

## ODC 96



Affordable Camera Technology to Replace Machine Vision

### Key Features

- **Zero recalibration** – sensor adapts automatically to any material (clear, opaque, metallic, nonwoven, mesh)
- **High resolution** – hardware resolution independent of sensing range
- **Material-agnostic detection** – fiber-optic technology based on light scattering and spatial filtering
- **Temperature immune** – unlike ultrasonic sensors, performance unaffected by temperature changes
- **One sensor, multiple applications** – edge guiding, width measurement, centerline detection, and more

### Benefits

- **Stop losing hours** to sensor recalibration when switching between materials
- **Eliminate changeover delays** – no manual sensor adjustments between product runs
- **End quality escapes** caused by undetected sensor drift between changeovers
- **Remove safety risks** from operators accessing sensors in awkward positions
- **Prevent hidden scrap** from temperature-related inaccuracies that plague ultrasonic sensors

## Specifications

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<b>Sensor Type</b>	Fiber Optic (diffuse-reflective)	<b>Sensing Range</b>	96 mm (3.8 in)
<b>Resolution</b>	0.0635 mm (0.0025 in) or 0.127 mm (0.005 in)	<b>Repeatability</b>	>99.9%
<b>Linearity Error</b>	<0.25%	<b>Response Time</b>	20 ms standard, 5 ms with special firmware
<b>Camera Type</b>	CMOS line scan camera	<b>Light Source</b>	Infrared (880 nm), UV (385 nm), White light
<b>Working Distance</b>	15-25 mm (0.6-1 in)	<b>Cable Length</b>	Up to 10 m (33 ft)
<b>Connector</b>	M12 12-pin male A Coded	<b>Housing</b>	Aluminum Extrusion
<b>IP Rating</b>	IP54 (IP64 on request)	<b>Operating Temp</b>	-10°C to 65°C (14°F to 150°F)
<b>Controller Required</b>	Yes (SCU5 or SCU6x)	<b>Vacuum Compatible</b>	Yes

## Applications

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- Edge sensing, measurement and guiding
- Centerline web position sensing, measurement and guiding
- Web width measurement and monitoring
- Thread/ribbon inspection
- Flag detection
- Registration mark detection
- Defect detection

## Compatibility

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### SUPPORTED LINE SPEEDS

1000+ fpm

### SUPPORTED MATERIAL TYPES

Nonwoven, Porous/Perforated

### SUPPORTED WEB WIDTHS

Medium (12"-48"), Narrow (<12")

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## Available Configurations

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Part Number	Configuration
3-410013	ODC 96-IR QD
3-410023	ODC 96-WL QD
3-410033	ODC 96-UV QD
3-411013	ODC 96-IR QD HR
3-411023	ODC 96-WL QD HR
3-411033	ODC 96-UV QD HR
7-020001	1" Mounting Bracket for WPS and ODC Sensors
7-020004	1.5" Mounting Bracket for WPS and ODC Sensors
7-020005	Mounting Bracket for 1" or 25 mm Extrusion for WPS, ODC and 1DC Sensors
7-020006	Mounting Bracket for 1.5" or 40 mm Extrusion for WPS, ODC and 1DC Sensors

## Supporting Documentation

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### Manuals (3)

- ODC and WPS Installation for Center Guiding and Web Width Measurement
- Sensor Installation Recommendations: Inspection Applications
- WPS 112/221/440/900 or ODC 96/192/288/384/480/768/960 Sensor Installation for to Reduce the Effect of Twist

### 2D Drawings (3)

- New Mounting Brackets for WPS, ODC and 1DC sensors - 1.5 in or 40 mm extrusion
- New Mounting Brackets for WPS, ODC and 1DC sensors - 1in or 25 mm extrusion
- ODC 96 xx-QD

### 3D Models (5)

- 1.5in Mounting Bracket for WPS and ODC Sensors
- 1in Mounting Bracket for WPS and ODC Sensors
- Mounting Bracket for 1.5in or 40mm Extrusion for WPS, ODC and 1DC Sensors
- Mounting Bracket for 1in or 25mm Extrusion for WPS, ODC and 1DC Sensors
- ODC 96-xx QD

### Wiring Diagrams (4)

- SCU5 C(x)D Wiring with ODC (Industrial Ethernet)
- SCU5 D Wiring with ODC (Analog Output)
- SCU5 DD Wiring with ODC (Digital Output)
- SCU5 DI Wiring with ODC (Digital Input and Output)



Scan for datasheets, 3D models & full documentation

<https://r2r.tech/products/sensors/odc-96>

### Ready to Get Started?

Contact our experts to discuss how this product fits your application.

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