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注释：扫描此二维码下载多语种快速指南。

# RANGE SENSOR

## QUICK START GUIDE



## Image Based Focusing Sensor

For additional information, warranty and instructions refer to the M830/M930 Camera Product Reference Guide (PRG) available on our website. Scan below to access the PRG.



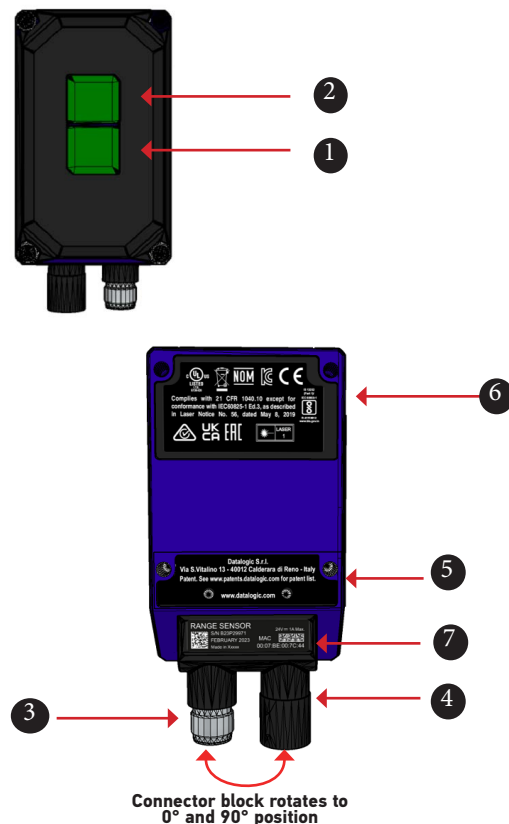
[www.datalogic.com](http://www.datalogic.com)



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## OVERVIEW

The Range Sensor is an image-based focusing accessory designed for use with the Matrix 830 and Matrix 930 image-based barcode readers. When connected to a barcode reader, the Range Sensor provides precise distance data that enables the reader to automatically adjust its dynamic focus. This ensures optimal image quality for accurate and efficient barcode reading.



1	Laser
2	Sensor
3	Power - COM - I/O Connector
4	Ethernet Connector
5	Manufacturing Label
6	Device Class and Warning Labels
7	Serial Label



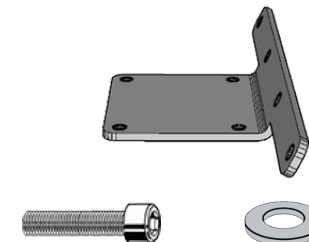
**NOTE:** Sample labels are shown here only to illustrate their location. Please view the labels on your product for actual details.

## OUT OF THE BOX

This guide explains how to mount and connect your Range Sensor to the camera.

The sensor will come with the following:

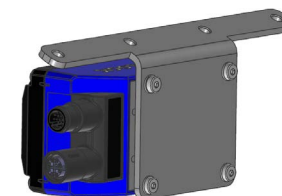
- 1 Bracket
- 6 screws 4X10 UNI5931 INOX (01993019)
- 6 washers 4,3 X9 UNI 6592 WZ (016038003)



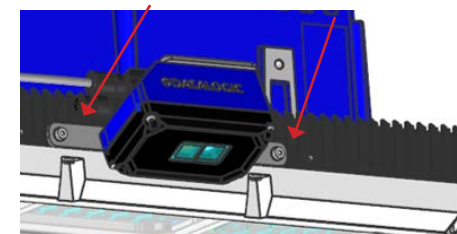
## MOUNT THE RANGE SENSOR TO THE CAMERA

Follow these steps to mount the Range Sensor to your camera:

1. Attach the Bracket to the Range Sensor with four of the provided screws and washers as shown.



2. Attach Bracket and Range Sensor to the Camera with two of the provided screws and washers as shown.

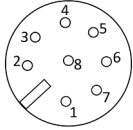


## CONNECTING THE RANGE SENSOR

The Range Sensor connects to the camera via a single Power, IO and com connector.

The recommended cables for connection are:

- CABLE M12M TO M12F 0,75M (93A050133)
- CABLE M12M TO M12F 3M (93A050079)

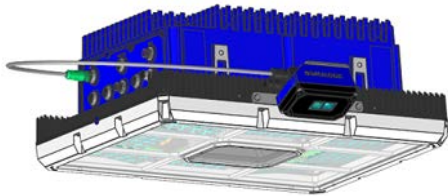


M12 8-pole male power, COM and I/O connector

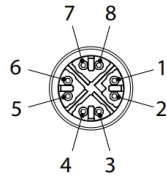
Pin	Name	Description
1	RX-	RS485 RX- signal
2	TX-	RS485 TX- signal
3	TX+	RS485 TX+ signal
4	PE	CHASSIS GROUND
5	IN1	DIGITAL INPUT
6	RX+	RS485 RX+ signal
7	VS	Power supply input voltage +
8	GND	Power supply input voltage -



**NOTE:** The images provided are for illustration purposes only and may differ from the actual product.



Power, IO and Com Port



M12 X-Coded female Ethernet Network connector

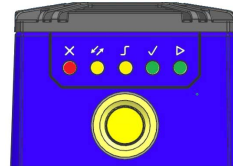
Pin	Name	Description
1	DA+	Bidirectional data DA+
2	DA-	Bidirectional data DA-
3	DB+	Bidirectional data DB+
4	DB-	Bidirectional data DB-
5	DD+	Bidirectional data DD+
6	DD-	Bidirectional data DD-
7	DC-	Bidirectional data DC-
8	DC+	Bidirectional data DC+



**NOTE:** The Ethernet connector is intended for service use only. Do not connect any external devices.

## RANGE SENSOR LEDS

Normal operating mode the colors and meaning of the five LEDs are illustrated in the following table:



LED	Description
READY (Green)	indicates the device is ready to operate.
GOOD (Green)	confirms successful detection of the parcel profile.
TRIGGER (Yellow)	shows the status of the input signal.
COM (Yellow)	indicates active communication on main serial port.
STATUS	RED in case of severe errors YELLOW for warnings, OFF otherwise.



**NOTE:** Long pressure (3 seconds) of the button restores the default configuration.

## TECHNICAL SPECIFICATIONS

ELECTRICAL FEATURES	
<b>Power</b>	
Supply Voltage	24 VDC +/- 10%
Peak Supply Current	1 A max.
<b>Communication interfaces</b>	
Main: RS485 Full-Duplex	115200 bit/s
Ethernet (Built-in) supported application protocols	10/100/1000 Mbit/s SSH
<b>Inputs</b>	
Input 1	Max Voltage: +5V Max Input Current: 0.39 mA
ENVIRONMENTAL FEATURES	
Operating Temperature	0° to 50° C [32° to 113° F]
Storage Temperature	-20° to 70° C [-4° to 158° F]
Humidity	90% non condensing
Vibration resistance EN 60068-2-6	14 mm @ 2 to 10 Hz; 1.5 mm @ 13 to 55 Hz; 2 g @ 70 to 500 Hz; 2 hours on each axis
PHYSICAL FEATURES	
Dimensions (with lens cover, connectors at 0°)	H x W x L 108.7 x 54 x 55.5 mm (4.3 x 2.1 x 2.2 in)
Weight	260 g
Material	Aluminum and plastic
OPTICAL FEATURES	
Image Sensor	CMOS
Image Format	512 X 512 pixels
View Angle	75° x 75°

## EULA

See [www.datalogic.com/eula](http://www.datalogic.com/eula).

## COMPLIANCE

### Laser Safety

This product conforms to the following standards:

- IEC60825-1 Ed.3 (2014)
- EN 60825-1:2014 + A11:2021
- 21 CFR 1040.1 except for deviation pursuant to Laser Notice N.56, date May 8, 2019

This product is Classified Class 1 laser product



**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light.

Disconnect the power supply during installation or during the cleaning of the window.

### Electrical Safety

This product conforms to the applicable requirements contained in the Standard for electrical safety EN IEC 62368-1 at the date of manufacture.

### European Declaration of Conformity

Hereby, Datalogic S.r.l. declares that the full text of the European Declaration of Conformity is available at: [www.datalogic.com](http://www.datalogic.com). Select the link from the downloads section of the product page.

### UKCA Declaration of Conformity

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### FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.