

SWARCO

# McCain CHANGEABLE MESSAGE SIGN

820 (TYPE 3)



The McCain Changeable Message Sign (CMS) 820 features SWARCO's patented Precision Optics lens technology and integrated surface-mount 3-in-1 RGB LED, which provides the sharpest, full-color display on the market. Strategically placed, these signs improve overall traffic flow and commuter safety with alerts to road closures or detours, direction and availability of carpool lanes or toll roads, advisory phone numbers, and general alerts.



## KEY BENEFITS

- Boasts advanced LED pixel matrix module design
- Supports standard assemblies, ensuring component interchangeability
- Cuts costs due to higher energy efficiency
- Notifies operator of pixel failure and live sign/message status
- Provides live status of door open, temperature, and humidity alarms
- Facilitates quick and efficient service or repair
- Provides reduced glare and increased message contrast and visibility

## PRODUCT DESCRIPTION

The industry-leading brilliance and clarity of McCain CMS 820 derives from its 26.5 to 1 contrast ratio, tight pixel pitch (12-30mm), and 1kHz energy refresh rate that captures 100% of the light energy emitted. Messages are legible up to 1,200 feet in any condition – including low-angle and direct sunlight.

McCain CMS 820 eliminate the need for bulky cooling or defogging equipment as they only draw a tenth of the power when compared to leading competitor's signs and give off little to no heat. Best of all, this contributes to fewer failure points and extends product life.

# McCain CHANGEABLE MESSAGE SIGN 820 (TYPE 3)

## GENERAL SPECIFICATIONS

Model Series:	V12502-1	V12502-2
Matrix Type:	Full Matrix	Full Matrix
Display Resolution (pixels):	112 (w) x 56 (h)	112 (w) x 56 (h)
Number of Lines & Chars/Symbols:	2 Lines x 8 Chars. @ 12" Char. Height Series E2000 MUTCD	2 Lines x 8 Chars. @ 12" Char. Height Series E2000 MUTCD

## OPTICAL

Display Color:	Full Color	Full Color
Display Area:	87.8" W x 43.7"H	87.8" W x 43.7"H
Pixel Pitch [mm]:	20	20
Pixel Type:	Cree (3 in 1 RGB SMD)	Cree (3 in 1 RGB SMD)
Luminance [cd/m2]:	L3* (16,758 white) / (9,321 yellow)	L3* (16,758 white) / (9,321 yellow)
Viewing Angle:	B6 30°	B7 60°
Chromaticity:	C2	C2
Contrast Ratio:	R3 (24:1)	R3 (24:1)
Optical Classification:	EN 12966-1:2005+A1:2009	EN 12966-1:2005+A1:2009
Color Deepnest:	Color deepnest 24 bits (2 <sup>24</sup> ) (RGB)	Color deepnest 24 bits (2 <sup>24</sup> ) (RGB)
Max. Operating Current per pixel:	6.21mA (White RGB) / 3.94mA (Yellow)	6.21mA (White RGB) / 3.94mA (Yellow)

## MECHANICS

Housing Size:	99.8"W x 55"H x 14"D	99.8"W x 55"H x 14"D
Display Access:	Front Access	Front Access
Sign Placement Proposal:	40.2 / 25.2 + 15	40.2 / 25.2 + 15
Matrix Material:	>0.118" THK Anodized Aluminum and painted	>0.118" THK Anodized Aluminum and painted
Casing Material:	Skin .125"THK 5052-H32 Aluminum	Skin .125"THK 5052-H32 Aluminum
Casing Color Finished:	Any RAL	Any RAL
External Fixation:	2 vertical "Z" extrusion brackets	2 vertical "Z" extrusion brackets
Water/Dust Ingress Rating:	NEMA 4x	NEMA 4x
Display Weight (Kg/Pd) Approx:	152 / 336	155 / 341
Wind Load Rating:	WL9	WL9
Dynamic Snow Lead Rating:	DSL0	DSL0
Operating Temperature:	T1 (-15°C up to +60°C)	T1 (-15°C up to +60°C)
Others:	Stainless steel snap latch assembly/ Aluminum conduit inlets	Stainless steel snap latch assembly/ Aluminum conduit inlets

## ELECTRICS

Supply Type:	120VAC / 60Hz 1Ph	120VAC / 60Hz 1Ph
Display Consump. [W] (Max / Typ.):	285 / 130	745 / 300
I <sub>max</sub> [A]/Display I <sub>max</sub> :	0.8	0.8
Others:	Illuminance by integrated sensors / Door contact switches	Illuminance by integrated sensors / Door contact switches

## CONTROLS & SOFTWARE

Protocol of Communications	NTCIP 1203 v03 Rainbow controller / contact closure	NTCIP 1203 v03 Rainbow controller / contact closure
Physical layer	Ethernet / contact closure	Ethernet / contact closure