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Traffic Message Boards

Covered Products:

This category covers Trailer Mounted, Portable Dynamic Message Signs (PDMS).

Specifications

Power:

All PDMS units shall operate primarily from a solar powered electrical system that consists of a battery bank and high efficiency solar array panels. Secondary power supply type shall be the capability of the unit to be operable and for the batteries to be recharged from a standard 110-120 VAC (nominal) 60-cycle source outlet.

Together, the solar array panels and battery bank should supply power sufficient to operate the unit year round under normal conditions in New York State.

The solar panel's output capacity shall keep the batteries charged to support all electrical components in full operation (mast, gauges, computers, LED's, etc). The solar power system shall be fully integrated into the unit power system and shall be in operation when the solar panels are deployed.

The battery bank shall have the capacity to run the LED panels minimally at 40% intensity with one-third of the pixels active, continuously for at least 21 days without recharge. The system should require ideally four and no more than six maintenance charges per year.

The 110-120 volt AC charging system shall initiate charging automatically when a 110-120 volt AC service is connected. The system shall fully recharge the battery bank within a 48 to 72 hour period when in a completely discharged state. The recharging system shall be designed so that a fully charged unit can remain plugged-in without damaging the system.

Display:

All PDMS units shall employ solar powered low voltage Light Emitting Diodes (LED's) to display dot-matrix or equivalent characters. The color of light emitted shall be amber, with a peak wavelength centered at 590 (+/-4) nanometers. The signboards LED's shall produce brightness greater than 1,000 candela per square meter at minimum luminous intensity.

Signboards shall automatically adjust the LED's intensity to be dimmer or brighter for optimum viewing as natural ambient light conditions change throughout the course of a day. This feature shall include a manual override function in the control system, allowing the operator the ability to select the level of illumination.