

## WPS 48

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Highly Accurate Sensors Can Also Be Adaptive

### Key Features

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- **Zero recalibration** – sensor adapts automatically to any material (clear, opaque, metallic, nonwoven, mesh)
- **Compact form factor** – 48 mm (1.9 in) sensing range in a small housing
- **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

### Benefits

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- **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

*Note: WPS is a legacy product line. For new installations, consider the **ODC 48** with enhanced features.*

## Specifications

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|                         |   |                            |                               |
|-------------------------|---|----------------------------|-------------------------------|
| <b>Sensor Type</b>      | Fiber Optic (diffuse-reflective)                              | <b>Sensing Range</b>       | 48 mm (1.9 in)                |
| <b>Image Sensor</b>     | 1D image sensor   | <b>Resolution</b>          | 0.0635 mm (0.0025 in)         |
| <b>Repeatability</b>    | >99.9%  | <b>Working Distance</b>    | 15-25 mm (0.6-1.0 in)         |
| <b>Response Time</b>    | 20 ms standard  | <b>Operating Temp</b>      | -10°C to 65°C (14°F to 150°F) |
| <b>Protection Class</b> | IP54  | <b>Controller Required</b> | Yes (SCU5 only)               |
| <b>Status</b>           | Legacy Product – Consider <b>ODC 48</b> for new installations |                            |                               |

## Applications

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- Edge position sensing on narrow web applications
- Web guiding for converting lines
- Width measurement for narrow materials
- Centerline detection

## Compatibility

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### SUPPORTED LINE SPEEDS

1000+ fpm

### SUPPORTED MATERIAL TYPES

Porous/Perforated, Nonwoven

### SUPPORTED WEB WIDTHS

Wide (48"-72"), Narrow (<12")

## Available Configurations

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| Part Number | Configuration              |
|-------------|----------------------------|
| 3-400012    | WPS 48-IR QD (1" Mounting) |
| 3-400022    | WPS 48-WL QD (1" Mounting) |
| 3-400032    | WPS 48-UV QD (1" Mounting) |
| 3-401012    | WPS 48-IR QD (NW Rail)     |

| Part Number | Configuration   |
|-------------|---|
| 3-401022    | WPS 48-WL QD (NW Rail)  |
| 3-402012    | WPS 48-IR QD (No Mounting Bracket)  |
| 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)

- ARIS Web Position Sensor Product Manual
- Sensor Installation Recommendations
- Sensor Installation Recommendations: Inspection Applications

### 2D Drawings (4)

- 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
- WPS 48-xx QD: 2D Drawing (pdf)
- WPS 48: 2D Drawing (DXF)

### 3D Models (7)

- 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
- WPS 48-xx QD (1" Mounting)
- WPS 48-xx QD (No Mounting Bracket)
- WPS 48-xx QD (NW Rail)

### Wiring Diagrams (4)

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



Scan for datasheets, 3D models & full documentation

<https://r2r.tech/products/sensors/wps-48>

### Ready to Get Started?

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

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