyzed and compared to learned reference
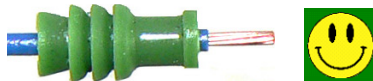
Strip Inspection
- Detects common strip defects -high/low insulation shoulder, pulled or splayed strands, and conductor mass

Pulled Strand Error

Seal Insert Inspection
- Detects common seal insertion defects – missing/reversed/skewed seal, and seal position

Seal Position Error

WireScan Software
- Operator interface software for production, configuration and setup, and data logging

Traceability
- Data logging feature for 100% data traceability

Machine Integration
- Designed for integration onto existing and new wire processing equipment

Applications
- Automated wire processing applications requiring 100% assurance of wire strip and seal insertion quality

Patents
US 6,496,271 B1
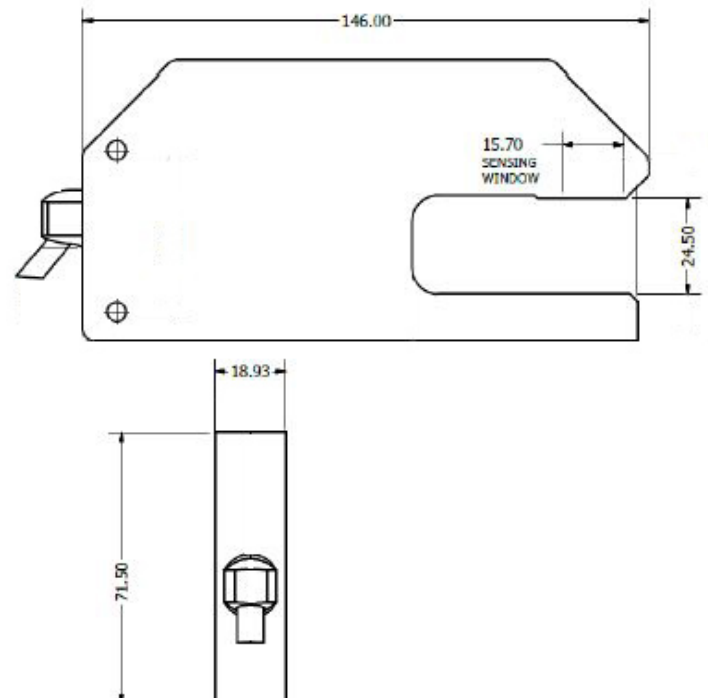US 6,885,463 B2
US 7,719,695 B2

WIREScan™

OES TECHNOLOGIES

WIREScan™

Quick Facts

WireScan LPA56B

The WireScan B-Series Laser Profile Analyzer is a compact optical sensor for strip and seal inspection. The unit projects a 16mm sensing window. As the wire passes through the sensing window, an image of the wire is captured with a resolution of 0.12 mm.

Using OES's proven algorithms, the image profile of each wire sample is compared with the "learned" standard profile image and a determination is made if the part is a "pass" or "fail".

MODEL	APPLICATION
LPA56B	Automatic Machine
Voltage Supply	24VDC @ 200 mA +/- 10%
Discrete Inputs (2)	24VDC
Electro-Mechanical Output (2)	24 VDC @ 0.5A - dry contact
Serial Communication	RS232
LASER	
Wavelength	658 nm
Class	2M
DYNAMIC PERFORMANCE	
Inspection Window Length	16 mm (0.63")
Resolution - Length	0.12 mm (0.047")
Resolution – Width	0.192 mm @ 10meters/second
	0.038 mm @ 2 meters/second
Wire Speed Range	0.5 - 14 Meters / second
WIRE & SEAL SIZE	
Typical Wire Size	1.31 mm2 – 0.05 mm2 (16 – 30 AWG)
Seal Diameter Range	2-10 mm (0.079" - 0.390")
PHYSICAL	
Dimensions	18.93 x 146 x 71.5mm 0.75" x 5.75" x 2.81

About OES Technologies

OES Technologies products and technologies are developed specifically for the wire processing industry to monitor and inspect 100% of parts produced during the manufacturing process, and prevent part defects from entering the supply chain. OES's dedication to innovation enables them to deliver a steady stream of cutting-edge technologies that meet the exacting demands of this ever-changing market.

OES TECHNOLOGIES