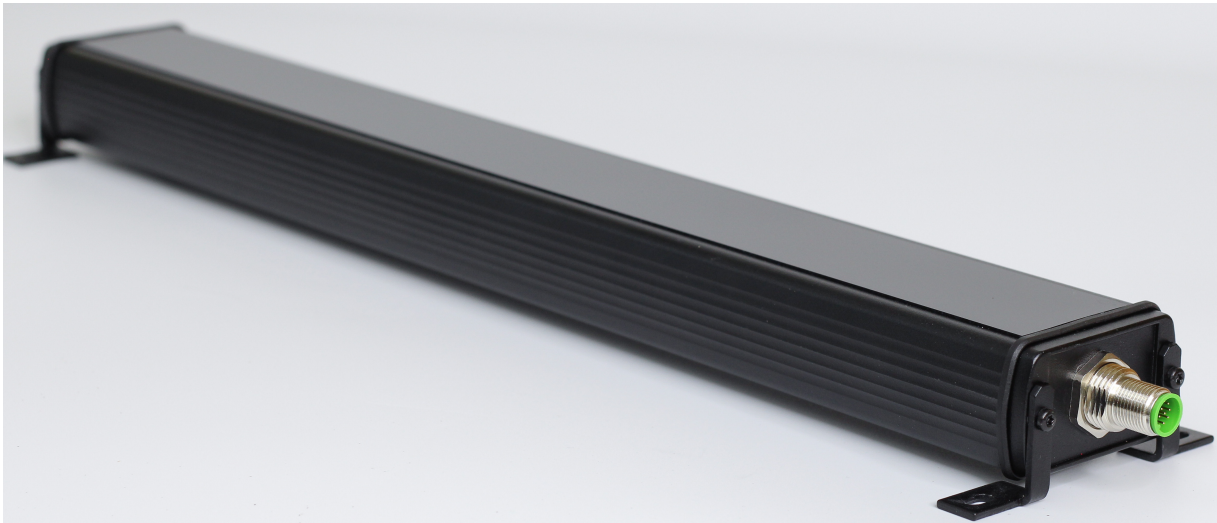


ODC 384



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

| | | | |
|----------------------------|----------------------------------|--------------------------|---|
| Sensor Type | Fiber Optic (diffuse-reflective) | Sensing Range | 384 mm (15.1 in) |
| Resolution | 0.127 mm (0.005 in) | Repeatability | >99.9% |
| Linearity Error | <0.25% | Response Time | 20 ms standard, 10 ms with special firmware |
| Camera Type | CMOS line scan camera | Light Source | Infrared (880 nm), UV (385 nm), White light |
| Working Distance | 15-25 mm (0.6-1 in) | Cable Length | Up to 10 m (33 ft) |
| Connector | M12 12-pin male A Coded | Housing | Aluminum Extrusion |
| IP Rating | IP54 (IP64 on request) | Operating Temp | -10°C to 65°C (14°F to 150°F) |
| Controller Required | Yes (SCU5 or SCU6x) | Vacuum Compatible | Yes |

Applications

- 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

SUPPORTED LINE SPEEDS

0-100 fpm

SUPPORTED MATERIAL TYPES

Opaque Material, Mesh/Screen

SUPPORTED WEB WIDTHS

Narrow (<12"), Narrow (<12")

Available Configurations

| Part Number | Configuration |
|-------------|---|
| 3-410015 | ODC 384-IR QD |
| 3-410025 | ODC 384-WL QD |
| 3-410035 | ODC 384-UV QD |
| 3-410115 | ODC 384-IR QD AS |
| 3-413015 | ODC 384-IR QD IP65 |
| 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

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 384 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 384-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-384>

Ready to Get Started?

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

Phone: +1 (888) 290-3215 | **Email:** experts@r2r.tech | **Web:** r2r.tech