

AIM - S

Above Ground Stopline Detector

Features:

- Vehicle presence detection
- Replaces Induction Loop Systems
- Simple Installation
- High reliability
- High immunity to false detects
- High immunity from lock up
- Low installed cost
- 1 or 2 lane operation
- Microprocessor controlled active infrared
- Left or right side versions available

The AIM-S is suitable for 1 or 2 lane applications and is mounted on a signal head pole, at the side of the carriageway, ahead of the stopline.

This active infrared detector is designed to detect the presence of vehicles, within the detection zone. 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 stopline detection, queue detection, filter lane detection etc. An LED is provided on the underside of the unit to give a visual indication of vehicle presence.

SPECIFICATIONS:

Supply Voltage:

24V AC or DC $\pm 20\%$ @ < 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.

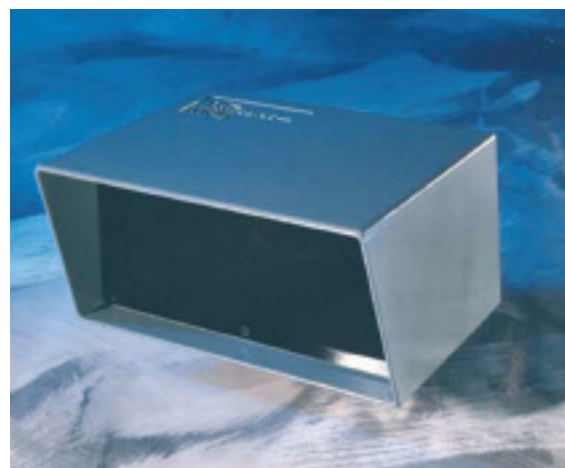
Presence Time:

4 Minutes \pm 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:

212x110x175mm (W x H x D) (excluding connections and mounting flange).
Flange projects approximately 70mm from the rear of the unit.

Weights:

2.0 kg AIMS24 (unpacked)
2.25 kg AIMS230 (unpacked)
0.3 kg MIAB1 (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 8 mm overall diameter. Individual cores are terminated in crimp terminals.

TSEU GROUP
Microsense Systems
Traffic Signals UK



Head Office

15 Narborough Wood Park, Desford Road
Enderby, Leicestershire LE19 4XT
T 0845 201 2750 • F 0845 201 2850
Email: sales@tseu.net • www.tseu.net

AIM - S



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 connectors – see
2	Supply – ve	
3	Chassis Earth	} table 2 below
4	Relay Common	Relay Common
5	} not used	} not used
6	} not used	} not used
7	Relay NO	Relay NO
8	Relay NC	Relay NC
9	Enable 2 Lane*	Enable 2 Lane

*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 pole at a height of 3.5m from the mounting flange hole to the ground. The unit should point across the carriageway from the left (left side version) or right (right side version) 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).

Figure 1a - Front View of Detection Zone

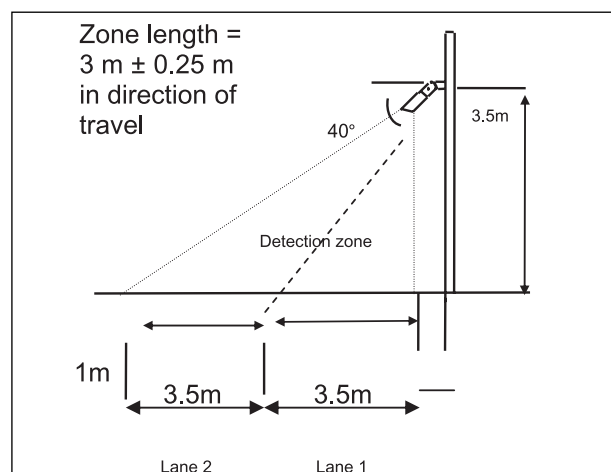
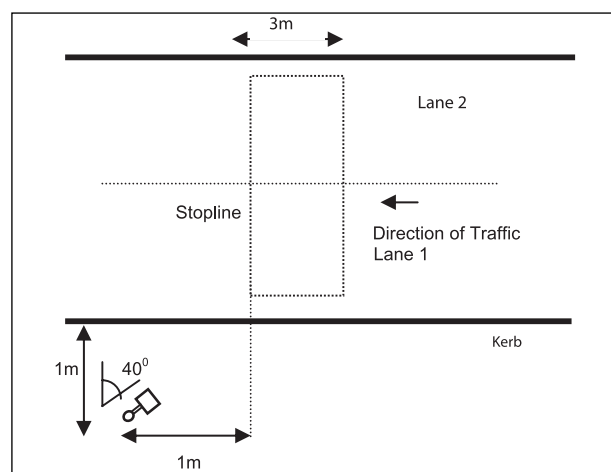


Figure 1b - Plan View of Detection Zone (Left side version)



Ordering Information:

Order as: AIMK24-D
AIMK230-D

Accessories:

Order as: MIA-B1 rightangled mounting bracket.

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