

# SUNRAY SOLAR 390

## Solar Powered Full Matrix Portable Changeable Message Sign



**Text and Graphics  
capable**



**User friendly interface  
and control**

**The Sunray Solar 390** combines the advantages of a highly portable, solar-powered, large display trailer with advanced LED Full Matrix technology. Capable of displaying a variety of graphics and extended messages, whether pre-programmed or entered by the user in the field, the Full Matrix display demonstrates National Signal's continuing commitment to effective traffic safety and management. National Signal's offers a complete line of products that provide contractors and state transportation authorities with the quality products they need to ensure regulatory compliance on their road and bridge projects.

- **Trailer mounted.**
- **AllInGaP LED technology.**
- **Hundreds of pre-programmed messages, MUTCD messages, and operator-created messages.**
- **Environmentally friendly.**
- **Cost effective.**
- **Reliable and easy to operate.**
- **Meet or exceed all state and federal highway MUTCD traffic safety specifications.**
- **NTCIP compliant.**
- **Optional Speed Display Feature**

Specifications subject to change at any time without notice.  
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**NATIONAL**  
signal incorporated

**Bright Ideas From A Bright Company**

## SPECIFICATIONS

### Trailer Construction

Width across fenders.....	78"
Length w/draw bar .....	160"
Height sign up .....	168 "
Height sign down.....	112"
Weight .....	3000 lbs
Tire size.....	ST205/75-D15 load C
Wheel size .....	15"
Axle capacity .....	3500 lbs
Suspension .....	Leaf spring
Color.....	Orange, optional other colors
Hitch.....	2" ball class II 3500 lb capacity
Frame .....	3" x 3" x 1/8" wall tubing
Deck material.....	1/8" steel tread plate
Fenders.....	Formed steel
Draw bar .....	3" x 3" x 3/16" wall steel tube 'A' frame
Jacks .....	(4) swing, (1) swing type with caster
Lighting.....	Stop, turn, and signal, side reflectors, four wire disconnect for towing
Lift mechanism.....	electro-hydraulic



### Batteries and Solar collectors

Batteries .....	6v or 12v deep cycle with varying options
Battery charger.....	45A fanned cooled, external plug, (75A optional)
Solar collector.....	Crystalline silicon auto erecting
Battery enclosure .....	Lockable, ventilated, acid resistant, steel, powder coat finish orange other colors available

### Control

Type.....	Proprietary embedded fully NTCIP compliant
Password Protection.....	One levels
LCD .....	4 lines, 40 characters per line, backlit

Messages .....	50 user programmable (4 pages each), 9 linkable, 300 pre-programmed including MUTCD symbols and arrows
Dimming.....	31 levels, photocell controlled, manual or automatic
Remote Comm. ....	Cellular ready
Message scheduling.....	36 events per year
Sign width .....	78'
Sign height .....	128"
Pixel matrix .....	28 rows by 48 columns
Character size.....	6 fonts from 7.5" to 36", 3 lines x 12 characters, graphics capable
LED's .....	590nm amber, 4 per pixel
Angularity .....	25° total
Legibility .....	1,200'
Brightness .....	Manual/automatic 31 levels
Photo Sensor.....	Shielded from extraneous light
Enclosure .....	Aluminum, finished powder coated black.
Display window.....	1/8" UV stable polycarbonate
RF Interference .....	Unaffected

### Radar Detector (Option)

Type.....	One true doppler radar
Speed range .....	5-200 Mph or km/h
Distance range .....	1/4 to 1/2 mile
Band type .....	K, 12°
Operating voltage.....	10.8 vdc to 16.8 vdc
Operating tem.....	-22F to +140F (-30C to +60C) 100% relative humidity at +99F (+37C) non-condensing
Accuracy .....	+/- 1 mph
Microwave source .....	Gunn-effect diode
Beam width .....	12 +/- 1

### Options

- Intellistat provides a variety traffic statistics that can be displayed or printed in graph or raw data format. Includes software and pneumatic tube for vehicle count
- Strobe light for over speed
- Wheel locks
- Combo hitch 2" ball & 3" pintle ring
- Cellular phone for remote operation
- Handheld controller

