

# ENFORCER®

## E-931-S50RRGQ

50ft Reflective Photoelectric Beam Sensor

### Manual



- Up to 50ft (15m) sensing range
- Weatherproof (IP55)
- Anti-condensation housing
- 12-30V DC/AC 60Hz, 100mA
- Form C relay: 0.5A@30VAC/VDC
- Beam status LED
- N.C. Tamper switch: 500mA@30VAC/VDC

**Caution:**

- This sensor is not designed to prevent bodily injury or loss of life.
- This sensor is not designed for use in environments where explosive gasses may be present.
- Use of this sensor in certain security applications may be regulated by local laws or codes. SECO-LARM is not responsible for compliance with such laws or codes.

# ENFORCER 50ft Reflective Photoelectric Beam Sensor

## Specifications:

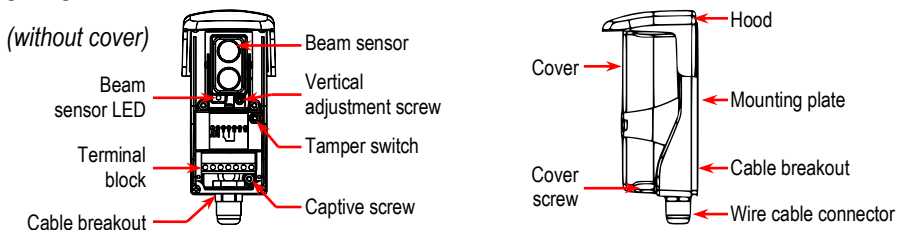
|                              |                          |                                      |
|------------------------------|--------------------------|--------------------------------------|
| <b>Model</b>                 |                          | <b>E-931-S50RRGQ</b>                 |
| <b>Type</b>                  |                          | Reflective photoelectric beam sensor |
| <b>Sensing range</b>         |                          | 50ft (15m)                           |
| <b>Operating voltage</b>     |                          | 12-30V DC/AC 60Hz, 100mA             |
| <b>Current drain</b>         | <b>Standby</b>           | 55mA@12VDC                           |
|                              | <b>Active</b>            | 40mA@12VDC                           |
| <b>Response time</b>         |                          | 10ms                                 |
| <b>Light source</b>          |                          | IR LED                               |
| <b>LED</b>                   | <b>Solid Green</b>       | Good beam signal, properly aligned   |
|                              | <b>Alternating flash</b> | Poor beam signal                     |
|                              | <b>Solid Red</b>         | No beam signal, triggered            |
| <b>Trigger output</b>        |                          | SPDT Relay output (NO/NC/COM)        |
| <b>Switching capacity</b>    |                          | 500mA@30VAC/VDC                      |
| <b>Tamper switch</b>         |                          | 500mA@30VAC/VDC                      |
| <b>IP Rating</b>             |                          | IP55                                 |
| <b>Operating temperature</b> |                          | -13°~140° F (-25°~60° C)             |

## Parts List:

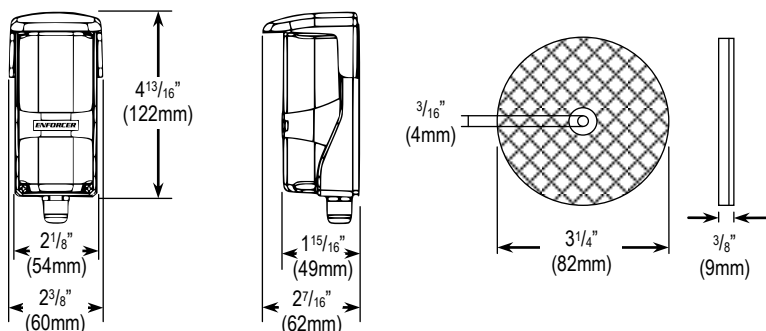
- 1x Sensor
- 1x Reflector
- 1x Mounting bracket
- 1x Sensor hood
- 4x Cover screws
- 2x Mounting screws
- 1x Reflector mounting screw
- 1x Rubber ring
- 1x Cable connector
- 1x Manual
- 1x Removable terminal block
- 1x 10KΩ Resistor

**Note:** Depending on the monitoring system used by the gate motor, it may be necessary to use either the N.C. output or connect the included 10KΩ resistor to the N.O. or N.C. output. Please refer to the gate operator manual or the gate operator manufacturer for the preferred monitoring method.

## Overview:

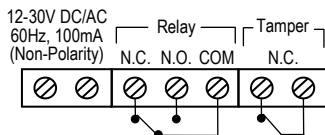


## Dimensions:



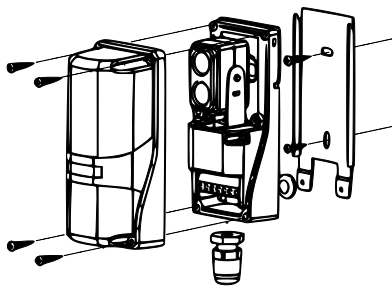
## Wiring Diagram:

- Polarity does not matter for the power input.
- Connect the N.C. tamper terminal to the tamper circuit of an alarm control panel.



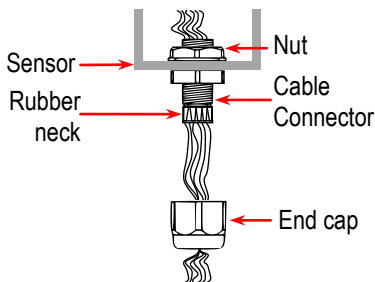
## Mounting:

1. Unscrew the four cover screws and remove the cover.
2. Loosen the captive screw and remove the sensor from the mounting plate.
3. Using the included mounting screws, mount the mounting plate to the wall.
4. Use the cable breakout and cable connector at the bottom or rear of the sensor to run the wires.
5. Hang the sensor back on the plate and use the captive screw to secure it in place.
6. Re-attach the cover, replace the four screws, and attach the hood to the top of the sensor.



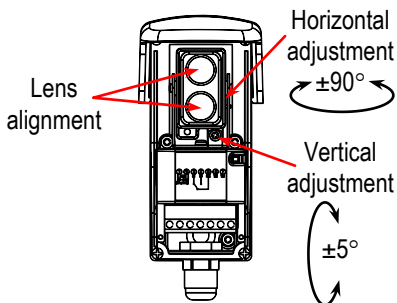
## Wiring for the Bottom Cable Breakout

1. Puncture the cable breakout located at the bottom of the sensor using a screwdriver or other object.
2. Insert the short end side of the cable connector into the cable breakout hole and use the nut to secure it, tightening with a wrench as needed.
3. Run the wires through the end cap and cable connector.
4. Then screw the end cap into the external side of the cable connector to prevent water from entering the unit.



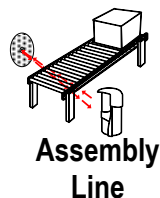
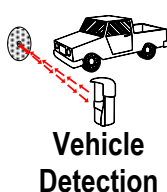
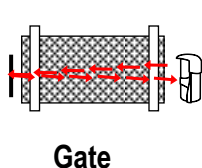
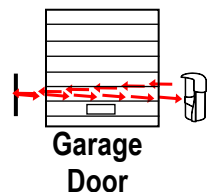
## Alignment:

1. Mount the sensor and reflector so that they face each other.
2. Connect power to the sensor. The LED will light as indicated in the chart below.
3. Unscrew the four cover screws and remove the cover.
4. To find the correct alignment, slowly turn the lens assembly left and right to adjust the horizontal angle.
5. Loosen the vertical adjustment screw to adjust the vertical angle.
6. Place the hood on the sensor by sliding the hood's ridges into the slots on the sides of the sensor.
7. Re-attach the cover, replace the four screws, and attach the hood to the top of the sensor.



|                   |                                    |
|-------------------|------------------------------------|
| Solid green       | Good beam signal, properly aligned |
| Alternating flash | Poor beam signal                   |
| Solid red         | No beam signal, triggered          |

## Sample Applications:



## Optional Accessory:

### Reflector Hood E-931ACC-HR1Q

Provides extra protection for the reflector.



*Compatible with Reflective Photoelectric Beam Sensor models E-931-S50RRGQ, E-931-S35RRQ, and E-931-S33PRGQ.*

## Other Sensors Available:



**Reflective Photobeam**



**Dual and Quad Beam**



**Curtain and Barrier**

## Troubleshooting:

Sensor does not detect the object.

- Change the angle of the sensor or readjust the sensitivity setting.

The beam sensor LED will not turn green.

- Clean the sensor and reflector with a damp (not wet) cloth.
- Adjust the reflector and/or sensor for proper alignment.

Beam sensor LED lights when object is detected, but there is no output.

- Check wiring between the sensor and local alarm device.

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This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship.

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