

SPECIFICATIONS

Specification for Furnishing of Driver Feedback Sign Assembly (Solar Powered)

1.0 General

1.1 This specification describes the furnishing and installation of Driver Feedback Signs. The Driver Feedback Sign is a dynamic sign that provides motorists real-time feedback of their vehicle's speed via radar speed detection. By providing this feedback, it is intended that motorists will better obey the speed limit and overall safety will be enhanced. The vehicle speed is to be detected via a radar module mounted within an enclosure. This document outlines the basic requirements for a Driver Feedback Sign.

Representative Model: Radarsign Model TC-500S

2.0 Display/Housing

- 2.1 The display shall be a 2 character, super bright amber LED type with 100,000 life hours.
- 2.2 The intensity of the display shall automatically adjust for Light conditions, up to 100 levels.
- 2.3 The display shall have numeric characters 12" inches in height.
- 2.4 All components will be contained in the display/housing so that it is easily transported.
- 2.5 The display/housing shall be vandal and tamper resistant by utilizing high impact .25" inch thick shatter resistant LEXAN™ on the display face.
- 2.6 The display/housing shall be 15.8" high x 22.2" wide x 5.25" deep and be aluminum with white power coated finish.
- 2.7 The K band radar, mounted inside the display/enclosure shall be single direction, Doppler radar, FCC part 15 compliant, with sensor range of 1000' with a 10 degree beam width, while operated at 24.125 GHZ.
- 2.8 The display will have an over speed detection alarm that flashes the displayed speed to warn the driver that he/she is exceeding the posted speed limit. As such, a method will be available to pre-select the posted speed limit.

SPECIFICATIONS

- 2.9 The unit shall have a .375" aluminum internal BASHPLATE™ to protect the components from abuse or vandalism. LED holes shall provide directed viewing of display to oncoming traffic.
- 2.10 Operating temperature range shall be -4 degrees F to + 138 degrees F.
- 2.11 Faceplate shall be full size 24" wide x 21" high with "YOUR SPEED" with MUTCD compliant colors & reflectiveness.

3.0 Power Source

- 3.1 The display/housing shall be capable of being powered by solar power.
- 3.2 The battery/solar power supply shall be capable of operating the radar and display 24 hours a day, seven days a week.
- 3.3 The solar charger assembly shall provide 40 watts charge to the battery. Voltage at Pmax = 16.9v, current at Pmax = 2.34 amps.
- 3.4 Battery shall be dual 12V, 18amp, AGM batteries. The battery shall fit inside the housing.
- 3.5 Unit shall have a battery controller that manages the flow of solar energy input up to 80W from the solar panel to the battery.
- 3.6 Unit shall have a smartcharge® software package to prevent overcharging and intelligent shutdown when the battery falls below acceptable voltage, also a auto restart when sufficiently recharged.
- 3.7 The battery status, charge levels, solar amperage shall be checked via Bluetooth enabled laptop PC.
- 3.8 The solar bracket shall be capable of adjusting the angle of the solar panel, to the sun, and shall be capable of mounting to a 4.5" O.D. aluminum pole.

4.0 Display/Controller

- 4.1 The display/controller shall be capable of taking radar generated speed input and displaying it on the sign.
- 4.2 The unit shall have the ability to store data on over 500,000 vehicle by mini SD card.

PART B
SPECIFICATIONS

- 4.3 Setup shall be via easy to follow menu driven P.C. software with no mechanical switches.
- 4.4 The unit shall have a maximum speed cutoff, which will prevent unwanted high speed displays up to 99 MPH.
- 4.5 The unit shall have a battery backed up real-time clock/calendar.
- 4.6 The unit shall have On/Off timer options to all for 4 timers per day and by day of week.

5.0 Misc

- 5.1 The driver feedback unit shall have a one-year warranty.