

# PRODUCT PROFILE

## Laser Measurement Sensors

**A reliable non-contact solution for long range (up to 6m) error proofing, positioning and measurement applications**

Recognizing the importance of flexibility and value in your control system, Rockwell Automation continues to introduce new sensors that help make your installations simpler while addressing the market's ever-changing needs. The new Allen-Bradley 45CPD line of photoelectric sensors is ideal for industrial applications requiring long range detection (up to 6m) with a small beam spot and non-contact measurement. These sensors are completely self-contained in an IP67 enclosure and do not require any external control devices which add cost and require additional mounting space. In addition, the 45CPD utilizes a class 2 laser for ease of alignment during the sensor setup but switches to a class 1 "eye safe" IR laser when in the normal operating mode. The 45CPD is set up quickly and easily using the Teach-In buttons on the top of the sensor and can be programmed for several operating modes depending on the application: object position (analog output), object detection (single or dual discrete output), background suppression or reflector mode (using the background as the reflector).

The 45CPD is an excellent solution for several long range, non-contact measurement applications including: error proofing, inspection, distance measurement, verifying material position, stack level, thickness measurement, roll diameter, web winding/unwinding, long standoff distance (hot or limited space), level monitoring and box width measurement.

The 45CPD is set up easily by mounting the sensor with the target within the sensing range and teaching the appropriate set-points for the application via convenient Teach-In buttons on the top of the sensor. For optimal application flexibility, the 45CPD can be set with either one or two discrete PNP outputs and a 4...20 mA analog output which is automatically scaled between the taught setpoints.



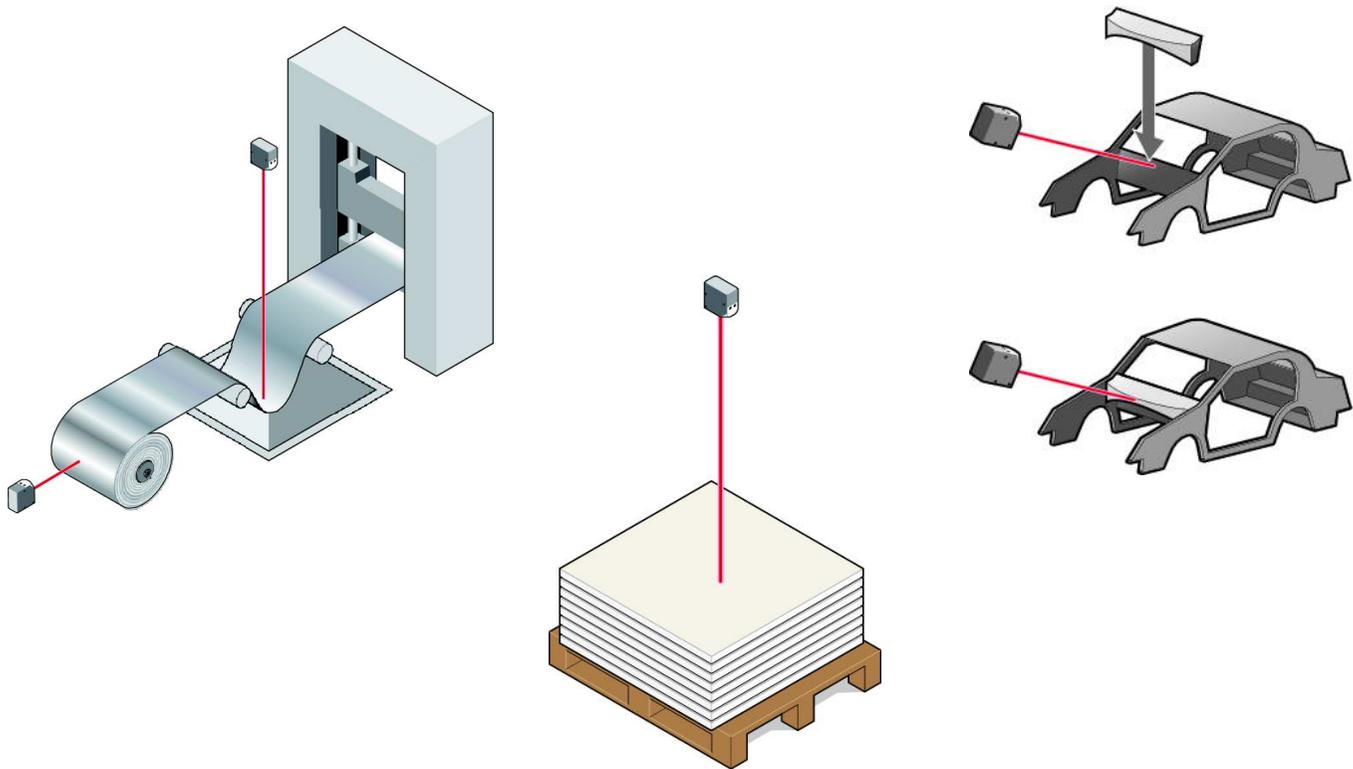
### Features

- Long distance non-contact measurement and detection (6m)
- Eye safe Class 1 laser for operation
- Visible red Class 2 laser for alignment during set-up
- Easy set-up using teach-in buttons
- Self-contained sensor does not require external control devices
- Two discrete outputs (PNP) and analog output (4...20mA)
- Analog output is automatically scaled between taught set points
- Discrete outputs configurable for either Light Operate or Dark Operate operation

## Ordering Information

| Model   | Description   | Catalog Number |
|---|---|----------------|
| Teach-In<br> | 200...6000mm sensing range, 4...20mA and 2 X PNP outputs,<br>4mm X 7mm beam spot @ 2000mm, 5-pin micro QD | 45CPD-8LTB1-D5 |

## Typical Applications



## Accessories

| Description                 | Catalog Number |
|-----------------------------|----------------|
| Mounting Bracket (optional) | 45CPD-BKT1     |
| Cordset, 5-pin micro QD     | 889D-F5AC-2    |

[www.rockwellautomation.com](http://www.rockwellautomation.com)

### Power, Control and Information Solutions

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