R920-MX

Connected Crosswalk Beacon or Sign

carmanah®
MX Series

Boost safety at unsignalized crossings with proven technology, actionable alerts, and street-level data.

- ✓ Every system ships with **3 years of free remote connectivity**
- ✓ Actionable email and text alerts
- ✓ Remote system access via MX Cloud™
- ✓ Quick setup and local access with MX Field App™ (iOS®/Android™)
- ✓ 'Smart module' design for simple installation and richer data
- ✓ Solar Power Report (SPR) available for every location

Cabinet-based solar and AC (100-240 VAC) available

Rectangular rapid flashing beacon (RRFB) shown

Free out-of-the-box connectivity

R920-MX systems have connectivity embedded into their design, making installation easy. From the moment a system receives power, it connects both locally to the MX Field App and remotely to MX Cloud, providing easy remote access to system status, settings and data. RRFB systems come with default settings that meet MUTCD Standards, including wig-wag plus simultaneous (WW+S) flash pattern.

Timely and actionable alerts

Cities can enable email and text alerts so they can know the minute there's an issue, be it a knockdown, dead battery or something else. Detailed location and module information reduce downtime and boost site visit efficiency while providing optimal citizen safety.

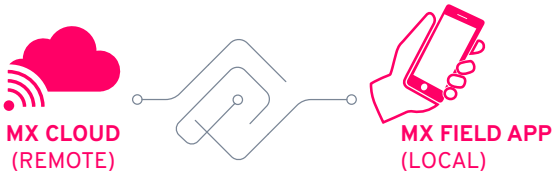
Comprehensive asset visibility and data collection

All MX systems come with MX Cloud, a web-based application that lets users remotely access system locations, alerts, settings and data like daily activation counts. The GPS map not only gives cities better visibility, but enables streamlined, proactive asset management and future planning.

Long-lasting, reliable operation

Every MX module is built to last with durable, weatherproof aluminum construction and vandal-resistant wireless antennas. Solar-powered models are solar-sized to project locations, backed by a Solar Power Report (SPR) to prove year-round sustainability.

MX Series
Connective Capabilities



What's a Solar Power Report™ (SPR)?

No matter where you install your solar-powered system, your product should be carefully sized for its location to ensure it will be operational for the long-term.

Over the last 20+ years, our engineers have developed a field-proven software simulation that helps us replicate the real-life conditions of your project location—and determine the best solar-powered solution for your project.

Learn more about our process at **carmanah.com/spr**.

Meets MUTCD Standards

Buy America/ BABA compliant

3-year limited warranty

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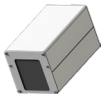
MX FLASHER MODULES

MX RRFB Module

MX Beacon Module

MX LED Sign Module

MX RRFB Module	Meets MUTCD approval (IA-21) and MUTCD (Canada) Standards
	Purpose-built optics exceed SAE J595 class 1 intensity by 2.5-3x when used as recommended; meet SAE J578 chromaticity
	3" (76 mm) x 7" (178 mm) clear, UV-rated polycarbonate lens with yellow LEDs and side-emitting pedestrian confirmation LEDs
	Stainless steel mounting brackets make back-to-back installation simple and enable in-field aiming for maximum effectiveness
	Yellow or black powder-coated light bar covers
	Light bar configuration: uni-directional or bi-directional
	RRFB backplate and mast arm mount available
	In-field aiming: rotate the light bar towards the incoming vehicle lane, independent of the wire hole location 
MX Beacon Module	Meets MUTCD Standards: 2009 MUTCD, Chapter 4L, Flashing Beacons
	Meets ITE recommendations for signal intensity and distribution
	12" (305 mm) or 8" (203 mm) diameter LED modules, yellow
	Yellow or black heads in UV-resistant polycarbonate or aluminum
	Side of pole arm and top of pole mount kits available
MX LED Sign Module	Meets MUTCD LED requirements for color, flash rate and dimming
	3M High Intensity Prismatic or Diamond Grade retroreflective sheeting and components UV-resistant polycarbonate channels and waterproof housings protect wiring; include fully integrated junction box
	Standard 30" and 36" W11-2 and S1-1 sign sizes (others available) Standard yellow and fluorescent yellow-green sign colors available
	Standard banding, through bolt and U-bolt mount kits available
Options	 Accessible Pedestrian Signals (APS) push button  Overhead lighting fixture (see data sheet)  Passive pedestrian detection

WIRELESS COMMUNICATION AND DATA COLLECTION

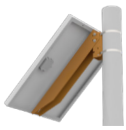
Local	MX Field App (Bluetooth®)
System-To-System	Linked MX systems flash in sync up to 1,000 ft (305 m) away
Remote	MX Cloud (cellular)
Location & Time	GPS

INCLUDED WITH EVERY SYSTEM

MX Subscriptions	**3 years out-of-the-box remote connectivity with MX Lite** See all MX subscriptions
MX Cloud	MX Cloud for remote health status monitoring, email/SMS alerts, scheduling, asset management, programming and more
MX Field App	Bluetooth® mobile app for on-site setup, local access to default settings, system health status and more Download on the App Store · GET IT ON Google Play
Warranty	3-year limited warranty on MX system
	1-year limited warranty on batteries
Support	Carmanah's North American product support technologists available for solution building, solar sizing and troubleshooting
	24/7 access to Carmanah's online Product Support Center
Customize	**Build an R920-MX online**

MX POWER MODULES

Solar	12 VDC operation, solar sized to specific geographic location Includes 12-month Solar Power Report to ensure sustainability
	System designed for 5+ year battery life
	Replaceable, recyclable, sealed, maintenance-free AGM batteries offer the widest temperature range and longest life
AC (only MX 300/400)	100-240 VAC in standard configurations
Construction	Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R)
	Lockable door Cabinet systems include Type II lock option (standard for MX 400)
	Corrosion-resistant aluminum with stainless steel hardware
	Raw aluminum finish or black powder-coated

	MX 100	MX 200	MX 300	MX 400
Type	Integrated solar + battery	Integrated solar + battery	Separate solar + cabinet	Separate solar + cabinet
Housing Dimensions & Weight (w/o batteries)	12.6 x 13.6 x 5.3" 320 x 345 x 135 mm 5 lb (2.3 kg)	30 W version: 18.3 x 15.7 x 5.8" 465 x 399 x 147 mm 11 lb (5.0 kg) 50 W version: 18.3 x 26.3 x 5.8" 465 x 668 x 147 mm 14 lb (6.4 kg)	16.7 x 11.3 x 7.0" 424 x 287 x 178 mm 10 lb (4.5 kg) AC version weight: 12 lb (5.4 kg)	21.9 x 16.1 x 8.3" 556 x 409 x 211 mm 19 lb (8.6 kg) AC version weight: 21 lb (9.5 kg)
Mount Kits	 Top of Pole Mount	 Side of Pole Mount	 Top of Pole Mount	 Side of Pole Mount
	Universal solar mounts: • 2-2.5" perforated square posts • 2.38-2.88" OD round poles • 3.5-4.5" OD round poles • Side of pole		Cabinet mounts: • Standard banding • Through bolts • U-bolts (MX 400 only) Universal solar mounts: • 3.5-4.5" OD round poles • Side of pole	
Batteries	1-2x 7 Ah	1-2x 18 Ah	1x 18, 35 or 55 Ah	1x 35, 55 or 100 Ah
Solar	15 W	30 or 50 W	50, 80 or 170 W	50, 80 or 170 W
Solar Dimensions & Weights	See housing dimensions above	See housing dimensions above	50 W: 26.3 x 21.2" (668 x 538 mm) 10 lb (4.5 kg) 80 W: 30.7 x 26.5" (780 x 672 mm) 13 lb (5.9 kg) 170 W: 59.1 x 26.3" (1500 x 668 mm) 25 lb (11.3 kg)	

Specifications subject to local environmental conditions, and may be subject to change.