

IRB-HB

SAFETY PHOTO BEAM • UL325-2016 • NEMA 4X

Applications

The IRB-HB is a monitored, weather-proof, thru-beam infrared photo eye solution providing entrapment protection for doors, gates or barriers.

The IRB-HB is an external entrapment protection device type B1, non-contact sensor for use with automatic gates and doors. This device is a UL325-2016 Recognized Component suitable for use with operator types that require a frequency (heartbeat) for monitored operation. Monitored output is achieved by using the heartbeat output from the IRB-HB to assure that the connections to the photo eye are intact and that the photo eye is operational. The heartbeat is a specified frequency that is superimposed onto the power supply lines and verified to be present by the operator. The heartbeat is not present when the beam is obstructed, the wire/connections are open or shorted, or the photo eyes are damaged or otherwise non-functional.

The long range and thru-beam features combined with the installer mode switch settings provide a flexible solution for many 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-HB



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Features

- Easy installation and set-up
- NEMA 4X enclosure
- Simple 2-wire connection
- Selectable frequency modes

CONDITION	CONFIGURATION 1	CONFIGURATION 2
No Obstruction	300Hz	300Hz
Obstruction	0Hz	2Hz
Fault	0Hz	0Hz

Accessories



IRB-HD



IRB-SH



IRB-SP



IRB-BR

Technical Data

Operating range	up to 115 ft. (35m)
Detection angle	24°
Sensitivity adjustment	potentiometer
Power indicator	Green LED
Detect indicator	Green LED
Configuration selection switch	2 modes, pulsed (3 frequency), pulsed (2 frequency)
Power protection	Thermal fuse
Power supply	6...35 VDC
Current	15mA (12VDC, includes TX and RX wired in parallel)
Operating temperature	-40°F...170°F (-40°...77°C)
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-2 terminal

Ordering Information

- IRB-HB 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

WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of sale to our customer. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship. Rev 1.3 07/14/15

