

# Variable Message Signs (VMS)

Powered by SWARCO

Full-Color

Overhead or Arterial

Cabinets  
Controllers  
Signals  
**Signs**  
Software  
Specialty



*Sample full-matrix, full-color sign with icons and text*

## Overview

McCain's Variable Message Signs, powered by SWARCO, provide pertinent roadside information and warnings to en-route motorists through high quality, full-color LED displays. Strategically placed, these signs improve overall traffic flow and commuter safety. Commonly used VMS applications include safety information near airports and major venues, data regarding road closures or detours, direction and availability of carpool lanes or toll roads, advisory phone numbers, and general alerts.

## Benefits

- Displays any combination of text, symbols, and images
- Clear visibility and color uniformity from any angle with unrivaled contrast ratios
- Emits little to no heat, eliminating the need for cooling, ventilation, and defogging equipment
- Low total cost of ownership thru reduced energy consumption and maintenance costs
- Draws a fraction (1/10) of the power of other signs
- Eliminates sunlight and headlight glare
- Meets or exceeds NEC and NEMA standards

## Product Description

McCain's VMS, powered by SWARCO, are available in multiple size and configuration options (front access, walk in, rear access) to meet all your ITS needs.

Integrated surface-mount 3-in-1 RGB LEDs combined with SWARCO's Precision Optic lensing provide the sharpest, full-color display on the market. VMS messages are legible up to 1,200 feet in any conditions – including low-angle and direct sunlight.

The VMS boasts a 26.5 to 1 contrast ratio, a tight pixel pitch (12-30mm) and a 10ms refresh rate. By capturing 100% of the light emitted the sign yields truer color and better visibility, while also drastically reducing heat emissions.

Drawing a tenth of the power of leading competitors' signs, McCain's VMS give off little to no heat eliminating the need for bulky cooling or defogging equipment. This not only contributes to less possible failure points, but helps to extend product life.

## Standard Features

- NTCIP 1203 v3 compliant
- NEMA TS4 standards compliant
- Real-time sign diagnostics and full pixel feedback
- Internally housed controller (no ground controller needed)
- Message control via override, local or central schedule
- Number of colors include mono, bicolor, 3, 5, or full color RGB; full-color RGB includes 64 million colors
- Watertight precision optical lens

## Options

- Dial-up, cellular, Ethernet, and radio communication
- Fans or heaters for service personnel
- Ground controller

## General Specifications

Dimensions:	Varied
Material:	Marine-grade aluminum
Finish:	Housing: Powder coated or natural Matrix: Powder coated
Access:	Front, rear or walk-in
Mounting:	"Z" bars, "C" channels or pipe clamps Others available on request
Display Type:	Full, line, or character matrix
Luminous Intensity:	Min: 9,200 cd/m <sup>2</sup> Max: 16,509 cd/m <sup>2</sup>
Pixel Inclination (half angle):	3G6 optics: ± 15.5° 3G7 optics: ± 31°
Pixel Pitch:	12, 16, 20, 25, 30 mm
LED Type:	Full Color: 3-in-1 SMD RGB Single Color: Amber or white
Power Supply:	120 VAC single phase 5 VDC internal (2-wire plus ground)
Power Consumption:	Max: 18.2 amps* Min: 1.8 amps*
Environment:	Operating Temperature: -44° C to 85° C Humidity: 0 to 99% (condensing)
Ventilation:	Not required
Weight:	Varied



Full-matrix, amber walk-in sign



Sample full-color artwork display



Full-matrix, full-color rear-access sign

To learn more about McCain's Integrated Traffic Solutions, please contact [info@mccain-inc.com](mailto:info@mccain-inc.com) or call (760) 727-8100



\*Based on 8' x 30' overhead display. Actual power consumption dependent on VMS display size

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