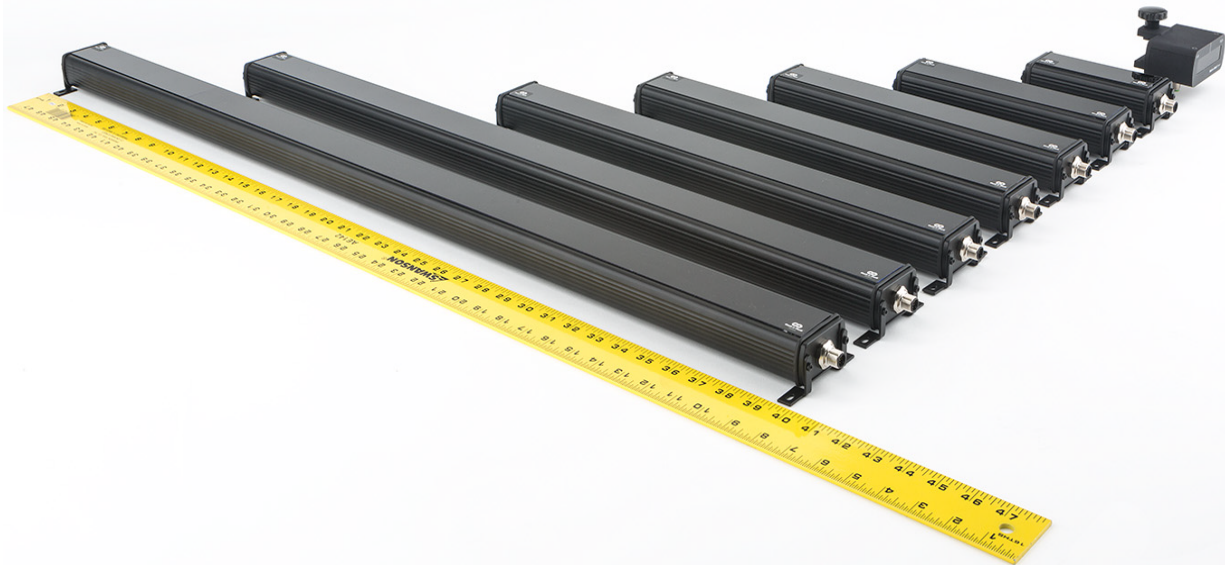


ODC FAMILY

Introducing the ODC family of **Roll-2-Roll®** Sensors, the advanced CMOS line scan cameras that can take care of your sensing, measurement, and monitoring applications.

Our patented sensor technology is based on light scattering and spatial filtering, which allows for the use of a wide range of materials including paper, clear film, plastics, clear glass, rubber, textile, mesh, nonwovens, carbon fiber, metals, foil, and even flexible printed electronics to be detected. The same sensor can be used for edge, center, line guiding, width measurement, mark detection, flag detection, thread counting, trim/tab contrast width measurement, and multiple strip width inspection.

ODC can detect the smallest objects with ease with unparalleled accuracy and repeatability. The compact, one-sided, retro-reflective sensor head includes a light source, optics, and a 1D camera, making it easy to install in tight spaces. The ODC family of sensors have a measuring range from 48 mm (1.89 in) to 960 mm (37.79 in) and are equipped with Infrared, Ultraviolet or Warm White LED light sources, making them an affordable vision-like sensing system. The ODC family is the perfect sensing solution for your industrial sensing and measurement needs.



Features and Benefits:

- **One Sided Sensor:** Easy threading, may reduce dust accumulation
- **Compact Construction:** Easy to install in tight spaces and close to web
- **Integrated Light Source:** Save cost with external lighting and gantry
- **Material Agnostic:** Quick product changeover without setup or calibration
- **Wide Sensing Range:** Eliminate operator error and increase operator safety
- **Wide Field of View:** Eliminate complex and unreliable sensor positioner
- **Linear Optics:** 1:1 magnification, eliminate lens distortion or aberrations
- **Track up to 128 Edges:** Eliminate multiple cameras for multiple webs
- **High Repeatability:** Ideal for guiding, measuring and monitoring applications

GENERAL SPECIFICATIONS

Sensor Type: Fiber optic

Sensing Mode: Diffuse-reflective

Sensor Resolution (mm): 0.0635 mm (¶) or 0.127 mm (*)

Sensor Resolution (in): 0.0025 in (¶) or 0.005 in (*)

Sensor Range (mm): 48¶, 96¶, 192¶, 288¶, 384*, 480*, 768*, 960*

Sensor Range (in): 1.89¶, 3.78¶, 7.56¶, 11.34¶, 15.12*, 18.90*, 29.92*, 37.79*

Sensor Accuracy: Greater than 99.9%

Sensor Linearity Error: Less than 0.25%

Maximum Number of Edges: 128

Minimum Distance Between Edges: 2 mm or 0.08 in

Smallest Detectable Object: 0.25 mm or 0.01 in

Working Distance from Object: 6 - 80 mm or 0.25 in to 3 in

Background Clearance: 25 mm to 150 mm or 1 in to 6 in

Camera: CMOS Line Camera

Camera Current Draw: 40 mA - 400 mA

Camera Voltage: 5 V

Camera Capture Rate: 25 Hz - 1000 Hz (with special firmware)

Light Source: Infrared (880 nm), Ultraviolet (385 nm) or White light (warm white)

Light Source Type: LED, integrated

Light Source Current Draw: 30 mA - 900 mA (intensity adjustable)

Light Source Forward Voltage: 9 - 18 V

Standalone: NO

Controller Required: YES

Quick Disconnect Type: M12 12-pin Male

Cable Type: M12 12 Conductors, 24 AWG, Shielded, Shield tied to coupling nut

Maximum Cable Length: 10 m

Primary Housing Material (ODC 48): PA 12 Nylon

Primary Housing Material (ODC 96+): Powder coated Aluminum alloy

Filter Material: Acrylic (Polycarbonate)

Anti-Static Coating: Available on request

Mounting Options: Wall mounting, 17 mm rail, 1 in or 1.5 in extrusion profile

Min Temperature: - 10° C or 14 F

Max Temperature: 65° C or 150 F

Relative Humidity: 20 to 85% (non condensation)

Protection Class: IP54

Protection Class: IP64 (available on request)

Vacuum Compatibility: YES

Affected by Ambient Artificial Light: NO