

BE SAFE-LE SWARCO
LE YOUR PART
TO STOP COVID-19

DYNAMIC MESSAGE SIGNS

EMPOWER: 2023 Channel Partner Summit

Justin Sigel

SIGNS SUMMARY

Intro

SWARCO McCain Dynamic Message Signs promote road safety and awareness by providing travelers with information about unique driving conditions, events or alerts.

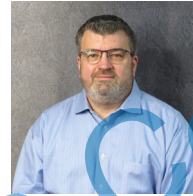
Meet the Team



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Benefits of SWARCO McCain Dynamic Message Signs

- ▶ 120-day lead-time (from submittal release). Lowest in the industry.
- ▶ Emits little to no heat, eliminating the need for cooling, ventilation, and defogging equipment. Which in turn reduces total cost of ownership thru reduced energy consumption and maintenance cost. Allows our signs to operate on 120V A/C or D/C option.
- ▶ Eliminates sunlight and headlight glare. With no need for polycarbonate front. So, no replacing polycarbonate front every 5 years.
- ▶ Standard with all Full Matrix Signs NTCIP 1203 V3 or Contact Closure
- ▶ Standard warranty for Full Matrix DMS 5 years (Best standard warranty in the industry)

Market Growth

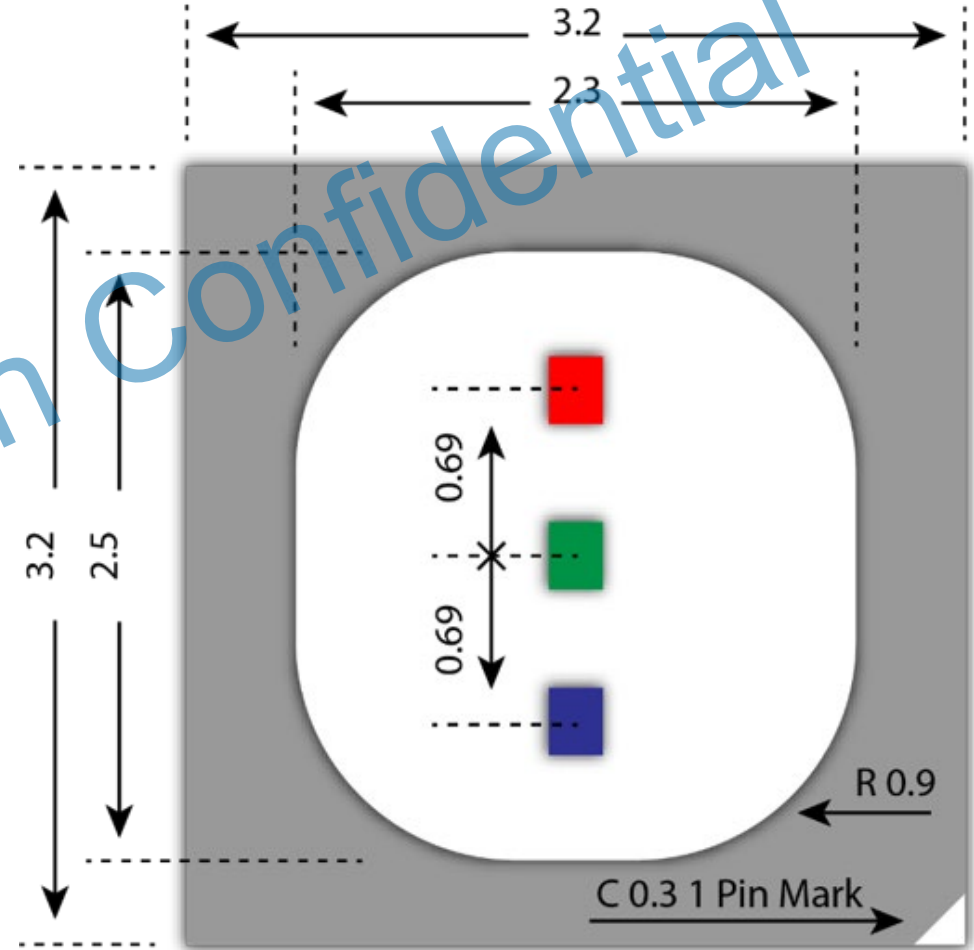
- ▶ Due to the COVID-19 pandemic and Russia-Ukraine War Influence, the global market for LED Traffic Signs and Signals estimated at USD 1014 million in the year 2022, is projected to reach a revised size of USD 1246.5 million by 2028, growing at a CAGR of 3.5% during the forecast period 2022-2028.

SWARCO SIGN DESIGN & TECHNOLOGY

SWARCO McCain Confidential

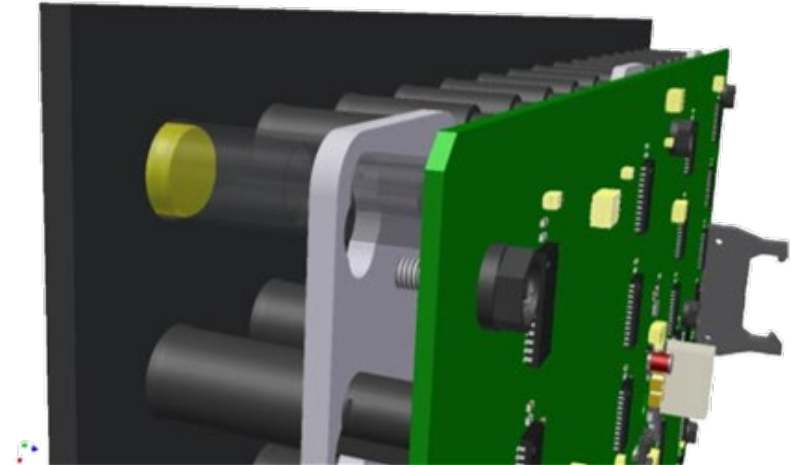
3-IN-1 RGB LED

- Allows smaller pixel pitch
- Reduces junction temperature
- Reduces LED board failure



PRECISION OPTIC

- Combines colors
- Focuses the light
- Redirects both incoming and outgoing light
- Captures 100% of the light energy emitted



CONTRAST RATIO



✓
McCain/SWARCO
VMS Technology
26.5:1 Contrast Ratio

✓
NEMA
Requirements
10:1 Contrast Ratio

BENEFITS OF OPTICAL LENS



No sunlight or
headlight glare

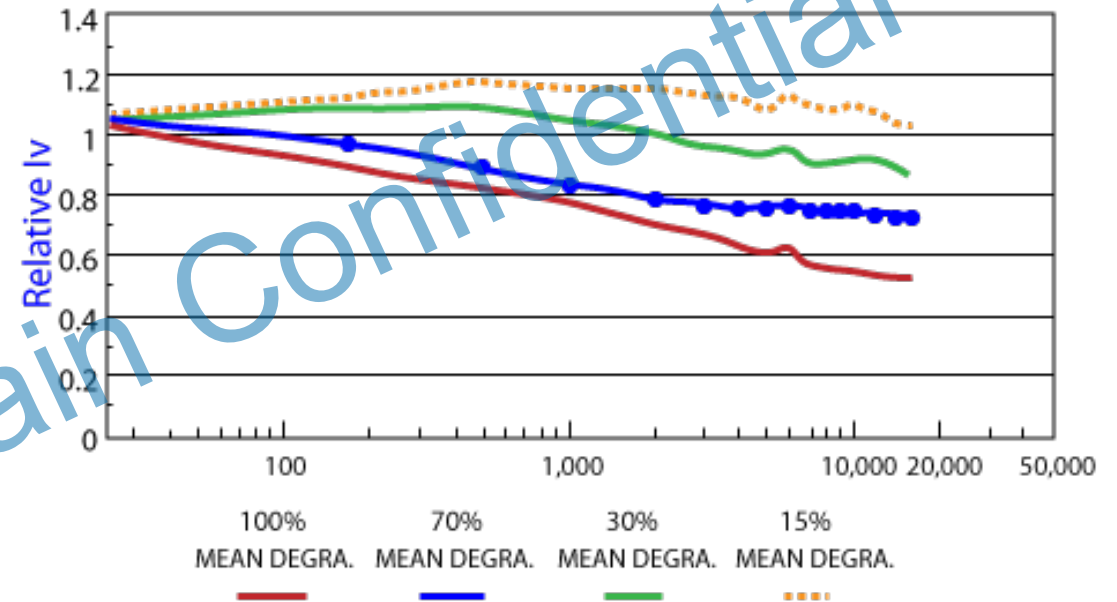


No fogging or
condensation

BENEFITS OF OUR DESIGN FOR LED SIGNS

- ▶ LEDs are driven at 14% or less of maximum rated LED current
- ▶ Power Supplies are driven at only 30 % of maximum rated wattage with all LEDs on full power

The Results: A longer lasting VMS that maintains constant brightness because of low LED heat/stress.



STANDARD SIGN PORTFOLIO

BLANK-OUT SIGN

BLANK-OUT SIGN



Offerings

- 24x24
 - No Right Turn (R3-1)
 - No Left Turn (R3-2)
 - No U-Turn (R3-4)
 - Do Not Enter (R5-1)
 - Trolley Symbol (W10-7)
- 30x30
 - No Right Turn (R3-1)
 - No Left Turn (R3-2)
 - No U-Turn (R3-4)
 - Do Not Enter (R5-1)
 - Trolley Symbol (W10-7)
- 36x36
 - No Right Turn (R3-1)
 - No Left Turn (R3-2)
 - No U-Turn (R3-4)
 - Do Not Enter (R5-1)
 - Trolley Symbol (W10-7)

Benefits

- Standard Warranty of 3 years. (Longest in the industry)
- Lowest power draw of the industry under 20watts A/C. Can be built for D/C to allow for Solar option.
- NEMA Type 4 Rated
- Customized options available.
- No need for a visor or polycarbonate front due to lensing technology.

BLANK-OUT SIGN

FULL FRONT MATRIX



Offerings

- 32x32
- 48x48

Benefits

- NTCIP 1203 V3 or Contact Closure.
- Load any MUTCD file to allow for changes.
 - Allows for change ability without replacing the sign
- Can be mounted using standard Blank-Out mounts
- 120V A/C or D/C option
- 5-year standard warranty

STANDARD SIGN PORTFOLIO

ARTERIAL SIGNS

CMS 810

DMS ARTERIAL

CMS 810



Benefits

- Boasts advanced LED pixel matrix module design
- Supports standard assemblies, ensuring component interchangeability
- Cuts costs due to higher energy efficiency
- Facilitates quick and efficient service or repair

Standard Features

- NTCIP 1203 V3 compliant
- NEMA TS 4 standards compliant
- Caltrans 2020 TEES compliant and Caltrans QPL approved
- Real-time sign diagnostics and full pixel feedback
- Ground or pole mount controller cabinet
- Message control via override, local or central schedule
- Full-color RGB includes 64 million colors
- Watertight precision optical lens
- 5-year warranty
- Georgia DOT QPL approved

DMS ARTERIAL SIGN



Benefits

- Boasts advanced LED pixel matrix module design
- Supports standard assemblies, ensuring component interchangeability
- Cuts costs due to higher energy efficiency
- Facilitates quick and efficient service or repair

Standard Features

- NTCIP 1203 V3 compliant
- NEMA TS 4 standards compliant
- Caltrans 2020 TEES compliant and Caltrans QPL approved
- Real-time sign diagnostics and full pixel feedback
- Ground or pole mount controller cabinet
- Message control via override, local or central schedule
- Full-color RGB includes 64 million colors
- Watertight precision optical lens
- 5-year warranty
- Georgia DOT QPL approved

STANDARD SIGN PORTFOLIO

FRONT ACCESS SIGNS

CMS 800

DMS FRONT ACCESS



Benefits

- Boasts advanced LED pixel matrix module design
- Supports standard assemblies, ensuring component interchangeability
- Cuts costs due to higher energy efficiency
- Facilitates quick and efficient service or repair

Standard Features

- NTCIP 1203 V3 compliant
- NEMA TS 4 standards compliant
- Caltrans 2020 TEES compliant and Caltrans QPL approved
- Real-time sign diagnostics and full pixel feedback
- Ground or pole mount controller cabinet
- Message control via override, local or central schedule
- Full-color RGB includes 64 million colors
- Watertight precision optical lens
- 5-year warranty
- Georgia DOT QPL approved

DMS FRONT ACCESS SIGN



Benefits

- Boasts advanced LED pixel matrix module design
- Supports standard assemblies, ensuring component interchangeability
- Cuts costs due to higher energy efficiency
- Facilitates quick and efficient service or repair

Standard Features

- NTCIP 1203 V3 compliant
- NEMA TS 4 standards compliant
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- Real-time sign diagnostics and full pixel feedback
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- Message control via override, local or central schedule
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- 5-year warranty
- Georgia DOT QPL approved

STANDARD SIGN PORTFOLIO
WALK-IN SIGN
DMS WALK-IN

DMS WALK-IN SIGN



Benefits

- Boasts advanced LED pixel matrix module design
- Supports standard assemblies, ensuring component interchangeability
- Cuts costs due to higher energy efficiency
- Facilitates quick and efficient service or repair

Standard Features

- NTCIP 1203 V3 compliant
- NEMA TS 4 standards compliant
- Caltrans 2020 TEES compliant and Caltrans QPL approved
- Real-time sign diagnostics and full pixel feedback
- Ground or pole mount controller cabinet
- Message control via override, local or central schedule
- Full-color RGB includes 64 million colors
- Watertight precision optical lens
- 5-year warranty
- Georgia DOT QPL approved

STANDARD SIGN PORTFOLIO

VARIABLE SPEED LIMIT SIGN

VARIABLE SPEED LIMIT SIGN (VSLS)



Intro

Allows agencies to adjust the speed limit in response to current road and traffic conditions, such as heavy traffic or adverse weather. Decreasing the risk associated with driving at speeds higher than appropriate in these types of conditions can improve traffic flow and safety.

Benefits

- Improve safety and traffic flow by adjusting speed limits in less-than-ideal conditions
- Clear visibility and color uniformity from any angle with unrivaled contrast ratios
- NEMA TS 4 standards
- NTCIP 1203 V3 and Contact Closure
- A/C or D/C version available
- Warranty 5 year

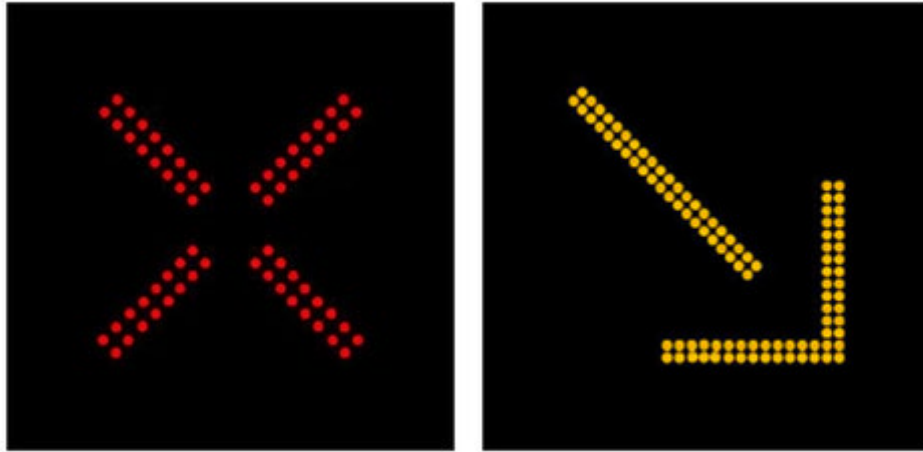
Press Release

Effective 15 December 2022, SWARCO McCain, Inc., a leader in the supply of advanced transportation solutions, announced that the company has equipped the Virginia Department of Transportation (VDOT) with variable speed limit signs (VSLS) for a 15-mile section of I-95 northbound in Virginia. The new signs are located between exit 110 (Ladysmith) and exit 130 (Route 3/Fredericksburg), from mile markers 115 to 130.

STANDARD SIGN PORTFOLIO

LANE CONTROL SIGN

LANE CONTROL SIGN (LCS)



Intro

Provides lane status to en-route motorists through high-quality LED displays. Strategically placed, these signs improve overall traffic flow and commuter safety by informing drivers of lane closures and directing traffic to open lanes. LCS applications are commonly used in Active Traffic Management corridors, airport entrances, toll lanes, and parking garages.

Benefits

- Directs or blocks traffic with directional arrows (straight, right, or left) and an "X"
- Emits little to no heat, eliminating the need for additional cooling, ventilation, and/or defogging equipment
- Boasts low total cost of ownership due to reduced energy consumption and minimal maintenance costs
- Eliminates glare caused by sunlight or headlights
- Meets or exceeds NEC and NEMA standards
- Standard 2-year warranty

STANDARD SIGN PORTFOLIO

EXTINGUISHABLE MESSAGE SIGN

EXTINGUISHABLE MESSAGE SIGN (EMS)



Intro

Provides a clearly visible fixed message to en-route motorists. Strategically placed, this sign improves overall safety by providing motorists with pertinent roadside information or warnings. Commonly used EMS applications include safety information near airports, data regarding direction or availability for carpool lanes or toll roads, radio frequencies for advisory radio stations, and general traffic alerts.

Benefits

- Can be built per Caltrans spec or new SWARCO design
- Low power draw

STANDARD SIGN PORTFOLIO

ILLUMINATED STREET NAME SIGN

ILLUMINATED STREET NAME SIGN (ISNS)



Intro

Improve street name visibility and legibility from a distance increasing street recognition, road safety, aesthetics, and overall infrastructure. ISNS signs are particularly popular at high-volume intersections and at night, since street name signs receive only 10% of headlight illumination, making them more difficult to see.

Benefits

- Increase intersection safety
- Corrosion resistant
- Access quickly without tools
- Customizable sizes available

STANDARD SIGN PORTFOLIO

REFLECTED STREET NAME SIGN

REFLECTED STREET NAME SIGNS (RSNS)



Intro

Boost street sign visibility and legibility. RSNS signs are particularly advantageous at night as they reflect light from automobile headlights and surrounding streetlights. Minimal up-front and maintenance costs make RSNS signs a cost-effective way to enhance neighborhood aesthetics and safety for residents and visitors alike.

Benefits

- Increase visibility day and night
- View from up to 500'
- Corrosion resistant
- Boost neighborhood aesthetics
- Fully customizable based on needs

SWARCO KEY DIFFERENTIATORS

SWARCO McCain Confidential



Low Power Draw

Lowest in the industry for all
components & sign



Legibility

Proprietary Precision Optic
technology focuses light for
unrivalled legibility



Lighting Technology

3-in-1 RGB LED offers:

Reduced temperature

Longer life

Smaller pixel pitch

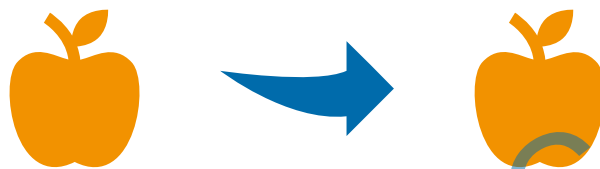
Clearer graphics



Reliability

Longest mean time between failure
in industry

Very little maintenance required



**Be sure to
compare apples to apples**

Light intensity
Power consumption
Display square footage
Pixel pitch