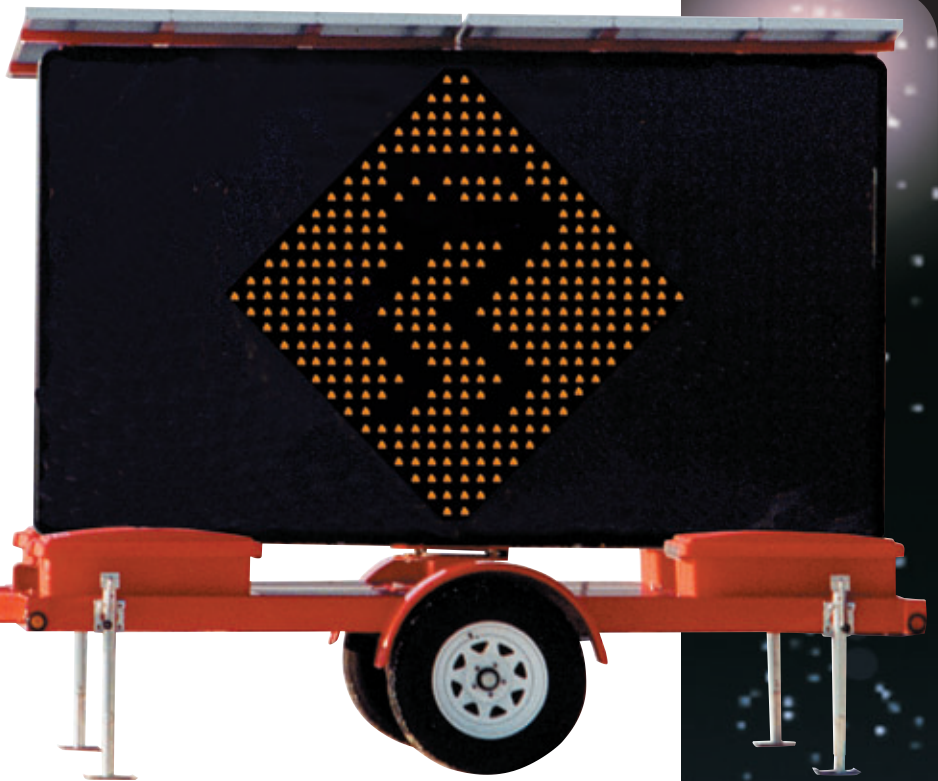


# NAVIGATE BY THE NORTHSTAR

## CMS80F Full Matrix Message Board

NorthStar Full Matrix, changeable message signs provide increased versatility compared to traditional 3-Line boards. With the choice of one, two or three line text messages and graphics to convey your message the NorthStar Full Matrix changeable message boards can be used to provide information on:

- Traffic Delays
- Retail Promotions or Sales
- Adverse Road Conditions
- Special Events
- Construction Detours
- Reduced Speed Zones.



Full matrix

The NorthStar's super efficient LED panels run on a fraction of the power of competitors models reducing the need for excess solar panels. Each of the units 24 identical LED panels has 54 pixels with each pixel being comprised of 3 LED's. The panels are also interchangeable and replaceable. The brightness of the LED's is adjusted automatically with the ambient light sensor to optimize visibility of the sign in any condition.

The NorthStar's Solar Array is mounted in the optimum charging position and can be tilted down for easy cleaning. The advanced charge controller provides better charging in cold temperatures and low light conditions than the competition, again reducing the need for excess solar panels. The 12 - 6 Volt, Heavy Duty, Deep Cycle Batteries provide enough power for the unit to run for up to 30 days without sunlight.

The slim, custom designed, steel display case features rounded corners, a virtually unbreakable polycarbonate covering and is constructed using self sealing rivets. Our unique dual seal protects electronic components from moisture. The display can be rotated over 360° and the sight tube provides for easy alignment of the sign. When the sign is properly aligned it can be pad locked in place using the locking mechanism on the automotive grade disc braking system.

The NorthStar's custom built, on-board computer controller features a backlit LCD screen and a watertight QWERTY keyboard. The easy-program custom software features 4 levels of password protection, an instant program function and is multilingual with English, French and Spanish versions loaded in each unit.

NorthStar message boards feature a sturdy welded steel frame. Balanced placement of the batteries, dependable surge brakes and our advanced torsion axle suspension system provide years of smooth, trouble free towing. A durable powder coat finish provides superior corrosion protection from salt spray or stone chips to keep your NorthStar message board looking good for years to come. A choice of a 2" Ball or Pintle couplers is available to meet your specific towing requirements and the 4 leveling jacks allow for stable, level placement of the unit on any terrain.



One line text



Two line text



Three line text

# CMS80F Full Matrix Message Board

Solar panels

Adjustable locking brake

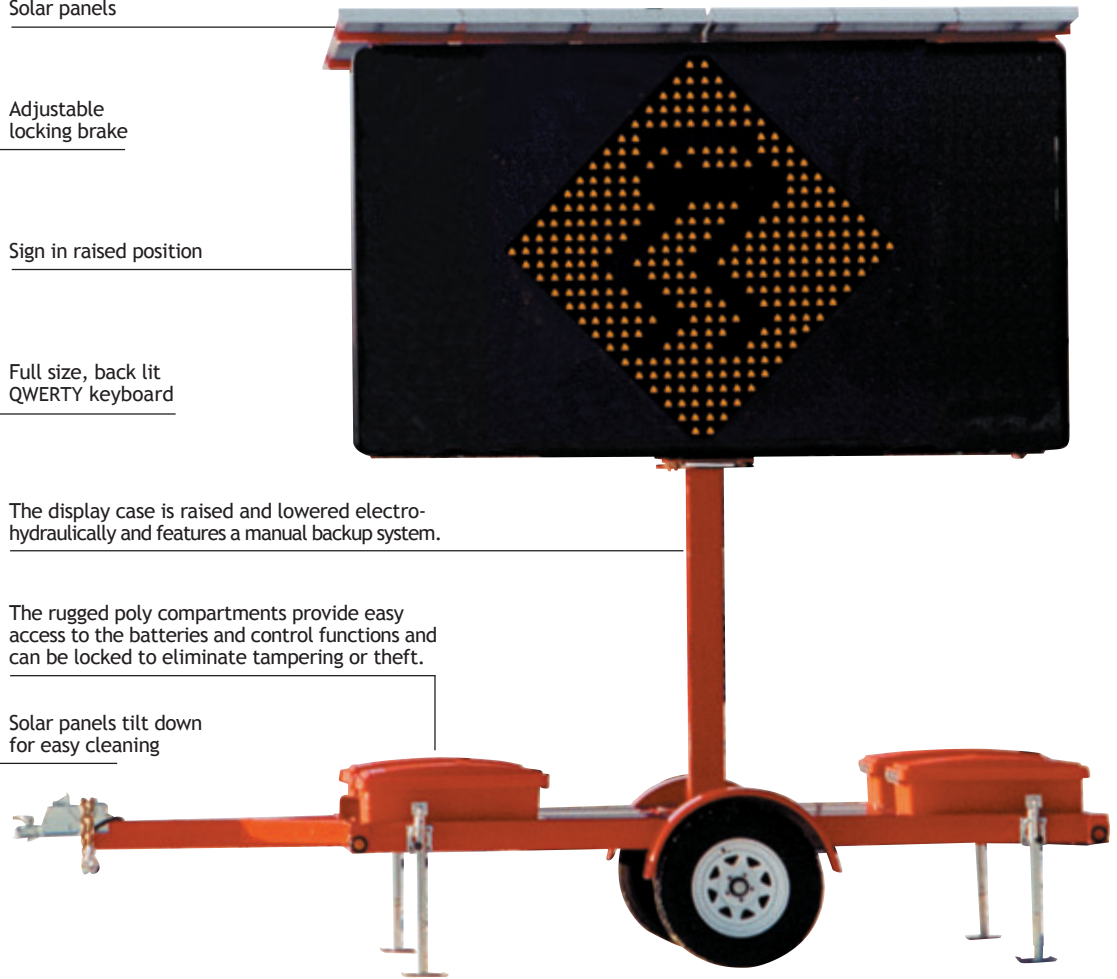
Sign in raised position

Full size, back lit QWERTY keyboard

The display case is raised and lowered electro-hydraulically and features a manual backup system.

The rugged poly compartments provide easy access to the batteries and control functions and can be locked to eliminate tampering or theft.

Solar panels tilt down for easy cleaning



## Specifications:

Length	188"	Sign Rotation	360°+
Width	81"	Operating Voltage	12 Volts
Height (Operating/Towing)	181" / 105"	Solar Array Power Output	225, 300, 375 or 450 Watts
Ground Clearance	14.5"	Batteries	12
Weight	3,000 lbs	Battery Capacity	1350 Amp Hrs
Display Size (w x h)	126" x 76"	Pre-Programmed Messages	200
Matrix Size	27 x 48 Pixels	User Defined Messages	200
Pixel Size	2.6" x 2.6"	Message Sequence Capacity	100

Specifications subject to change without notice.

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## Warranty:

Overall:	2 Years
Solar Panels	10 Years
Electrical:	2 Years
Display Modules:	10 Years

All models meet or exceed the specifications for Portable Changeable Message Signs as listed in Part 6F.52 of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD).

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