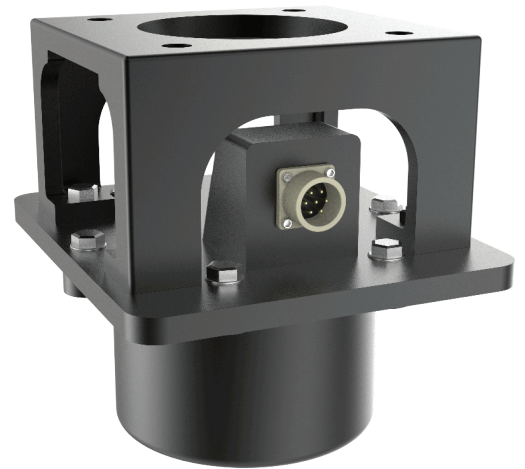


## MagSense

MRD's MagSense track magnet receiver has been designed for maximum reliability in order to detect track magnets used in Station Protection, Automatic Power Control and Automatic Warning Systems. The detector's operation is easily configured and calibrated to latch at the specified field strengths using the provided calibration software. There is no need to open the enclosure to adjust pots. The mode of operation can also be customised to suit specific customer requirements.



## Reliable Track Magnet Detection

MRD's MagSense track magnet receiver has been designed for maximum reliability in order to detect track magnets used in Station Protection, Automatic Power Control and Automatic Warning Systems.

### Features

- Robust industrial design to suit harsh environments
- Circuitry encapsulated in polyurethane potting compound
- Vibration and moisture resistant
- Plug connections for easy installation and maintenance
- Programmable trip point from 1 - 35 Gauss
- Retrofit option available
- EN50155 / IEC 61373 compliant

### Benefits

- Reduced vehicle unavailability and lower maintenance costs
- Overhaul requirements are reduced with maintenance limited to functional testing only



# MagSense

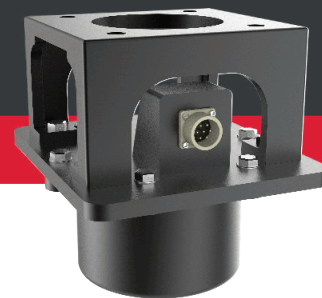
## Track Magnet Detector

MRD Rail Technologies Pty Ltd

+61 7 3821 5151

sales@mrd.com.au

www.mrd.com.au



### Part Numbers

|                                           |             |
|-------------------------------------------|-------------|
| Magsense Retrofit with Cannon Connector   | MagSense-RC |
| Magsense Retrofit with Marachel Connector | MagSense-RM |
| MagSense New with Cannon Connector        | MagSense-C  |
| MagSense New with Marachel Connector      | MagSense-M  |

## Technical Specifications

### General Data

|                           |                                               |  |
|---------------------------|-----------------------------------------------|--|
| Casing                    | IP67 Protection, Anodised Aluminium Enclosure |  |
| Dimensions (W x H x D)    | 157 x 157 x 113mm                             |  |
| Weight                    | 3kg                                           |  |
| Operating Temperature     | -25 to 55°C (EN50155)                         |  |
| Storage Temperature       | -40 to 85°C                                   |  |
| Ambient Relative Humidity | 5 to 95% (non-condensing)                     |  |

### Power Circuit

|             |               |
|-------------|---------------|
| Input       | 50 to 150V DC |
| Consumption | 10W           |

### Input Circuit

|                 |               |
|-----------------|---------------|
| Reset Impedance | 90 K $\Omega$ |
| Reset Voltage   | 45 to 150V DC |

### Output Circuit

|                 |                             |
|-----------------|-----------------------------|
| Voltage         | Within 5% of supply voltage |
| Maximum current | 80mA                        |

### Sensitivity/Threshold

|              |                      |
|--------------|----------------------|
| North Preset | 22.5 $\pm$ 2.5 Gauss |
| South Preset | 17.5 $\pm$ 2.5 Gauss |

### Approvals & Compliances

|                             |             |
|-----------------------------|-------------|
| Transient and Surge Testing | EN50155     |
| Vibration and Shock         | EN61373     |
| EMC                         | EN50121-3-2 |
| MTBF                        | On request  |