



# ONSITE™ | 400

03/30/07

## TECHNICAL SPECIFICATIONS

### TRAILER

<b>Frame:</b>	Constructed of 4" channel formed from 1/8" hot rolled steel. "Open" channel frame design eliminates places for water to be trapped in areas not treated by paint. The "C" channel open design reduces the chances for corrosion and rusting.
<b>Finish:</b>	White paint that is chemical, white powder coat. All metal is pre-treated with phosphate spray before primer.
<b>Storage Boxes:</b>	Two 24"x48"x17.5", removable, 10 gauge hot rolled steel, weather tight boxes bolted to frame. Rubber automotive weather strip is used to seal lid of storage boxes. Each box has two paddle type latches that are lockable. A 150 lb. strut supports each lid. One storage box contains 3 batteries enclosed in battery box, battery re-charger, control panel, volt- meter for battery condition, work light and other optional equipment.
<b>Control Panel:</b>	Located behind a small locked door in the curb side of the storage box, sealed with automotive weather strip. Contains 110V re-charging connection, fuses, and On/Off switch for raising lowering display and speed limit sign.
<b>Motorized Lift:</b>	Raises/lowers LED speed display and speed limit sign. A 6 volt motorized actuator is protected from the weather and debris generated by travel by a heavy duty rock guard in the front and a rain cap on top of the actuator's base. PVC tubing covering the shaft further protects the motor from the elements.
<b>Removable Tongue:</b>	Equipped with a 2" ball coupler, safety chains and a removable wiring cable. The Tongue is 42 inches long and easily attaches to the frame with two 5/8" diameter receiver tube pins. The wiring cable plugs into the trailer's wiring harness to connect it to the vehicle. The Tongue, when removed will easily fit into the Storage Compartment.
<b>Leveling Jacks:</b>	Four zinc plated 10" adjustable swivel "bull dog" style jacks mounted to each corner of the trailer for leveling and adjusting the height of the unit. Adhesive pads are placed on trailer where legs fold to prevent paint and surface damage from direct metal-to-metal contact.
<b>Wheel Lock:</b>	6 ft. steel cable with padlock
<b>Suspension:</b>	1500 lb. Torsion Springs.
<b>Tongue Weight:</b>	120 lbs.
<b>Axle:</b>	One 3500 lb. axle.
<b>Tires:</b>	14" 185/75R14 Radial
<b>Wheels:</b>	14"x6" One piece Chrome
<b>Fenders:</b>	Enclosed fenders with front and back steps constructed of 14-gauge diamond plate steel to protect the storage boxes and display unit while in transit. Steps aid in the loading and unloading of storage boxes.
<b>Hardware:</b>	All exposed hardware and hinges are stainless steel with zinc plated connecting pins
<b>Lights:</b>	Meets all D.O.T requirements including turn signals, rear brake lights and taillights. Taillights are fully encased into the heavy frame of the trailer providing extra rigidity and protection. The trailer also has one license plate holder and light with four amber reflectors. Wiring is provided via a 4-prong flat plug connector.

<b>Physical:</b>	Length: 120" including the tongue Height with display sign lowered: 52" Height with display sign raised: 104" to top of display box 110" to top of speed limit sign Width: 6 ft. Weight: 1500 lbs. GVW
<b>Speed Limit Sign:</b>	Attached to rotating frame that holds Display. Speed Limit Sign is 24"x18" with 7" changeable numbers, (0,1,2,3,4,5,6,7,8,9). Material is .080 Aluminum Engineering Grade Sheeting. "YOUR SPEED" is attached to bottom of Display Box. (6"x24")

---

## DISPLAY

---

<b>Type and Size:</b>	Two- digit, 18" Amber Wide Angle LED Display with auto dimming. (3 digit available)
<b>Violator Alert:</b>	0-99 pushwheel setting. Speed flashes when exceeded
<b>Over Speed Cutoff:</b>	0-99 pushwheel setting. Speed will not display above pre-set limit
<b>Display Opening:</b>	Covered with 3/8" high impact tinted shatterproof Lexan®
<b>Internal Test Mode:</b>	Cycles through 1-99 to insure system is operating properly
<b>Light Test:</b>	Displays "88" to insure all LEDs are operating
<b>Power Supply:</b>	The battery bank has a capacity of 225 amp-hours at 12 VDC. Two 6 VDC deep cycle batteries wired parallel/series to obtain 12V. On-board 12 VDC 25/30 amp battery charger is ready to plug into 110 VAC commercial power source to re-charge the batteries. All batteries are enclosed in battery box. All power wiring from Display to Storage Box fully enclosed in weatherproof conduit
<b>Re-Charging System:</b>	Three Cell Marine Professional Battery Charger with LED status lights. Charges each battery independently with independent shut off when fully charged
<b>Physical:</b>	Display unit is contained in 28"x28"x17.6" Steel Box mounted on a rotating frame that folds down for travel. Rotating frame provides mounting of the Display Box, Message Sign, Speed Limit Sign and Emergency Warning Lights.
<b>Optional Solar Charging System:</b>	100 Watt, 50 Watt or 15 Watt Solar re-charging systems are available to extend the operational time of the batteries.
<b>Control Panel:</b>	The Display's Control Panel is located on the curb side of the Display Box sealed by automotive weather-stripping and a small locking door. Control Panel includes Switches for Violator Speed Select, Over Speed Cut off Select, Internal Test Mode and Light Test Mode. Door hinge is stainless steel.

---

## RADAR UNIT

---

<b>Type:</b>	One-piece programmable stationary directional true Doppler Radar. Programmed to monitor and display only speed of vehicle coming towards the Speed Display Trailer.
<b>Measurement:</b>	Available in miles per hour or kilometers per hour.
<b>Frequency:</b>	K-Band, 24.150 GHz. +/- 100MHz.
<b>Accuracy:</b>	+/- 1 mph
<b>Beam Width:</b>	12 ° +/- 1 °
<b>Microwave Source:</b>	Gunn-effect diode
<b>Electronics:</b>	Solid State Digital Signal Processing (DSP)

**Target Speed Range:** 10 mph-99 mph. (optional three digit, 10-199)

**Mounting:** Fully enclosed within Display Unit, but removable from back panel

---

## OPTIONS

---

The following options may be added to the OnSite 400™.

- Anti-Theft Motion Alarm with remote control
- EZ Stat Pak (radar based data logger)
- Metro Count Statistical Package (utilizes rubber hoses across the roadway)
- LED Flashing Emergency Lights to flash with Violation
- LED Traffic Manager (arrow stick)
- Mobile Messenger Model 1200 with Programmer (large 9" LED Scrolling Message Sign)
- 24-hour timer (turns power to unit on/off at pre-set times)
- Spare Tire and Wheel
- White Strobe Light (flashes with violation to simulate photo radar flash)
- Extra Power/Charging Unit (3 deep cell batteries, re-charger enclosed in case and mounted.)
- Bolt-on front swing away wheel
- Locking Lug nut
- Protective Cover