

# NTIS DATEX II Portable Travel Time Variable Message Sign (TTVMS) Solution

The NTIS DATEX II Portable TTVMS Solution enables real-time journey time information to be displayed on portable VMS using data from the National Traffic Information Service (NTIS), the same data source that Highways England's National Traffic Operations Centre (NTOC) used to display Journey Time information on the Strategic Road Network's fixed VMS, ensuring consistency of information displayed to the public.

The NTIS validates all data collected from Global Positioning System (GPS) probe devices and confirms the quality and accuracy by comparing the measured journey times and speeds with ANPR and MIDAS data. Benefits of using GPS probe devices include:

- Data is provided by the National Traffic Information Service (NTIS)
- Low latency – Complete journey time sections can be continually monitored in real time
- Granularity of traffic data – Congestions or delays can be pinpointed to within tens of metres as opposed to identifying a section which could comprise several junctions
- Changes in journey time can be monitored – It is possible to reliably identify when journey times are starting to increase or decrease and predict when traffic conditions will return to normal
- Improved coverage – In-vehicle GPS data provides coverage on remote parts of the network where there is generally less or no fixed monitoring equipment and ensures data is available at times when fixed sensors may be disabled (e.g. due to roadworks)
- Less roadside 'kit' required on site with corresponding reduction in maintenance liability



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### Key Features

- Messages can be displayed in Amber or White.
- Five minute refresh rate is the default setting compliant with Highways England's Major Projects Instruction (MPI-54-062016).
- Manually set a threshold for each route for the minimum and maximum journey time of any route.
- Display alternative messages if the maximum journey time is exceeded.
- Email alerts to multiple recipients if the maximum journey time is exceeded.
- Override journey time messages at any time to display other messages as required.

### Technical Specifications

#### Trailer

- Overall length:** 4050mm  
**Travel position:** Width 1980mm, height 2680mm  
**Operating position:** Width 2730mm, max height 4030mm  
**Weight:** 840kg  
**Tyre:** 185 x 75 x 14  
**Coupling:** 40mm towing eye / quick release, 50mm ball

#### Power

- Voltage:** 12V  
**Solar Panels:** 2 x solar panels  
**Batteries:** 3 x 12V deep cycle, 200Ah, or 6x12V deep cycle 100Ah  
**Solar Controller:** 2 x 15A MPPT  
**Operation on batteries / solar:** Indefinite under recommended conditions

#### Display

- Display Type:** LED full matrix  
**Display Size:** 2730mm x 1850mm  
**Display Viewing Area:** 2420mm x 1590mm  
**Communication:** SMS, internet, web based, serial  
**Matrix:** 48 x 28  
**Enclosure:** Aluminium IP54 equivalent  
**Screen:** Non-glare UV polycarbonate  
**Brightness Control:** Automatic and manual  
**Display Lifting:** Hydraulic lift system