Roll-2-Roll Technologies

PRODUCT BROCHURE

# ODC 288



Eliminate Recalibration. Detect Any Material.

## Key Features

- **Zero recalibration** – sensor adapts automatically to any material (clear, opaque, metallic, nonwoven, mesh)
- **High resolution** – 0.0635 mm (full) or 0.127 mm (half) hardware resolution
- **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 drift that plagues ultrasonic sensors

## Specifications

| | | | |
|---|---|---|---|
| **Sensor Type** | Fiber-optic (diffuse-reflective) | **Sensing Range** | 288 mm (11.3 in) |
| **Resolution** | 0.0635 mm (0.0025 in) or 0.127 mm (0.005 in) | **Repeatability** | ±0.127 mm (±0.005 in) |
| **Linearity Error** | <0.25% | **Response Time** | 20 ms standard; about 2.8 ms (full resolution) or 1.4 ms (half) 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

## Available Configurations

| Part Number | Configuration |
|---|---|
| **3-410018** | ODC 288-IR QD |
| **3-410028** | ODC 288-WL QD |
| **3-410038** | ODC 288-UV QD |

| Part Number | Configuration |
|---|---|
| 3-411018 | ODC 288-IR QD HR |
| 3-411028 | ODC 288-WL QD HR |
| 3-411038 | ODC 288-UV QD HR |
| 7-020001 | 1" Mounting Bracket for WPS and ODC Family |
| 7-020004 | 1.5" Mounting Bracket for WPS and ODC Family |
| 7-020005 | Mounting Bracket for 1" or 25 mm Extrusion for WPS, ODC Family and 1DC Series |
| 7-020006 | Mounting Bracket for 1.5" or 40 mm Extrusion for WPS, ODC Family and 1DC Series |

## 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 Family and 1DC Series - 1.5 in or 40 mm extrusion
- New Mounting Brackets for WPS, ODC Family and 1DC Series - 1in or 25 mm extrusion
- ODC 288 xx-QD

### 3D Models (5)

- 1.5in Mounting Bracket for WPS and ODC Family
- 1in Mounting Bracket for WPS and ODC Family
- Mounting Bracket for 1.5in or 40mm Extrusion for WPS, ODC Family and 1DC Series
- Mounting Bracket for 1in or 25mm Extrusion for WPS, ODC Family and 1DC Series
- ODC 288-xx QD

Scan for datasheets, 3D models & full documentation
https://r2r.tech/products/odc-288

### Ready to Get Started?

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