

Product Specification

M150 MIDAS

Interface Card

The Clearview Intelligence M100 wireless vehicle detection system uses embedded inroad sensors to detect the presence and lane occupancy of vehicles. This provides a more reliable, lower cost and easy to install alternative to traditional inductive loops.

Sensors wirelessly transmit real time data via low power secure radio technology to a nearby M110 access point interfacing with a MIDAS outstation using the M150 Interface Card.

The sensors can be installed either in motorway surface or underneath certain elevated sections.

The M150 MIDAS Interface Card provides four detection channels suitable for two lanes; each comprising of an optically isolated contact closure relay for maximum reliability in both normally closed (n/c) and normally open (n/o) configuration and is switchable between different manufacturers of MIDAS outstation to give compatibility via a single interface card. Up to 16 interface cards can be daisy-chained together via the front panel connectors to support more sensors across multiple lanes.

Configuration

M100 sensors, two per lane at 4.5m spacing are mapped to their own individual channel so that on vehicle detection the contact

closure relay will close. The Clearview Intelligence wireless vehicle detection system can therefore be easily configured to replicate the way traditional inductive loops interface with a MIDAS outstation.

Easy to use

Status, detection and power LEDs are provided on the front panel. A power consumption reduction feature disables the LEDs after a preset time with simple push button reactivation. Card reset may be initiated either by the front panel reset button, a power down/power up sequence or by the reset input on the connector.

Key Benefits

- Reduced installation costs
- Ease of system installation, no loop cutting or trenching required
- More cost effective than traditional inductive loops
- Increased reliability compared to traditional inductive loops
- Installation under elevated sections possible
- Easy configuration using TrafficDot (Java Application)

Key Features

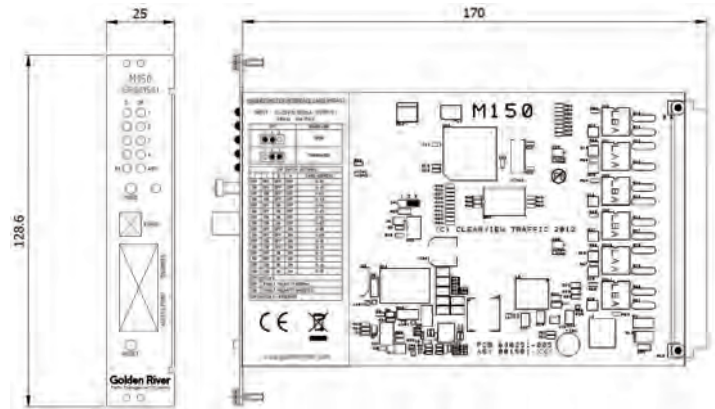
- Standard 3U rack size contact closure card
- Four detection channels, two lanes per card
- MIDAS outstation manufacturer independent to ensure compatibility
- Replicates traditional inductive loop inputs
- Optically isolated contact closure signals (n/c and n/o)
- Type approved to UK HA specifications TR2512A and MCH1529
- Power saving LED display mode



Applications

Back plane connector pinning DIN41612 Type B

Pin No.	Row A	Row B
1	CH 1 N/C Relay Output	CH 1 Fault Relay Output N/C
2		CH 1 Common Relay Output
3	CH 1 N/O Relay Output	CH 1 Common Fault Output
4		
5		
6		
7		
8	CH 2 Fault Relay Output N/C	CH 2 N/C Relay Output
9	CH 2 Common Relay Output	
10	CH 2 Common Fault Output	CH 2 N/O Relay Output
11		
12		
13		
14		Earth
15	CH 3 N/C Relay Output	CH 3 Fault Relay Output N/C
16		CH 3 Common Relay Output
17	CH 3 N/O Relay Output	CH 3 Common Fault Output
18		
19		
20		
21		
22	CH 4 Fault Relay Output N/C	CH 4 N/C Relay Output
23	CH 4 Common Relay Output	
24	CH 4 Common Fault Output	CH 4 N/O Relay Output
25		
26		
27		
28		
29	Reset Input	
30		+24V DC Supply
31		
32		0V DC Supply



PHYSICAL

Standard 3U single extended Eurocard outline

170mm x 128.6mm x 25mm (nominal)

Number of channels

Four optically isolated (n/c and n/o) for two lanes

Sensitivity

16 levels

Configuration

With Traffic Dot software via front panel RJ45 (Ethernet port)

Access Point Connection

Via connection on front panel

POWER

Input voltage

Via MIDAS outstation backplane
DC - 19-29VDC 550mA or
AC - 21-28 VAC 800mA 47-63Hz

Output voltage

48VDC 6W max
(Access Point power)

Elxon Code

83 9000 5000 100

ENVIRONMENTAL

Operating Temp.

-15°C to +60°C (5°F to +140°F)

Humidity

95% (non condensing)

Designed to meet mechanical and temperature requirements of TR2130C and European specification HD638

COMPLIANCE AND COMPATIBILITY

CE Marked

Approved to UK HA specification TR2512A and MCH1529

Meets electrical safety requirement EN 60950

Electro Magnetic Compatibility (EMC) tested to EN 50293

Specifications

USER INTERFACE

Reset	Card reset
Mode	Enable LEDs; channel buzzer assignment / enable / disable
Buzzer	Assignment to any channel; sound when presence detected
LEDs	OK, Detect, RX, 48V
6 way DIP Switch	Select address (0 to 16) and outstation type fault polarity