ODC Linear Camera product line - replacement of the WPS Sensor product line

Blog Post

The new ODC Linear Camera system for web edge and contrast detection and monitoring

We took another step forward in advancing the web handling technology for the converting industry. Now converters can benefit from using affordable vision systems for web guiding and monitoring. These last couple of months we finalized the introduction to the market of the ODC Linear Camera system for web edge and contrast detection. It will replace the tradition WPS line of sensor products from Roll-2-Roll Technologies LLC, and customers have already been notified of the end of life of the sensor line. This includes the guarantee that service and support will be available for the WPS sensor line until 2025.

ODC Linear Cameras are single dimension cameras for web edge and contrast detection. They will have the same compact enclosure design of the WPS Sensor product line allowing for placement in spaces that fork style sensors and other vision systems cannot be placed. Designed for web guiding and monitoring, ODC Linear Cameras offer improved capabilities, and a cost effective alternative compared to traditional vision systems and laser profile solutions to the converting industry. The ODC Linear Cameras have already been shipped out to customers with difficult applications for which traditional sensors have no solution.

ODC Linear Camera

Features and Benefits of ODC Linear Cameras

- New and improved CMOS line scan camera with high dynamic range
- Elimination of motion blur with a global shutter
- Up to 4x the scan rate compared to WPS
- Improved sensitivity to pick hard to sense materials and low contrast difference
- Same enclosure profile as the WPS line of sensor products. Low profile allows for placement in restricted spaces in converting lines where other sensors cannot be used.
- When combined with the soon to be released SCU6 controller, ODC can provide 8x the dynamic range for superior edge detection and contrast detection
- Drop-in functional replacement to existing WPS products with same cabling

Applications

- Web guiding: Edge, line, center, pattern and contrast guiding
- Web width measurement
- Flag detection
- Registration mark detection
- Product length measurement
- Tear detection
- Simple automated defect detection

Options

ODC Linear Cameras are available with measurement ranges from 48 mm up to 768 mm. Light sources include: Infrared for mostly edge detection and high contrast applications, White Light (broadband) for visible contrast detection, and UV for fluorescent contrast applications. Additional LED light sources are available on request. Hardware camera resolution of 0.0635 mm (0.0025”) or 0.127 mm (0.005”). Higher firmware resolution of up to 0.015875 mm (0.000625”) available upon request.

ODC Linear Cameras will work with existing SCU5 controllers with a firmware update. Two ODC 768 can be used with a single SCU5 controller to provide a total coverage of 1536 mm (60.5”). There are additional options and increased capabilities with the soon to be released SCU6 controller.

Availability

ODC Linear Cameras are now available for ordering and immediate delivery.

Online demos of the product and applications can be scheduled by contacting us through our website.

Roll-2-Roll Technologies LLC invites all converters and related industries to visit its website at https://r2.tech periodically to keep updated on new products and development, and its library of instructional papers and videos.