**DES TECHNOLOGIES LPA56B Laser Profile Analysis** For Strip and Seal Inspection





- Transmit - Receive 🥖 LPASED 17bat12 - 📑 Logging: Off 🛄 Convert Profile Nove

## 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

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Pull Strand Error

#### 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

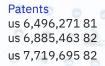
#### **Seal Insert Inspection**

• Detects common seal insertion defects - missing/re-versed/ skewed seal, and seal position



#### WireScan Software

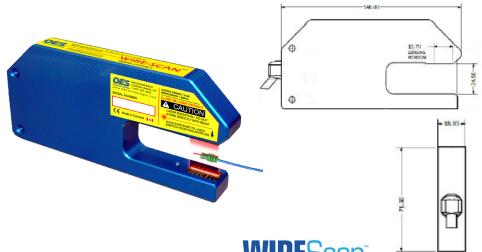
 Operator interface software for production, configuration and setup, and data logging



## **Quick Facts**

| Model                         | Application  |
|-------------------------------|--|
| LPA56B                        | Automatic Machine  |
| Voltage Supply                | 24VDC @ 200mA +/- 10%                                      |
| Discrete Inputs (2)           | 24VDC  |
| Electro-Mechanical Output (2) | 24 VDC @ 0.5A - Dry contact                                |
| Serial Communication          | RS232  |
| Laser                         |  |
| Wavelength Class              | 658nm 2M   |
| Dynamic Performance           |  |
| Inspection Window Length      | 16mm (0.63")   |
| Resolution - Length           | 0.12mm (0.047")  |
| Resolution - Width            | 0.192 mm @ 10<br>meters/second<br>0.038mm @ 2meters/second |
| Wire Speed Range              | 0.5 - 14 Meters /<br>Second                                |
| Wire & Seal Size              |  |
| Typical Wire Size             | 1.31 mm2 - 0.05mm2 (16-30<br>AWG)                          |
| Seal Diameter Range           | 2-10mm<br>(0.079"-0.390")                                  |
| Physical                      |  |
| Dimensions                    | 18.93 x 146 x 71.5mm<br>0.75" x 5.75" x 2.81               |





### LPA56B WIREScan

The WireScan 8-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".

#### **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**

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