IRB-MON

UNIVERSAL UL325-2016 PHOTOEYE

Applications

The IRB-MON provides a universal solution for entrapment protection. One photoeye covers the entire spectrum of possible requirements for monitored and non-monitored photo eyes, simplifying inventory management and product training.

The IRB-MON is an external entrapment protection device type B1, non-contact sensor for use with automatic gates and doors. The device is UL325-2016 compliant and suitable for use with both operators that require monitored entrapment protection and those that do not require monitored operation.

There are four monitoring interfaces:
1. Normally closed: Cycle power to the transmitter while monitoring the receiver contacts for proper operation
2. Two-wire pulsed (2 freq): Provides 300Hz "heartbeat" unobstructed, 0Hz obstructed over power supply lines
3. Two-wire pulsed (3 freq): Provides 300Hz "heartbeat" unobstructed, 2Hz obstructed and 0Hz failure over power supply lines
4. Resistive termination: Provides a 10k Ohm resistance when unobstructed

The long range and thru-beam features combined with the installer mode switch settings provide a flexible solution to all external entrapment protection needs.
A robust, NEMA 4X enclosure provides the durability required for high-reliability entrapment protection applications. Lens-less design minimizes fogging and false triggering caused by small objects and provides for easy alignment.

IRB-MON

EMX

INDUSTRIES

Erich Industries, Inc.
DoorSensors.com Division
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1-800-882-5839

Competitive Advantage

The major advantage of the IRB-MON is its flexibility; this photoeye covers the whole spectrum of UL situations.

• Monitored application per UL325-2016 as applied to overhead door and gate operators
• Non-monitored UL325 for gate operators prior to new 2016 requirements
• Non-UL installation

Distributors and dealers need only one photoeye to cover all these applications.

Accessories

IRB-HD   IRB-SH   IRB-SP   IRB-BR

Technical Data

Operating range	up to 115 ft. (35m)
Detection angle	24º
Sensitivity adjustment	potentiometer
Power indicator	Green LED
Detect indicator	Green LED
Mode selection switch	3 modes, relay output, pulsed (3 frequency), pulsed (2 frequency)
Relay output operation	Light on/dark on selection
Relay output	Form C contacts (NO, COM, NC)
Resistive termination	10k Ohm across NO contact
Power protection	Thermal fuse
Transmitter power cycle	>300mS (for use in configuration 0 Monitored)
Power supply	6…35 VDC, 12...24VAC (configuration 0-relay only)
Current (config. 1 and 2)	15mA (12VDC, includes TX and RX wired in parallel)
Current (config. 0)	60mA (relay activated)
Operating temperature	-40ºF...170ºF (-40ºC...77ºC)
Environmental	NEMA 4X
Dimensions (L x W x H)	2.3" (57mm) x 2.6" (65mm) x 3.7" (94mm)
Weight	TX - 0.35 lbs (159 g), RX 0.35 lbs (159 g)
Connections	TX-2 terminal, RX-5 terminal

Ordering Information

• IRB-MON Safety Photo Beam
• IRB-HD-SET Gold anodized aluminum protective hood
• IRB-SH-SET Gray powder coat steel hood
• IRB-BR "L" shaped mounting bracket
• IRB-SP Liquid tight strain relief connector
• IRB-S Set of nylon mounting screws with nuts