AIM - G

Above Ground Gantry Detector

Features:

- Vehicle presence detection
- Replaces Induction Loop Systems
- Simple Installation
- Fast response time
- High reliability
- High immunity to false detects
- High immunity from lock up
- Low installed cost
- 2 zones for speed measurement
- Microprocessor controlled active infrared

The AIM-G is suitable for monitoring a single lane when mounted directly overhead.

This active infrared detector is designed to detect the presence of vehicles within the detection zones. The unit gives an output when one or more vehicles are present. Environmental tracking and anti lock up algorithms, coupled with active infrared technology, make the unit operationally robust and reliable, under a wide range of operating conditions.

Typical applications include vehicle counting, queue detection, speed indication, etc.

An LED is provided on the underside of the unit to give a visual indication of vehicle presence.

Supply Voltage:

24V AC or DC ± 20 % @ < 200 mA
230V AC @ <30 mA

Output:

Relay (de-energised for detect), contacts rated 1 A 24 V DC, 0.5 A 120 V AC.

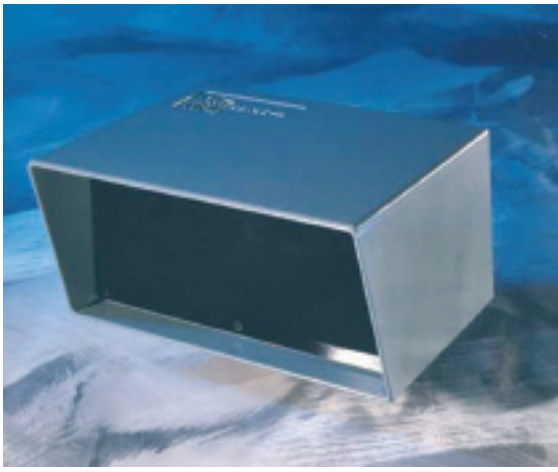
Presence Time:

4 Minutes ± 1 second

Mechanical:

Case Material:

The detector enclosure is a two-part die cast aluminium construction, with a mounting flange provided at the rear. The separate mounting bracket (see accessories) is also manufactured from aluminium to prevent corrosion.



Dimensions:

212 x 110 x 175mm (W x H x D) (excluding connections and mounting flange). Flange projects approximately 70mm from the rear of the unit.

Weights:

2.0kg AIMG24-D (unpacked)
2.25kg AIMG230 (unpacked)
0.3kg MIAB1 bracket (unpacked)

Connections:

Connection to the unit is by means of chassis mounted Bulgin Buccaneer connectors. The 24V version has a single 9-way male connector and the 230V version supports 2 connectors, as shown overleaf. Each unit is supplied with a female connector suitable for connecting to multi-core cables between 7 and 8mm overall diameter. Individual cores are terminated in crimp terminals.

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Alternatively, separate cores may be connected with a short length of a suitable flexible conduit, pushed over the connector body. Pin allocation is shown in the table below.

Table 1 – Connector Pin Allocation:

Pin	Functions for 24V Connector type	Functions for 230V connector type
1	Supply + ve	} Power on separate
2	Supply – ve	} connectors – see
3	Chassis Earth	} table 2 below
4	Relay 1 Common	Relay 1 Common
5	Relay 1 NC	Relay 1 NC
6	Relay 1 NO	Relay 1 NO
7	Relay 2 NO	Relay 2 NO
8	Relay 2 NC	Relay 2 NC
9	Relay 2 Common	Relay 2 Common

*Connect Pin 9 to Pin 1 to enable.
Mating connector type P727P.

Table 2 – Power Cable Pin Allocation:

Pin	Power Cable for 230V
1	Live
2	Neutral
3	Earth

Installation Instruction:
The unit is mounted on a Gantry, at a height of 7.5m from the mounting flange hole to the ground. The unit should point towards the oncoming traffic, as shown in figure.1.

Vertical alignment of the unit is achieved by ensuring the top surface of the sensor housing is at the required angle, to the horizontal (see figure 1).

The AIM-G can be mounted at other heights up to 8m at the same mounting angle, taking account of corresponding changes to zone size etc.

Figure 1a - Side View of Detection Zone

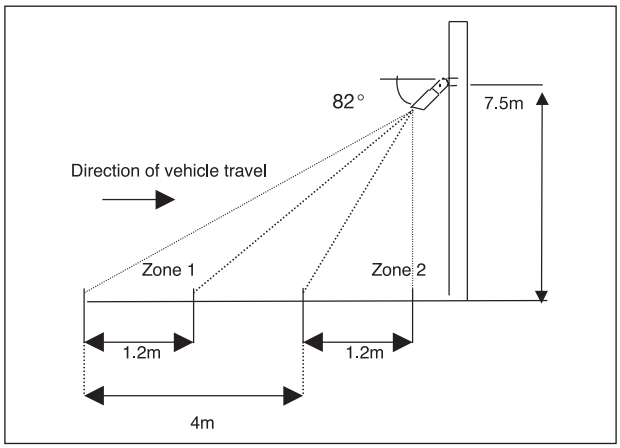
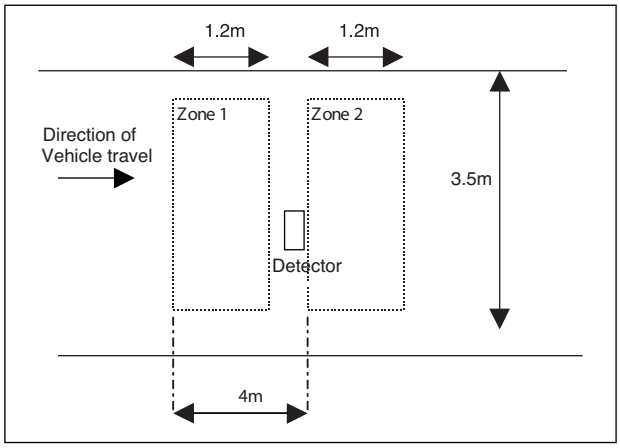


Figure 1b - Plan View of Detection Zone



Ordering Iinformation:
Order as: AIMG24-D
AIMG230-D

Accessories:
Order as - MIA-B1 right-angled mounting bracket.

Please contact the Sales Department for further details or with enquiries about our product range.