

MIDAS Outstation

Motorway Incident Detection and Automatic Signalling.



Supporting the major issue of congestion management across the highway; providing safer roads and helping to inform travellers of impending queues.

Reliable Journeys

A Highways Agency standard outstation for traffic monitoring and traffic data collection. One of the most important tools for improving traffic flow and reducing congestion on the motorway network.

The MIDAS outstation, the roadside element of MIDAS, uses traffic detectors installed at carriageway sites to monitor the traffic volume and speeds in each lane. The outstation processes the detection data to generate alarms as flows build up to critical levels.

Informed Travellers

The Regional Control Centre (RCC) based HATMS receives and processes the alarms to set warning messages and speed limits. Queue warnings can be given or mandatory speed limits applied, to assist in the reduction of congestion.

The outstation creates time-averaged statistical reports of traffic speed, flow, headway and occupancy, enabling the provision of real-time traffic information on-screen to RCC operators, or to public traffic information websites.

Key Features

- Suitable for all MIDAS schemes including:
 - Traffic Counting
 - Queue Protection
 - Managed Motorways
 - Hard Shoulder Running
 - Ramp Metering
- Compatible with IP and RS485 MIDAS networks
- Stand-alone mode available for applications such as Ramp Metering where no MIDAS network exists
- Detection for up to 20 loops across 4 sites
- Supports alternative detector technology
- Uses HA type 9300 Equipment Configuration Plug
- Modular design for cost effective maintenance
- Compliant with Highways Agency TR2169
- Runs HA algorithms: HIOCC, HIOCC2, Speed and Flow Threshold, Traffic Data, Vehicle Presence
- Re-programmable via local or remote IP connection

MIDAS Outstation

Motorway Incident Detection and Automatic Signalling Outstation

Applications

Designed as a backwards compatible replacement for non-IP enabled MIDAS outstations, this unit can be used on existing RS485, or newer IP based, MIDAS networks.

The Outstation Auxiliary Link (OAL) supports either RS485 or IP connection to auxiliary systems such as Ramp Metering.

Communications Interfaces – Rear

- TPR/OAL RS485 10-way IDC
- Ethernet RJ45 for Instation IP connection
- Loops 1-10 on 20-way IDC
- Loops 11-20 on 20-way IDC

Communications Interfaces – Front

- Local TPR RS485 9-way D type
- Engineer's Terminal RS232 9-way D type
- Ethernet Engineer's Terminal RJ45
- HA type 9300 Equipment Configuration Plug socket

The Ethernet ports support IP services:

- TCP/IP, UDP/IP, FTP, NTP, SSH, SSL
- SNMP, HTTP, XML: supported but normally disabled

Related Products

- Equipment Configuration Plug Type 9300
- Equipment Configuration Plug Programmer

Environmental Credentials

Exelon Codes	Watts	Annual kW:Hr	CO2 kg pa
79 10 017 000 100	17	149	80

Hardware Description

The MIDAS Outstation hardware consists of the following core components (equipment configuration plug not included):

- CPU card running embedded real-time Linux.
- Replaceable compact flash for program storage
- Five slots for 4-loop detectors with rear mounted DIN41612 edge connector, 2 x 32 pins
- Peek MTS4E detectors fitted as standard, although compatible alternatives can be used
- Communications interfaces
- Mains power supply with 12V battery charger
- 12V 7Ah sealed lead-acid battery
- LEDs for status indication
- Mains and battery switches
- Recessed reset switch
- Local/Remote TPR switch
- Service switch to toggle status and detector LEDs
- Dimensions : (h) 3U x (d) 250mm 19" rack mount
- Weight: 5kg fully populated



Peek Traffic Limited, Hazelwood House, Lime Tree Way
Chineham Business Park, Basingstoke, Hampshire, RG24 8WZ

Tel: +44 (0) 1256 891800 Fax: +44 (0) 1256 891870
Email: sales@peek.co.uk

Peek is a leading supplier of intelligent transport solutions. For more than 30 years, the firm has been providing advanced traffic control products and systems, management and maintenance services for both the urban and highways markets. Peek's established and proven portfolio includes traffic management systems incorporating SCOOT, highway congestion management and enforcement systems, vehicle detection systems, exterior lighting, as well as supervisory and communications systems. Peek is ISO 9001:2008 and ISO 14001:2004 certified.

With headquarters in Basingstoke, Hampshire, Peek employs more than 500 staff throughout the UK. Peek is part of the Traffic and Infra division of Imtech NV, a global technology services provider based in the Netherlands.

© March 2011 v1 Peek. All rights reserved.

www.peek.co.uk