

*The*

# SILENT MESSENGER

## SOLAR POWERED FULL MATRIX PORTABLE DYNAMIC MESSAGE SIGNS

### MB-3056-MTO

### FEATURES & SPECIFICATIONS

**Truly Solar Powered** - Continuous, uninterrupted operation between 1 April and 30 November in Ontario (320 watt solar array with tilt & rotate feature) with minimum seven (7) day autonomy on battery pack alone (per MTO specifications)

**Brightest, Most Visible Display** - Visible & Legible messages under all ambient lighting and weather conditions (> 15 degree angularity, > 500m visibility, legible from < 50m to > 300m)

**Mega-Tech Full Color Touch Screen Control Console** - Simple easy to use graphical user interface (GUI) with four (4) levels of password protection and full NTCIP compatibility (per MTO specifications)

**Sign Panel Failsafe System** - Automatically detects and corrects sign panel errors and faults

**CE Marked** - Insures complete electromagnetic compliance for superb reliability

**Cellular Remote Ready** - Interface and software required for remote control installed (includes software, antenna, ethernet cable and power connection for MTO supplied modem)

**Custom Sign Case & Door Frame Extrusions** - Sturdy, secure and weathertight (complies with CAN/CSA-S6-00)

**Modular Construction** - Easy maintenance and repair with no cutting or welding for most repairs

**Torsion-type Axle** - Smooth, stable ride with minimum of 13" ground clearance

**Polyamide Epoxy Primer** - Excellent rust and corrosion protection (complies with CAN/CSA-S6-00)

**Acrylic Urethane Finish** - Excellent appearance and durability (complies with CAN/CSA-S6-00)

**ISO 9001:2000 Certified Design and Manufacturing** - The ultimate in quality assurance

**Best Warranty** -  
One year overall  
Two years on electrical and electronic components  
Three years on standard display modules  
Ten years on solar panels

#### AVAILABLE OPTIONS

**Radar Speed Monitor** - Measure and display speed of oncoming vehicles

**Battery Pack Upgrades** - Increased autonomy

**Battery Charger Upgrades** - Quicker recharge rates



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***Harness the Power of the Sun***

# The **SILENT MESSENGER**

## FULL MATRIX PORTABLE DYNAMIC MESSAGE SIGN

### SPECIFICATIONS

#### MESSAGE PANEL

Panel Size .....	126 in. wide x 76 in. high (320 cm wide x 193 cm high)
Panel Construction .....	All aluminum, modular construction - conforms to CAN/CSA-S6-00
Matrix Size .....	30 x 56 pixels
Pixel Size .....	2.3 x 2.3 inches (6.0 x 6.0 cm)
Characters per Line .....	Up to Twelve (12)
Number of Lines .....	Up to Three (3)
Number of Fonts .....	One (1) - MTO-2 Font
Character Height .....	16.1 inches (41 cm) nominal visible from 500m / legible 50m to 300m
Graphics Capability .....	Full Matrix - static and animated
Display Technology .....	LED (Amber, 590 nm) / >3,500 cd/m <sup>2</sup>
Display Contrast Ratio .....	> 6:1 (400 to 40,000 lx)
LED Consistency .....	<3:1 (12% pixels) / <5:1 (4% pixels)
Display Life Expectancy .....	10 years minimum (>100,000 hours)
Lifting Mechanism .....	2,000 lb. capacity electro-hydraulic
Sign Panel Rotation .....	Greater than 360 degrees

#### PHYSICAL

Length Overall .....	180 inches (457 cm)
Width Overall .....	92 inches (234 cm)
Width Across Fenders .....	92 inches (234 cm)
Height Traveling .....	111 inches (282cm)
Height Operating .....	170 inches (431cm)
Ground Clearance .....	13 inches (33 cm) min.
Weight .....	3,400 lbs (1,089 kg) maximum
Coupler (Class III) .....	3-inch (7.6 cm) pintle ring
Axle/Suspension .....	Torq-Flex - independent
Wind Loading / Stability .....	120 kph (sustained) / 160 kph (gusts)
Temperature Range (operating) .....	-40 to +50 degrees Celsius

#### MEGA-TECH CONTROL CONSOLE

Console Circuitry .....	Ultra-low power solid state
Console Touchscreen .....	Waterproof, backlit, full color GUI, intuitive icon-driven, multi-lingual
Programming Software .....	Proprietary, field upgradable
Message Capacity .....	Greater than 500
Time/Date Control .....	Real time clock/calendar (365-day)
Message Display Time .....	User-selectable (0.1 to 99 seconds)
Display Update Time .....	Instantaneous
Non-volatile Memory .....	Separate backup battery
Password Protection .....	User-selectable, multi-level
Operator Interface .....	Easy-to-use icons (no instruction manual required)
Connectivity .....	Networkable (wired or wireless - static or dynamic IP addressable) and fully NTCIP compatible

#### ENERGY SOURCE

Operating Voltage .....	12 Volts DC nominal
Battery Type .....	6-Volt heavy duty, deep cycle Gel-Cell (BCI Group GC-2) - Deka 8GGC2
Number of Batteries .....	Four (4) Standard - min. 7 day autonomy w / Aux. Battery Pack Upgrade . Eight (8) or Twelve (12)
Battery Bank Capacity .....	600 Amp Hours Standard (7 day autonomy) w / Aux. Battery Pack Upgrade . 1,200 Amp Hours or 1,800 Amp Hours
Battery Status Indicator .....	Displays full charge, normal and low battery condition
Solar Array Construction .....	Top-mounted solar panels in sub-frame with tilt & rotate & tamper resistant hardware
Solar Array Power Output .....	320 Watts (peak)
Solar Charge Controller .....	Automatic, temperature compensated
Auxiliary Automatic Battery Charger .....	115 VAC line powered, 30 Amp - Standard w / Battery Charger Upgrade ..... 45 Amp or 75 Amp

**All models meet or exceed the standards for Portable Changeable Message Signs as listed in the Special Provision No. 685S06 and CAN/CSA-22.2.**

#### AVAILABLE OPTIONS

##### BATTERY BANK UPGRADES

8 or 12 batteries (1,200 AH or 1,800 AH) and/or Gel-Cell

##### WIRELESS REMOTE CONTROL

Cellular Modem & Antenna

##### RADAR SPEED MONITOR

Monitor and display speed of oncoming traffic

##### AUXILIARY AUTOMATIC BATTERY CHARGERS

115 VAC line powered, 45 Amp or 75 Amp

#### OTHER *SolarTech* PRODUCTS

##### SILENT SENTINEL

Trailer and Truck Mount Arrow Boards

##### SILENT MESSENGER

Full-Size Portable Dynamic Message Boards

##### SILENT MESSENGER II

Mid-Size Trailer and Vehicle Mount Message Boards

##### SILENT MESSENGER III

Small-Size Trailer and Vehicle Mount Message Boards

##### SILENT ADVISOR

Low and High Speed Application Radar Speed Trailers



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