SUNRISE SESA
INTELLIGENT TRANSPORTATION SYSTEMS

ITS SOLUTIONS FOR ROAD & HIGHWAY APPLICATIONS

☑ **DYNAMIC MESSAGE SIGNS**

☑ **RETROFIT DYNAMIC MESSAGE SIGNS**

☑ **FULL MATRIX BLANK OUT SIGNS**

☑ **BLANK OUT SIGNS**

☑ **VARIABLE SPEED LIMIT SIGNS**

☑ **LANE CONTROL SIGNS**

☑ **TRAVEL TIME SIGNS**
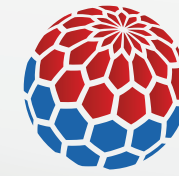
☑ **SCU CONTROLLER**

REFERENCES

Since 1987, we have delivered ITS solutions across the United States and Canada. The following states and provinces are currently using our signs:

- Alaska
- Arizona
- California
- Quebec (Canada)
- Nova Scotia (Canada)
- Alberta (Canada)
- Florida
- Delaware
- Georgia
- Kansas
- Kentucky
- Maine
- Massachusetts
- Michigan
- New Hampshire
- New York
- Pennsylvania
- Rhode Island
- Tennessee
- Texas
- Utah
- Virginia
- Washington DC
- Washington State
- Wyoming

More than 1,200 signs
Currently in service across
United States & Canada

CONTACT US TODAY FOR A FREE QUOTE!

SUNRISE SESA

SUNRISE SESA TECHNOLOGIES, INC.

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781-826-9706

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WWW.SUNRISESESATECH.COM

STANDARDS AND QUALITY

Our Intelligent Transportation Systems products are all fully compliant with NTCIP standards. This allows for easy integration with your current signs, software, and systems without the need for additional software, hardware, or extra work. We provide the quality solutions you expect and deserve.

NTCIP · UL · NEMA NEMA TS2 CERTIFICATION NEMA TS4 CERTIFICATION · AASHTO · IAS ACCREDITED Management Systems Certification Body · IAF MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT · ITS PRODUCT OF THE YEAR 2014 FOR SOLAR POWERED SIGN · BEST MANUFACTURING OVERALL EXCELLENCE 2015

EAST 1/2 MILE

SUNRISE SESA TECH.COM

LED TECHNOLOGY FOR ITS APPLICATIONS

ABOUT US

The authority on LED technology for almost 50 years, the Sunrise SESA Technologies family of talented engineers design and manufacture innovative LED & LCD displays for ITS applications. Our products, made in the USA, adhere to strict quality standards while ensuring craftsmanship and long-term performance. At Sunrise SESA Technologies, we are innovating tomorrow's transit needs today.

When you buy a Sunrise Sesa Technologies product, you buy something from a company that cares and provides trust. What you get is an experienced team of expert engineers and technicians who work diligently to fill the requirements of any project, whether it is a single sign or a custom-tailored solution. Our commitment is to support contractors, consultants, and end-users through all phases of each project and work to maintain open, structured communication channels so that no one is left in the dark.

Our approach is to work alongside our clients and to deal with obstacles directly, ensuring complete client satisfaction. Every one of our products is created with ease-of-use, ease-of-installation, and longevity in mind to survive the harshest conditions. Our personalized customer care team is dedicated to your project, providing answers within 24 hours available through a dedicated support number or by e-mail. We also maintain a large, ready-to-ship spare parts inventory so our turnaround times from reception to repair and return is highly efficient.

PROGRESSIVE TECHNOLOGY

Our products offer numerous features and benefits that are unique to our industry and our innovative design process.

NEED-BASED CUSTOMIZATION

We sell solutions. Our team is ready to study your specific needs and develop a solution that meets you where you are.

PROUDLY MADE IN THE USA

Our products, manufactured in the USA, compliant with the Buy-America Act adhere to strict quality standards.

TESTING FOR QUALITY

All of our products are fully factory tested and documented to ISO9001:2015 standards.

DYNAMIC MESSAGE SIGNS

M6000 SERIES

We draw on decades of industry experience in developing quality, customized Variable Message Signs. SESA Messenger displays are comprehensively designed with clear messaging on high-speed roadways in both rural and urban environments. These signs have proven highly capable in the field, where extended visibility and legibility distances are required. Messenger display types are available in full-color 20 or 33 mm pixel pitch and Amber 8", 12", and 18" at any size and dimension.

SESA Messenger products have successfully operated for years without requiring extensive maintenance. We have installed over 1000 DMS's throughout the US and Canada. Throughout the process, we help our customers identify their needs by using every interaction and engagement to ensure and accelerate the operation of their Messenger sign while having a complete vision of their investment. Our proven innovation and quality are demonstrated by our signs providing 36 percent more efficiency than our competitors' Variable Message Signs. That is, our Messenger signs consume about 480 watts of power, while our competitors' signs consume almost 650 watts of power, thus leading to more cost savings.

FEATURES

- ⦿ Available in 200 configurations and 3 housings: Front Access, Rear Access, or Walk-in
- ⦿ We have 3 display types available for M6000 Dynamic Message Signs: character matrix, line matrix, full matrix
- ⦿ Available in Amber, White, or Full Color and all character sizes
- ⦿ M6000 Dynamic Message Signs controlled by our SCU6 Controller.
- ⦿ Our product utilizes innovative and has reliable Dynamic Message Sign technology
- ⦿ M6000 exceeds NEMA TS4 and NTCIP Dynamic Message Sign standards
- ⦿ Our product has advanced electronic Dynamic Message Sign architecture for increased reliability
- ⦿ With a unique Dynamic Message Sign housing design solution, M6000 has great display modularity and reduced maintenance costs

APPLICATIONS

- Highways
- Traffic Management
- Travel Time
- Speed Limit
- Arterial Roads
- Emergency
- Traffic Calming
- Toll Systems
- Tunnel
- Bridge

Mechanical	
Display Capacity	Full Matrix Amber or Full Color
Size	Amber: 8", 12", 18"; White: 18"; Full Color pitch: 20mm or 33mm
Access	The M6000 Dynamic Message Sign has front, rear, or walk-in access
Mounting	Depends on access type
NTCIP Controller	
Serial Ports	2 ports RS322
Ethernet	2 ports (10/100 base T) RJ45
Communication with DMS	2 ports RS485, radio link is possible
Capacity	NTCIP multi-DMS
Electrical	
Power	Depends on model
Voltage	110V AC – 60Hz
Cable/Connection	Only power and communication between the M6000 dynamic message sign and controller
Other	
NTCIP	1101, 1102, 1201, 1203, 2001, 2101, 2103, 2104, 2202, 8004
Temperature Range	-34ºF to 185 ºF

RETROFITS

Upgrade your old DMS signs to the latest LED technology with our unique DMS retrofit package allows you to cost-effectively upgrade your sign to the latest LED technology.

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FEATURES

- ⊘ Available in 200 configurations and 3 housings: Front Access, Rear Access, or Walk-in

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- ⊘ Available in Amber, White, or Full Color and all character sizes

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APPLICATIONS

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- ◈ Speed Limit
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- ☀ Emergency
- ▨ Traffic Calming
- ⊟ Toll Systems
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- ⩜ Bridge

Mechanical	
Display Capacity	Full Matrix Amber or Full Color
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FULL MATRIX BLANK OUT SIGNS

FMX SERIES: HYBRID DMS / BOS

Sunrise SESA has reinvented the Blank Out Sign. Sunrise SESA's Versatile Blank-Out Signs are an excellent way to display any MUTCD Compliant Images in a single sign. Providing dynamic information for drivers and reinforcing traffic signals, Sunrise SESA's innovative variable blank-out sign is superior to a traditional blank-out sign, static warning signs, and regulatory signs because it is not hardwired to support one or two symbols. It is a full matrix high-resolution LED sign, capable of displaying unlimited graphics or text on the matrix.

Sunrise SESA's innovative sign stores up to 128 MUTCD images. These adaptive signs are easily focused toward providing traffic information to drivers when required at appropriate times. Full color ultra-bright LED's are mounted onto modular printed circuit boards for easy front access maintenance. Parts are simply replaced on site with basic hand tools. Variable signs brightness is be automatically adjusted for optimal performance under any environmental conditions.

APL CERTIFICATION

700-012-014 (Approval Date: 8/27/2024) (Service Life Expectancy) BABA Eligible: Eligible

FEATURES

- ☑ Full-color ultra-bright LEDs are mounted onto modular printed circuit boards for easy front access maintenance.
- ☑ Parts are simply replaced on-site with basic hand tools.
- ☑ Innovative sign stores up to 128 M UTCD images.
- ☑ Variable signs brightness is be automatically adjusted for optimal performance under any environmental conditions.
- ☑ Easily focused on providing traffic information to drivers when required at appropriate times.

VALUE/ BENEFITS

- ☑ Controllable via 8 dry contacts, or via NTCIP commands.
- ☑ Can be retrofitted in an existing intersection, or connected to an ATMS for remote dynamic control
- ☑ Full Matrix LED can produce bitmap image making the sign flexible for a range of scenarios
- ☑ Library of MUTCD symbols preloaded, easy to deploy and program

  Access allows for easy maintenance
- ☑ All components are standard reducing complexity and range of inventory of spare parts

General

- MUTCD Compliant Images
- Full Color RGB LED
- Active Area: 30"x30", 24"x66", 24"x24"
- Matrix Size: 100x100, 80x220, 80x80 Pixels
- Pixel Pitch – 7.62mm
- 110 deg. Viewing Angle
- Onboard Non-Volatile Memory
- Automatic brightness control via photosensor
- Visor/Heatshield – 4"wide

Construction

- 5052 Aluminum alloy
- NEMA 3R
- Polycarbonate front face

Electrical

- Supply Voltage: 120 - 240 VAC
- Max Power: 500W, 883W, 320
- Typical Power: Varies by Content Assume 30% pixels, at 50% brightness <250W, <140W, <90W.

Cabinet Dimensions and Weight

- 35" H x 35" W x 4" D
- 72" H x 30" W x 4" D
- 29" H x 29" W x 4" D
- Weight: 68 lbs. (30 Kg)
- Weight: 109 lbs. (49 Kg)
- Weight: 31 lbs. (14 Kg)

Environmental

- Operating Temperature: -40°F to +165°F (-40°C to +74°C)
- Humidity: 0% to 99% noncondensing

Control Options

- Dry Contact – up to 8 messages
- NTCIP – Subset of Commands Stores up to 256 messages

Mounting Options

- Z-Bar Standard Mounting
- Mast Arm
- Side Pole
- Span Wire Hanger
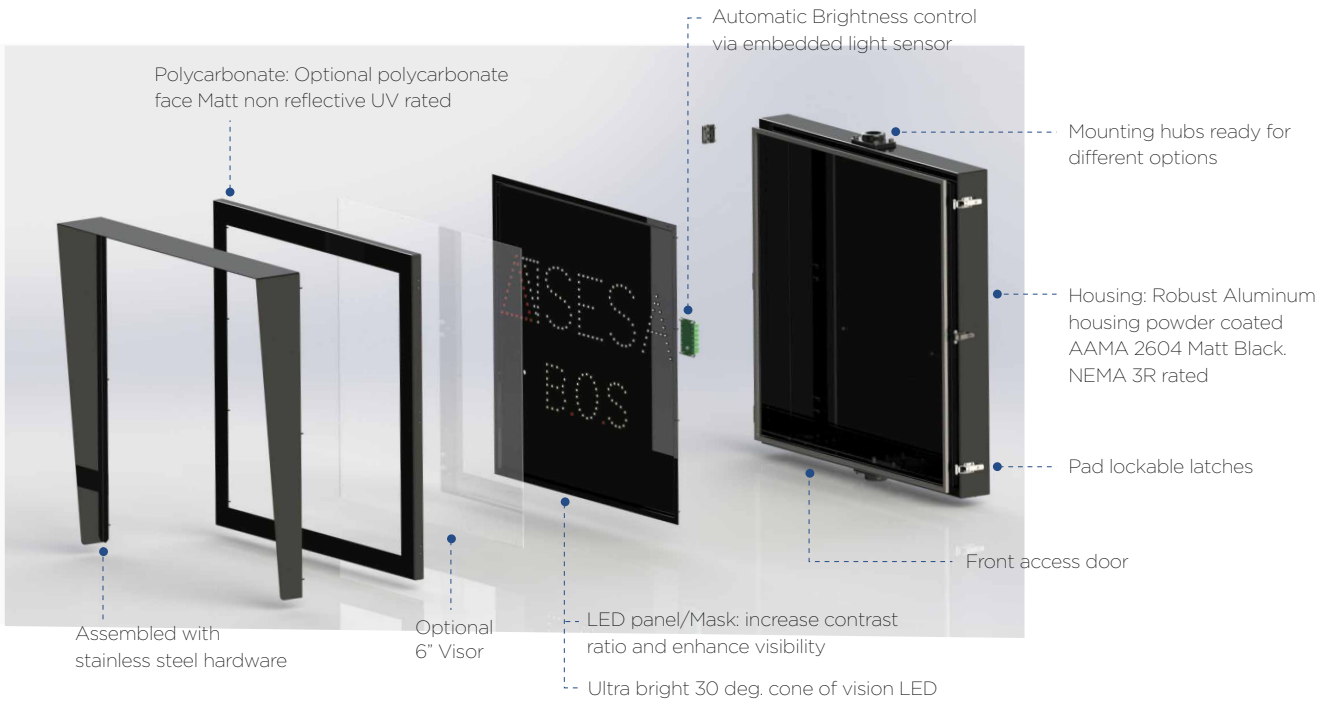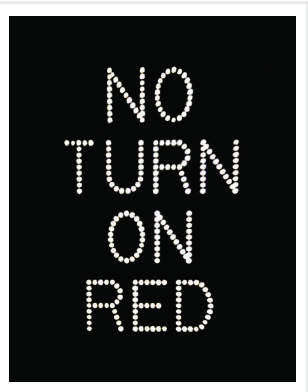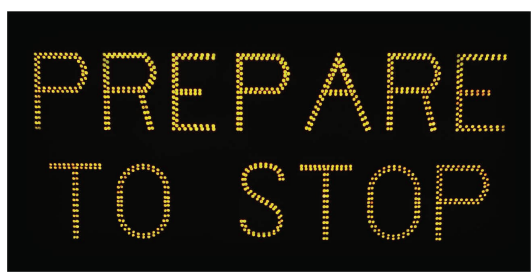
Other Options

- Heater

BLANK OUT SIGNS

BOS SERIES

SESA Blank Out Signs offer traffic engineering professionals a customized solution to meet unique project specifications. These mobility signs can be favorably adapted to display a multitude of messages and graphics - utilizing a single sign. Notably differentiated from competitors, our use of string technology supports multiple applications and provides the lowest maintenance requirements, both short and long term, while still providing the best warranty in the traffic engineering industry. SESA string technology eliminates a contrast inhibiting polycarbonate face, resulting in a higher than normal contrast finish to amplify day/night visibility and legibility.

FEATURES

- 2 Phase, 4 Phase, 6 Phase, or Full Matrix Display Configurations
- Supports 9", 12", or 18" Characters
- Available in MUTCD Compliant Symbols
- NEMA TS4 Compliant
- Simple Dry Contact or Serial Links
- Web-Based Software for Remote Monitoring
- Manage Up to 10 Signs with SCU6 Controller
- NTCIP Compliant & Integration Friendly
- Automatic Brightness Adjustment
- Conflict Monitoring Option

Automatic Brightness control via embedded light sensor

Polycarbonate: Optional polycarbonate face Matt non reflective UV rated

Mounting hubs ready for different options

Housing: Robust Aluminum housing powder coated AAMA 2604 Matt Black. NEMA 3R rated

Pad lockable latches

Front access door

Assembled with stainless steel hardware

Optional 6" Visor

LED panel/Mask: increase contrast ratio and enhance visibility

Ultra bright 30 deg. cone of vision LED

TECHNICAL SPECIFICATIONS

- Robust NEMA 4 Aluminum Enclosure
- All surfaces are black matte powder coated AAMA2604
- Foam gasket
- Pre-drilled and equipped with Pelco type hubs for standard and easy mounting options
- Polycarbonate face: matte, non-reflective and UV rated
- Black Internal LED panel for excellent contrast and improved visibility
- 6" visor
- Din Rail power supplies
- Polycarbonate front face can be avoided to reduce cost
- 3 standard mounting options
- Other mounting options can be designed for a specific application
- All parts are UL approved and tested as per NEMA TS4
- 30 degrees LEDs as per NEMA TS4 standard
- All PCB are conformal coated
- All signs are equipped with a photo sensor and a micro-controller to automatically adjust brightness level (factory programmable)

VARIABLE SPEED LIMIT SIGNS

VSL SERIES

SESA's Variable Speed Limit Signs (VSLS) provide every feature required to meet industry standards, plus an ability for additional options to enhance legibility, structural integrity, and regional preferences. Meeting the ITS industry demand, SESA's Variable Speed Limit Signs (VSLS) provide every feature required to meet industry standards, plus an ability for additional options to enhance legibility, structural integrity, and regional preferences. NTCIP Compliant and built to withstand an assortment of roadway conditions, VSLS utilize a durable aluminum face material while demonstrating our historical commitment to low maintenance in amber or white and energy efficiency. Fully solar capable, this mobility solution is available in full figure or inverted fonts that over versatility to regional climatic conditions or community preferences.

From a long and short term cost perspective, our VSLS's create an unrivaled value in the ITS industry. This is especially notable when paired with SESA's multi-sign SCU6 controller with remote access enabled, web-based software to allow functionality assessments without an on-site presence. The SCU6 controller will retain log files for up to a year, providing field staff with a comprehensive snapshot of diagnostic evaluations. Our reliable, durable, and dependable VSLS comes complete with installation support and an industry best warranty to simplify your asset management and lower field costs.

FEATURES

- The front face has three layers: a superior contrast black mask, a polycarbonate layer, and an extra aluminum layer.
- High intensity LEDs provide clear messages on the M5000
- Embedded DMS with a 30 degree cone of vision or less.
- Available with standard 18", 12", or 8" characters.
- Any Dimension in Any Color & Size Font
- Lightweight, Slim, & Easily Accessible
- Display Instant Information from the Cloud with DMS Connect
- System Diagnostics & Fault Detection

- Full Color, Touch Screen, NTCIP Controller
- Manage Up to 10 Signs Using One Controller
- Log & Record Events in Real Time
- Simple Mounting Solutions
- Serial communication between the Embedded DMS sign and SESA's controller reduces the number of required cables and installation costs.
- A 500 foot maximum distance between the Embedded DMS and the controller allows choice of the optimal locations for the sign and the controller cabinet.
- NEMA 3R controller cabinet is available for the Embedded DMS

TECHNICAL SPECIFICATIONS

- Retrofit kit includes display boards, power supplies, light sensors with associated wiring, sheet metal supports, and component mounting brackets.
- The control cabinet kit for the retrofit includes a new SESA controller, power supply, surge arrestor, and main switches, and is fully wired and ready for installation
- The entire retrofit kit is NTCIP and NEMA TS4 compliant.
- Retrofit life-expectancy is an additional 10-15 years.
- With our retrofit, high-intensity LEDs ensure high visibility even behind an older front-face.
- Retrofit components do not require ventilation and can be installed even if the old DMS's ventilation does not work.
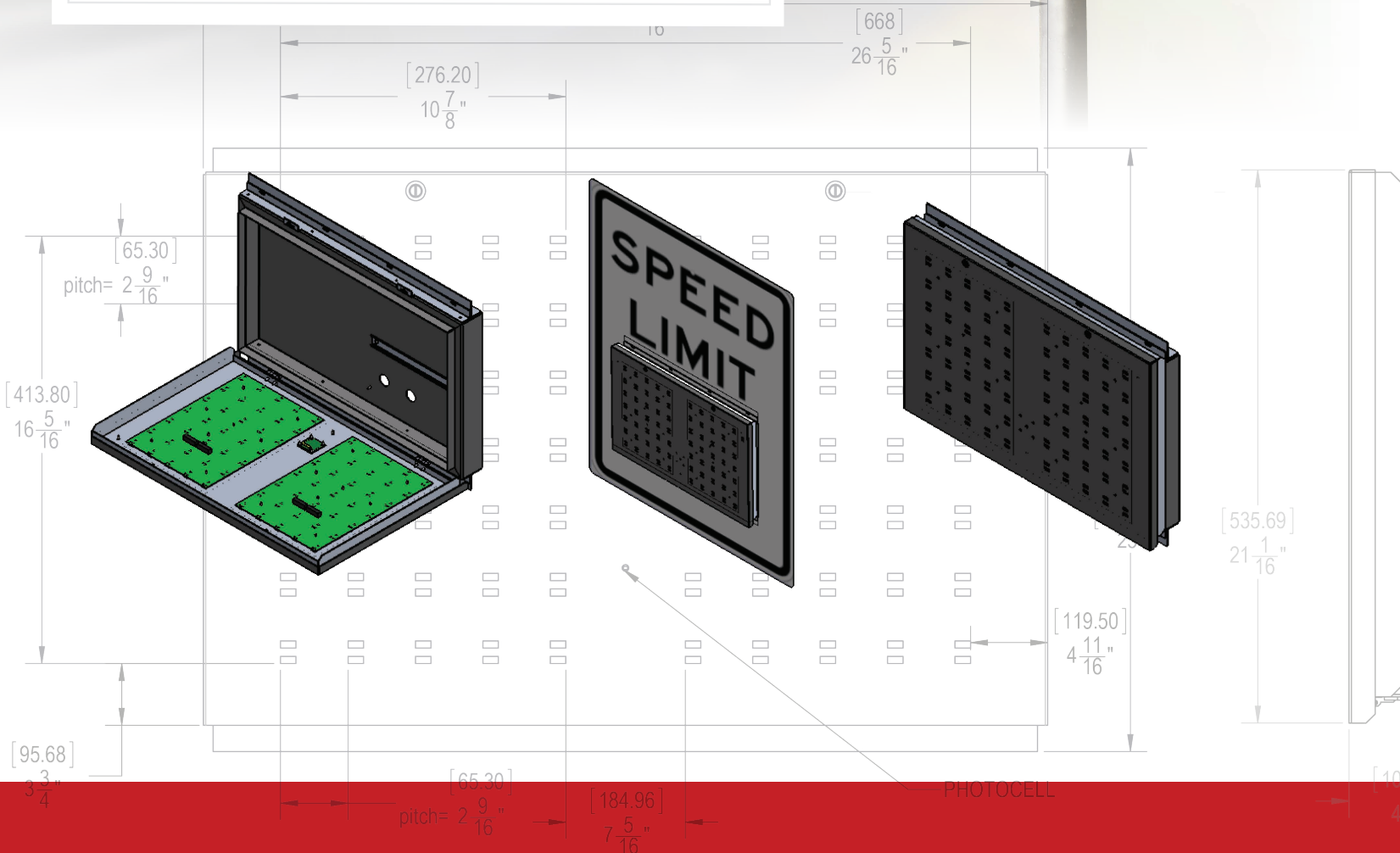
LANE CONTROL SIGNS

LCS SERIES

SESA's energy-efficient, highly visible Lane Control Signs are optimized using high performance LED's, a high contrast front mask, and a specialized electrical design to effectively reduce energy consumption and minimize long range maintenance costs. A robustly designed, NEMA rated housing and contrast border ensures that each sign meets, and exceeds, industry standards with clear, legible, and reliable messaging.

Our versatile Lane Control Signs can be controlled using dry contact or with the use of our NTCIP compliant controller to enable vigilant monitoring and management. The SESA SCU6 multi-sign controller's fault detection, communication abilities, one year memory capability, and web-based software makes these the easiest lane control signs in the industry to manage remotely. With just the use of an IP address and a wireless device, field operations personnel can easily manage and diagnose issues from miles away!

6 MESSAGES

4 MESSAGES

2 MESSAGES

TECHNICAL SPECIFICATIONS

- ☑ Versatility Lane Control Signs can stand alone or be easily integrated into the most complex ATMS systems.
- ☑ 6 Different Lane Control Sign Models with varying symbol size and display configurations.
- ☑ Easy Installation-Our standard Lane Control Sign housing is designed to be mounted on standard Single 1 1/2" NPS Hub Plate brackets
- ☑ Custom installation configurations for Lane Control Signs are available
- ☑ Easy Maintenance Lane Control Signs allow easy access to all internal components through the front or rear door panel for simple and fast maintenance.
- ☑ Multi-DMS Controller With SESA's Multi DMS SCU6 controller, managing up to 10 Lane Control Signs.
- ☑ Each Lane Control Sign has its own unique address, controllable from a single location.

- ☑ Housing for Lane Control Signs is robust, light, slim, and scratch resistant.
- ☑ The front face of the Lane Control Signs have high contrast masks behind the polycarbonate layer to improve visibility.
- ☑ High intensity LEDs that ensure clear symbols with a 30 degree cone of vision or less.
- ☑ Supports 9", 12" and 18" characters.
- ☑ Serial communication between Lane Control Signs and our controller reduces the number of required cables and installation costs.
- ☑ Lane Control Signs can be digitally controlled through simple dry contacts is possible.
- ☑ Lane Control Signs are available with a NEMA 3R controller cabinet.
- ☑ On the shelf and customized solutions
- ☑ 50% Reduced Maintenance Costs

TRAVEL TIME SIGNS

TTS SERIES

SESA Travel Time Signs, also known as M5000, are NEMA rated, lightweight, and available in any color or size messaging. Both our Messenger 5000 and Solar Sign 5000 series incorporate all of the latest advanced technology from SESA to accurately and reliably display travel time data. These easily mounted solutions can be connected to our SCU6, NTCIP controller, to access DMS Connect, our first ever cloud-based traffic management solution that eliminates the need for any fixed speed-sensing infrastructure and expensive equipment.

SESA also recently developed and launched a new concept -- the Travel Time Stand Alone Station. This unique ITS solution has the ability to not only display travel time, but other critical transportation data. DOTs, law enforcement, emergency management, and even event venues can deploy sophisticated, real-time communication at a fraction of the cost and complexity, making it viable for fixed, mobile, or spontaneous use.

TECHNICAL SPECIFICATIONS

- ⊘ The front face has three layers: a superior contrast black mask, a polycarbonate layer, and an extra aluminum layer.
- ⊘ High intensity LEDs provide clear messages on the M5000
- ⊘ Embedded DMS with a 30 degree cone of vision or less.
- ⊘ Available with standard 18″, 12″, or 8″ characters.
- ⊘ Any Dimension in Any Color & Size Font
- ⊘ Lightweight, Slim, & Easily Accessible
- ⊘ Display Instant Information from the Cloud with DMS Connect
- ⊘ System Diagnostics & Fault Detection

- ⊘ Full Color, Touch Screen, NTCIP Controller
- ⊘ Manage Up to 10 Signs Using One Controller
- ⊘ Log & Record Events in Real Time
- ⊘ Simple Mounting Solutions
- ⊘ Serial communication between the Embedded DMS sign and SESA's controller reduces the number of required cables and installation costs.
- ⊘ A 500 foot maximum distance between the Embedded DMS and the controller allows choice of the optimal locations for the sign and the controller cabinet.
- ⊘ NEMA 3R controller cabinet is available for the Embedded DMS

Mechanical	
Display Capacity	Line or Full Matrix White or Amber
Size	From one line of 10 pixels to 3 lines of 75 pixels
Access	Front swing door
Mounting	Bolted to static signs or to rear supports. Z-bars are possible on bigger models
NTCIP Controller	
Serial Ports	2 ports RS322
Ethernet	2 ports (10/100 base T) RJ45
Communication with DMS	2 ports RS4BS - radio link or fiber optic are possible
Capacity	NTCIP multi-DMS, up to 10 TSDMS per controller
Electrical	
Power	Depends on the Embedded DMS model; grid or solar
Voltage	110V AC for grid; 24V DC for solar
Cable/Connection	Only power and communication between Embedded DMS and controller (daisy chain)
Other	
NTCIP	1101, 1102, 1201, 1203, 2001, 2101, 2103, 2104, 2202, 8004
Temperature Range	-34ºF to 185ºF

SCU6 CONTROLLER

SCU6 MULTI-DMS CONTROLLER V4

SCU6 DMS Control Hardware: A modern and innovative DMS Controller with a whole host of features unique in the ITS industry.

FEATURES

- ⊘ The SCU6 DMS Controller Compatible with all SESA signs.

- ⊘ The DMS Controller has a standard 19-inch rack (3U) mounting.

- ⊘ The SCU6 DMS Controller has robust, slim, light, and scratch resistant housing.

- ⊘ Support for any communications method (fiber optic, wireless, copper cabling, etc).

  The DMS Controller has embedded I/O monitoring and control with no additional hardware required.

- ⊘ The SCU6 DMS Controller log records all events in real-time with a one-year history.

- ⊘ Web-based Software on the DMS Controller

- ⊘ NEMA 3R controller cabinet available to host the DMS Controller.

- ⊘ The DMS Controller allows the user to view the displayed message or graphic, change the message or graphic, and get system diagnostics, all online using any web browser.

- ⊘ The SCU6 DMS Controller uses password protected software accessible with a standard web browser.

- ⊘ Optional WiFi access from a smartphone or laptop on the DMS Controller.

- ⊘ The DMS Controller has intuitive menus for easy navigation and maintenance operations.

Mechanical	
Dimensions	19 1/4" x 5 1/4" x 1 1/2"
Weight	Less than 3 lbs (550 g)
Color Screen	The screen on the DMS Controller measures 4 1/4" x 3 1/4"
Mounting	4 screws
Communication with the DMS	
Serial Ports	2 ports RS322
Ethernet	2 ports (10/100 base T) RJ45
Communication with DMS	2 ports RS485 - Radio link or fiber optic possible
Electrical	
Power	15W
Voltage	12V DC - Optional battery for extended power outages
Cable/Connection	All connectors at the front for easy and fast access
Other	
Digital I/Os	4 inputs - 4 outputs on the DMS Controller
NTCIP	1101, 1102, 1201, 1203, 2001, 2101, 2103, 2104, 2202, 8004
NEMA TS4	The DMS Controller is fully tested
Temperature Range	-34°F to 185°F
Internal Test	The DMS Controller is equipped with a TEST BUTTON, RESET BUTTON