

# Q5X Demo Kit



#### DK-Q5X (PN 803566) Components

Models	Description
1. Q5XKLAF2000-Q8	Background Suppression Laser Sensor
2. SMBQ5XFAM12	Bracket for 12mm Rod Display Stand
3. MQDC-4501SS	5-pin Euro to 4-Pin Euro Adapter Cable for use with Remote Display (RSD1QP)

NOTE: Out of the box, Channel 1 is set at 25 cm and Channel 2 is set at 50 cm

## **Product Features**

- Laser triangulation sensor with a range from 9.5 cm (3.75 in) to 2 m (76.75 in)
- Compact and flexible to meet a wide variety of mounting constraints with a universal cubic housing (52 mm x 60 mm x 25 mm) and 270° rotatable M12/Euro-style quick disconnect
- Bright output indicators and real-time distance feedback provide easy set up and troubleshooting for reduced installation costs
- Exceptionally high excess gain enables the sensor to reliably detect the darkest objects (< 6% reflective black targets), including black targets against a black background, black targets against a shiny metal background, clear and reflective objects, multicolor packaging, and targets of all colors even at acute angles
- Dual independent output channels and communication over IO-Link
- Optional Remote Sensor Display (RSD) (available separately) enables remote programming and monitoring

## **Basic TEACH Instructions**

Use the following instructions to teach the Q5X sensor. The instructions provided on the sensor display vary depending on the type of TEACH mode selected. Two-point TEACH is the default TEACH mode.

- 1. Press and hold TEACH for longer than 2 seconds to start the selected TEACH mode.
- 2. Present the target.
- 3. Press TEACH to teach the target. The target is taught, and the sensor waits for the second target, if required by the selected TEACH mode, or returns to Run mode.

Complete steps 4 and 5 only if required for the selected TEACH mode:

- 4. Present the second target.
- 5. Press TEACH to teach the target. The target is taught, and the sensor returns to Run mode.

See the Instruction Manual for detailed instructions and other available TEACH modes.

#### **TEACH Modes include:**

## Two-Point Static Background Suppression 2-Pt

Two-point TEACH sets a single switch point. The sensor sets the switch point between two taught target distances, relative to the shifted origin location.

# Dynamic Background Suppression

Dynamic TEACH sets a single switch point during machine run conditions. The sensor takes multiple samples and the switch point is set between the minimum and the maximum sampled distances.

### One-Point Window (Foreground Suppression) FL5

One-point window sets a window (two switch points) centered around the taught target distance.

#### One-Point Background Suppression 65

One-point background suppression sets a single switch point in front of the taught target distance. Objects beyond the taught switch point are ignored.

#### Dual Intensity + Distance

Dual mode records the distance and amount of light received from the reference surface.

