

# Q2X Laser Measurement Sensor



## Long-Range Sensing in a Miniature Housing

- Measure out to 3 m, the industry's longest sensing range for a compact form factor
- Simplify machine design with miniature, lightweight sensor
- Reduce and simplify inventory by stocking one sensor that offers multiple teach modes

## Small Size, Powerful Time-of-Flight Sensing



### Reliably Detect Challenging Targets at Long Range

- Best-in-class sensing range—detects targets up to 3 meters away
- Sense the most challenging targets like dark totes, shiny poly bags, or clear bottles with a powerful infrared laser with best-in-class excess gain
- Infrared laser with large spot size—ideal for bin-fill applications, in which surfaces are uneven, with peaks and valleys

### Simplify Machine Design with Miniature Housing

- Install in space-constrained locations by leveraging its compact size
- Due to its light weight, robot arms or other equipment will not be over-encumbered

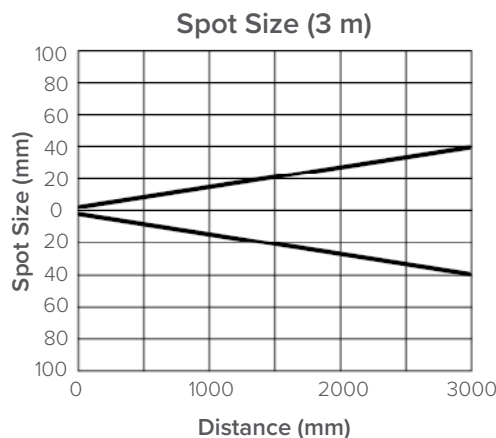
### Reduce Inventory While Serving Many Applications

- Solve many application problems by consolidating to one sensor model with the array of teach modes including background suppression, window mode, and dual mode
- Integrate easily into most control systems and access measurement values, delay timers, and advanced diagnostics via IO-Link®
- The PulsePro output can be directly integrated with Banner Pro lights to provide real-time visual feedback for machine operators, without using a PLC

## Q2X Laser Measurement Sensors

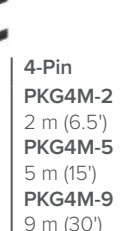
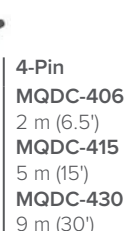
| Series                         | Output   | Sensing Mode                 | Range              | Sensing Beam  | Connector  |
|--------------------------------|----------|------------------------------|--------------------|---------------|--|
| <b>Q2X</b>                     | <b>K</b> | <b>LAF</b>                   | <b>3</b>           | <b>IR</b>     | <b>Q5</b>  |
| K = Dual discrete with IO-Link |          | LAF = Laser adjustable-field | 3 = 3 m<br>2 = 2 m | IR = Infrared | Q = 150 mm (6 in.) 4-pin M8 pigtail<br>Q5 = 150 mm (6 in.) 4-pin M12 pigtail |

## Specifications



|                             |   |
|-----------------------------|---|
| <b>Power</b>                | 12 to 30 V DC                                   |
| <b>Sensing Range</b>        | 20 mm to 3 m                                    |
| <b>Response Speed</b>       | Fast: 33 ms<br>Medium: 100 ms<br>Slow: 500 ms   |
| <b>Operating Conditions</b> | -20 to +50 °C (-4 to +122 °F)                   |
| <b>Environmental Rating</b> | IP67  |
| <b>Construction</b>         | Housing: ABS<br>Lens cover: PVC                 |
| <b>Certifications</b>       | CE, UL LISTED, Industrial Control Equipment TJJ |

## Accessories



Banner Engineering Corp.

9714 10th Avenue North • Minneapolis, MN 55441 • 1-888-373-6767 • www.bannerengineering.com