

Best in Class.

# P3 Laser Distance Sensors Triangulation





# Impresses Threefold: TripleA Technology

The P3 series triangulation laser distance sensors unleash their inimitable performance threefold, wherever complex shapes are measured, object surfaces and colors vary, maximum precision in the micrometer range and temperature-stable measured values are required.

Adaptive Autoexposure
Intelligent exposure control for optimal detection of challenging surfaces with changing reflections.

Active Temperature Control
Several temperature sensors built
into the housing guarantee optimal temperature monitoring, resulting in faster
sensor availability.

Aspheric Dual Lens
Two aspheric glass lenses integrated in the sensor offer a clear advantage in terms of optical precision.

### **Maximum Power with Laser**



#### **Micrometer Precision**

- Reliable detection of the smallest objects with reproducibility to 0.8 

  µm
- Highly accurate results due to a linearity deviation of just 0.08% from the measuring range
- Detection of very flat objects directly in front of the background



### **Material Independence**

- Reliable measurements on dark, light or low reflecting objects
- Versatile use on different surfaces and shapes regardless of the degree of reflection
- Highly accurate switching to objects



### **Temperature Stability**

- Temperature-stable aluminum housing and high-quality glass lenses in the housing
- Extremely fast availability of stable measured values thanks to built-in temperature sensors
- High temperature stability due to low temperature drift of up to 2.5 µm/K

### **Innovative Features**



#### **Dynamic Jump Detection**

The P3 sensors are equipped with built-in jump edge detection. They detect automatic measured value jumps and thus ensure reliable scale counting.



# Width and Thickness Measurement without an Analysis Module

Two P3 sensors are mounted opposite each other and connected. They calculate the thickness of objects automatically without an analysis module.







## **Superior Laser Expertise**

The P3 series laser distance sensors feature a small laser light spot measuring just 0.5 to 1.5 mm in size and come with both red and blue laser light.

- Increased power for very dark objects and extremely high speeds by enabling laser class 1 to 2
- Suitable for measurement on polished metals, shiny plastic surfaces and dark paints
- Short-wave blue laser light for high accuracy and ideal for shiny, organic and red-hot surfaces

## **High User-Friendliness and Easy Operation**

The various models can be configured directly via teach-in, button actuation or OLED display. The weCon app also enables mobile setting and data transfer to the P3 distance sensors. Parametrization can be carried out easily via Bluetooth app.

- Intuitive operating concept via two- or five-second button actuation
- Time savings thanks to easy initial start-up
- Display of distance value via the OLED display



Download the free weCon app now!







## **Product Overview**

Product		Working range	Property	Output
	P3PC0xx	30 to 80 mm	Laser (red), OLED display / teach-in Laser (blue), OLED display	Analog / 2 x NO contacts
	P3PC1xx	40 to 240 mm	Laser (red), OLED display / teach-in Laser (blue), OLED display	Analog / 2 x NO contacts
	P3PC2xx	50 to 350 mm	Laser (red), OLED display / teach-in Laser (blue), OLED display	Analog / 2 x NO contacts
	P3PC3xx	60 to 660 mm	Laser (red), OLED display / teach-in Laser (blue), OLED display / teach-in	Analog / 2 x NO contacts
	P3EC4xx	150 to 1,000 mm	Laser (red), OLED display / teach-in Laser (blue), OLED display	Analog / 2 x NO contacts

All models are equipped with the IO-Link interface.









