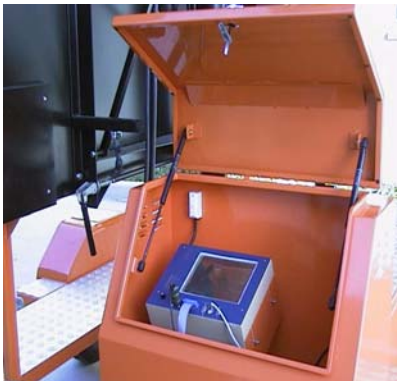
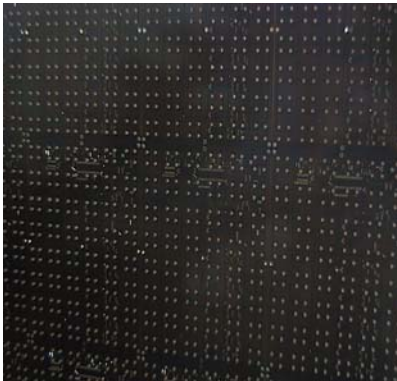


## Trailer Mounted Variable Message Signs (TMVMS)



The Trailer Mounted Variable Message Sign was designed to provide portable notification to motorists of traffic hazards, incidents, lane closing, road works, route guidance, emergency information, real time congestion levels, variable speed limits, and weather related traffic conditions. TMVMS is also used to display route guidance for high occupancy vehicles (HOV). The sign informs the motorists of the problem ahead and the solution. The sign is a self contained standalone solution with internal battery power and solar panel battery charging capability.



- Windows based user interface
  - Local on sight adjustment
  - Remote monitoring and control GSM network
  - Remote monitoring and control – wire connection
  - Easy to use message configuration and editing program
- The sign has a default safety net display configuration operation
  - Identifies and corrects configuration errors. This means that if a user inputs an incorrect message, being too long or not spaced properly, the configuration program identifies the error and allows either manual or automatic reconfiguration
- Low maintenance – high quality “Agilent” LEDs
  - 5 year warranty on LEDs
  - Existing field equipment history indicates low maintenance
  - Automated diagnostic performance assessment
- Full graphic configuration or alpha numeric display presentation available with automatic or manual dimming control. Multiple LDRs enable accurate assessment of ambient light conditions
- Message set configuration
  - Multiple frame message sets – message strings
  - User defined time periods for frames and between frames
  - Scheduler option for automated message selection
- Internal enclosed automated environment management
  - Temperature sensing to automatically control exhaust fans and heating apparatus
- The sign includes RADAR speed warning intervention and automated scheduler operation

## Functional Attributes

- Full graphic configuration or alpha numeric display presentation
- The sign provides a maximum of 4 rows of 8 characters or 48 pixels (wide) by 32 pixels height – providing 3 lines of 8 characters as per Australian Standard
- Windows based user interface with local on-sight adjustment or remote adjustment via mobile GSM phone network or GPRS
- Safety net sign display configuration operation that identifies and corrects configuration errors and provides easy configuration of displays and display set sequences
- Extendable stabilisers for secure operation
- Low cost reliable winch operation for raising and lowering sign mast
- Simple easy to use hand controller for field use personnel operation

## Specification

### Physical

- Pixels: 4 LEDs per pixel with a 6 column by 8 row tile matrix
- Sign face dimensions – typical Width 2.2 mt x Height 1.6 mt

### Power Supply

- Operational voltage: 12 volt DC battery with solar charging power source
- Operating at maximum brightness typically less than 1.5 amps for 60% capacity of 2400 pixels
- Dimming range for night time operation current 15% maximum

### Optical and Photometric Specification

- Yellow in colour as per CIE 1931 Chromacity (590 nms)
- Type of LED: Yellow AlinGap, output luminous intensity 3.2 CD/LED (daylight operation)
- Viewing angle typically +/-10% horizontal and 2.5° vertical
- Luminance intensity uniformity– variation does not exceed 5:1
- Daylight mode – LEDs can be brightened to increase visibility
- Nighttime mode – LEDs can be dimmed to eliminate “flaring” (overly bright) and reduce current consumption
- Dimming facility – 8 levels, maximum output at 1100lx
- Daytime visibility over 400 metres

### Interface Specification

- Nominal RS232 electrical level signal 9600 baud N,8,1
- TCP/IP Ethernet interface option available
- Functions include remote monitoring and sign control, message uploading and remote diagnostic interaction