# **SWARCO**

# McCAIN VARIABLE SPEED LIMIT SIGN



McCain Variable Speed Limit Signs (VSLS), featuring SWARCO's patented lens technology, allow 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.

These highly energy-efficient signs provide brilliant legibility and a superior luminance ratio resulting in outstanding reliability, quality and usability.



# **KEY BENEFITS**

- · Improve safety and traffic flow
- Clear visibility and color uniformity from any angle with unrivaled contrast ratios
- Meets or exceeds NTCIP and NEMA TS 4 standards
- Fully programmable
- All control equipment is internally housed
- · Ultra-bright, full-color LEDs
- Schedule for Day of Week, Month of Year, or any specific date(s)

# PRODUCT DESCRIPTION

McCain VSLS features SWARCO's patented lens technology that enables the fitting of the optical lens directly in the matrix plate. The unique optical design avoids problems associated with reflections. Even at a low sun position, the luminance ratio meets the highest requirements and guarantees superior visibility.

The energy-efficient McCain VSLS displays two-digit speed limits using 18" or 22" tall numerals. Built to SWARCO McCain, Inc.'s high-quality standards, these signs are ideal for permanent or temporary installation, as they will withstand wide temperature and humidity ranges as well as winds and other harsh weather conditions.

McCain VSLS are fully NTCIP-compliant. Up to 14 schedules can be accommodated with up to 16 events per schedule and 32 customizable events



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# STANDARD FEATURES

- NTCIP and NEMA TS 4 standards compliant
- 100 brightness levels under software or photocell control
- · Message is concealed when off
- · Internally-housed controller
- All electronic assemblies are conformal coated for operation in harsh environmental conditions
- · Compatible with flashing beacon systems
- Front and rear photocells
- Door contact switch
- 2 x 120 VAC utility outlets inside sign housing
- 2 year warranty

# SOFTWARE FEATURES

- Fully customizable
- · Runs up to 14 schedules
- · Day of Week, Month of Year, or specific date schedules
- · Day plan with up to 16 events per schedule
- · Select from 32 customizable day plans
- · Control the minute and hour of every event
- · Schedule control via override, local, or central control
- Ethernet and RS232 serial communication

# **GENERAL SPECIFICATIONS**

| MECHANICAL                        |   |
|-----------------------------------|---|
| Dimensions <sup>1</sup> :         | 48"W x 60"H x 10"D  |
| Access:                           | Front   |
| Material:                         | Housing: 5052-H32 aluminum, 0.125" thick Matrix: 0.118" thick anodized aluminum |
| Finish:                           | Face: retroreflective material<br>Matrix: black, painted                        |
| Environment:                      | Operating Temp.: -37°C to +74°C<br>Humidity: 0 to 95% (non-condensing)          |
| Water/Dust Ingress<br>Rating:     | NEMA 4  |
| Rear External Fixations:          | "Z" extrusion brackets  |
| Weight:                           | 161 lbs   |
| Other:                            | SS locks and hinges, aluminum conduit inlets                                    |
| ELECTRICAL                        |   |
| Supply Type:                      | 120 VAC   |
| Power Consumption <sup>2</sup> :  | 80W / 42W / 20W   |
| Imax [A]/Display Imax +<br>GFCIs: | 6.1 / 1.1 + 5 + 0   |
| Energy Consumption:               | 150 KWh per year  |
| Other Controls:                   | Illuminance by Integrated sensors, door contact switches                        |
| Communications<br>Protocol:       | NTCIP 1203 v03 Rainbow Controller or contact closure                            |
| Physical Layer:                   | Ethernet, RS485, Contacts (Digital I/Os)  |
| OPTICAL                           |   |
| Display Resolution:               | 48 (w) x 32 (h) pixels  |
| Number of Lines:                  | 1 line x 2 char. @ 18" or 22"H char.<br>E20000 MUTCD/NEMA TS4                   |
| Display Area:                     | 37.31"W x 24.88"H   |
| Matrix Type:                      | Full matrix   |
| Lens Options:                     | 3G6: V12440<br>3G7: V12440-3G7  |
| LED Colors:                       | Full Color: RGB LED   |
| Pixel Type:                       | Cree (3-in-1 RGB SMD)   |
| Pixel Size:                       | 20 mm   |
| LED Angle View:                   | B6 30° (±15° H) (0, -10° V)   |
| Color Depth:                      | 24 bits (2^24) (RGB)  |
| Luminance [cd/m2]:                | L3* (16,758 white) / (9,321 yellow)   |
| Contrast Ratio:                   | R3 (24:1)   |
| Optical Classification:           | EN 12966 - 1:2005 + A1:2009   |
| "SPEED LIMIT":                    | FHWA Series E, 8" UC  |
| Display Font:                     | MUTCD Series "E"  |

<sup>&</sup>lt;sup>2</sup>Max/Typical/Standby - Average consumption within 24 hours; LEDs typically active when using average message: 15%. Excludes GFCI branches consumption



<sup>&</sup>lt;sup>1</sup>Dimensions rounded to the nearest inch