

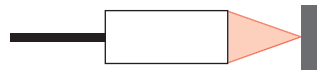
## CHOOSING BACKGROUND SUPPRESSION VS DIFFUSE SENSING MODES

What is the difference between background suppression and diffuse photoelectric sensing?

What is it?

### Diffuse

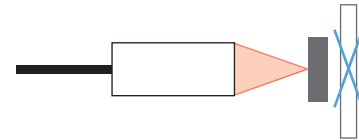
The sensor requires a portion of the light to be reflected back to the receiver from the target surface to activate the output.



VS

### Background Suppression

The sensor is set with an adjustable receiver which divides the visible field into an active sensing area and the background through triangulation. Also called convergent beam.



Benefits and Info

- Easier mounting with space restrictive applications
- Single device to wire
- Most cost effective photoelectric technology

- Single device to mount and wire
- Detect targets regardless of color, texture, surface, or finish
- Solve applications that cause standard diffuse sensors to false trip or not trip at all
- Ignores objects beyond the far limit of the depth of field
- Detects small profiles and materials of low reflectivity

Gotchas

- Can be false triggered by objects in the background
- Can struggle to detect dark colors
- Can struggle to detect matte finishes

- Can still be false triggered by shiny objects in the background

See a video of background suppression technology in action on YouTube:  
<https://www.youtube.com/watch?v=7D1UvMi9u6o>