Product Catalog

BRINGING YOU TOMORROW'S SOLUTIONS TODAY
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About McCain Inc.

Your Trusted Transportation Partner Since 1987

History of Excellence

Millions of times a day people come in contact with a McCain product, whether it be a single traffic signal or the system running a city’s entire traffic network. Since 1987, McCain has been producing traffic management solutions and making a difference in communities across the globe.

The secret to Team McCain’s success is an unrelenting dedication to provide the best products and service the industry has to offer. Though the company has expanded dramatically in size and scope, McCain’s resolute commitment to this core mission remains.

As a vertically-integrated company with over three decades of expertise, McCain is uniquely positioned to provide long-lasting solutions and support that you can trust.

We Are SWARCO

In 2016, McCain became part of the SWARCO family, joining forces with more than 80 member companies around the world. Together, these companies keep traffic in motion and support the growing mobility needs of society through a complete range of road marking and traffic management products, services, and solutions.

As a member of the SWARCO family, McCain has direct access to SWARCO’s global network of intelligent transportation solutions and the brilliant minds behind them.

So when you partner with McCain you can trust that whatever your transportation goals are, we have the team and network in place to provide a comprehensive and lasting solution.

Customer Service

At every point in the production cycle, from design through delivery, McCain’s entire team is dedicated to providing the best customer service possible.

In addition, McCain has a technical support team committed to providing top-notch support for all of McCain’s products and services.

For product details or quotes, contact a member of Team McCain.

☎ (888) 262-2246
✉ info@mccain-inc.com
🌐 www.mccain-inc.com

Join Our Story

Learn more about Team McCain and our SWARCO family by joining us online.

#TeamMcCain #WeAreSWARCO
CABINETS

ATC Cabinets
Revolutionary cabinets combine the best of rack-mount and serial-based designs.
- 350i
- 352i
- 356i

170/2070 Cabinets
Rack-mount cabinets in industry standard and agency specific configurations.
- 303/8
- 330
- 332
- 333
- 334
- 350i
- 352i
- 357i
- Backpack
- M ATC

NEMA Cabinets
NEMA (size 1-7) and Caltrans (size G, M, P, R) cabinets in the following configurations:
- NEMA TS 1
- NEMA TS 2 Type 1
- NEMA TS 2 Type 2

Leading the way for safer, more connected roads. Through best in class diagnostics, smart components, and cutting-edge technology, McCain’s ATC Cabinets are the safest available today. With the most sold in the industry, our proven ATC Cabinets meet the needs of today’s smart cities and are ready for tomorrow’s challenges, including the future of connected and autonomous vehicles.
- Handle up to 32 movements
- Safeguard against accidental contact with high-voltage components
- Expedite troubleshooting through advanced diagnostics
- Reduce agency liability through enhanced safety features
- Available in a low-voltage, 48 VDC design
- Connected vehicle ready

MCCAIN PRODUCES MORE THAN 300 DIFFERENT CABINETS IN ADHERENCE WITH NATIONAL STANDARDS.

ITS Equipment Cabinets
McCain manufactures cabinets in a multitude of sizes and styles for applications, such as:
- Communication hubs
- Closed circuit television (CCTV)
- General storage

Insulated cabinets with rack-mount air conditioners for temperature-sensitive equipment are also available.

Battery Backup Cabinets (BBS)
Provide backup power to critical intersections as part of your citywide emergency planning to promote safety for drivers and law enforcement.
- Multiple styles and sizes available
- NEMA 3R-rated version
- Fully equipped system for up to 16 hours of backup* (optional)

* Average backup based on typical LED intersection
Cabinet Peripherals
McCain partners with a number of suppliers to ensure that every cabinet is fully equipped to meet your needs.

- Alarm panels
- Detector cards
- Flash transfer relays
- Flashers
- Input test panels
- Network switches
- Optical vehicle preemption
- Pedestals and risers
- Power supplies
- Railroad interface panels
- Signal monitors
- Switch packs
- Video detection

Which Cabinet is Right for You?
Reference the chart below to easily compare standard industry specifications or contact McCain for assistance.

<table>
<thead>
<tr>
<th>Key Cabinet Assemblies</th>
<th>TS 1</th>
<th>TS 2</th>
<th>170/2070</th>
<th>ITS</th>
<th>ATC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMU channels, maximum</td>
<td>18</td>
<td>16</td>
<td>18</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Detector inputs, maximum</td>
<td>8</td>
<td>64</td>
<td>28</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Max phase, overlap, ped outputs, and flashing arrow*</td>
<td>18</td>
<td>16</td>
<td>18</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Flasher output monitoring</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMU programming method</td>
<td>program card</td>
<td>program card</td>
<td>varies</td>
<td>datakey</td>
<td>datakey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load current monitoring</td>
</tr>
<tr>
<td>Flash intersection while replacing output assembly</td>
</tr>
<tr>
<td>High-voltage components not exposed, per NEC</td>
</tr>
<tr>
<td>Main circuit breaker at power service entry point</td>
</tr>
<tr>
<td>Main contactor mercury free</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports third-party hardware and application software</td>
</tr>
<tr>
<td>Modular design</td>
</tr>
<tr>
<td>Rack-mount (EIA) rails</td>
</tr>
<tr>
<td>Cabinet power architecture</td>
</tr>
<tr>
<td>Serial bus communication speed</td>
</tr>
</tbody>
</table>

* Combined maximum
** Ready to support evolution to low-voltage operations, such as less than 2-watt LEDs

Don’t see what you are looking for?
No problem! Contact a member of Team McCain to discuss your application needs, including general specifications, dimensions, applicable standards, and assemblies.
CONTROLLERS

170 Controllers
McCain is dedicated to serving legacy customers through replacement controllers and components for:
- 170 ColdFire
- 170E
- 170E HC11
- 170 ATC HC11

2070 Controllers
The open architecture of 2070 controllers promotes interchangeability, permitting a range of traffic control applications and configurations.
- 2070E
- 2070LX

NEMA Controllers
Controllers available for rack-mount and standard NEMA cabinets; offering an inexpensive alternative for upgrading existing installations.
- 2070EN1
- 2070EN2
- 2070LXN1
- 2070LXN2
- ATC eX2

ATC Controllers

A single hardware platform compatible with any cabinet type, including legacy and modern Caltrans, ATC, ITS, and NEMA cabinets. Built around the ATC standard, each controller provides an open-architecture design that facilitates migration to next generation traffic control applications.

Every McCain ATC Controller features:
- Linux operating system that supports third-party software
- Freescale PowerQUICC II Pro microprocessor
- USB ports that support data transfer, software upgrades, and log retrievals

2070 & NEMA ATC Controllers
Designed to meet or exceed ATC, Caltrans TEES, and NEMA TS 2 standards, where applicable.
- 2070LX
- 2070LXN1
- ATC eX2 NEMA
- 2070LXN2

FLeX® ATC Controller
Measuring just 5.5” tall, the compact design is available in both shelf and rack mount versions offering versatility and performance for any ATC or Caltrans-style cabinet configuration.

THE FLEX CONTROLLER IS THE LATEST IN MCCAIN’S ATC SERIES OF ADVANCED TRANSPORTATION CONTROLLERS.

The FLeX Controller has a real-time, open-source operating system that supports the latest ITS applications including high-resolution data collection and enough computing power to address emerging connected and autonomous vehicle (CAV) applications.
Modules & Peripherals
Easily upgrade, enhance, or reconfigure existing traffic signal controllers.

Standard Controller Modules
- Communication
- CPUs
- Field I/Os
- Front panel displays
- Power supplies
- PROM modules
- NEMA adapters

GPS Modules
Provide accurate time-of-day for more effective signal timing operations and synchronization.
- Stand-alone for general purpose and NEMA applications
- 2070 plug-in version

Peripherals
- Communication modems
- Controller stands
- Test equipment
- Wireless radio

Controller Testers
Test, troubleshoot, and demonstrate controllers using McCain's compact and lightweight controller testers.
Available for 170, 2070, and NEMA controllers.

Controller Software
McCain's software sets the standard for traffic signal control and has a reputation for performance and reliability.

Designed, developed, and tested to meet the rigorous demands of modern traffic control, McCain has software solutions available for legacy and modern traffic controllers for a variety of applications.

- Arterial master
- Intersection control
- Ramp metering
- Transit signal priority

Omni eX® Software
State-of-the-art transportation control for McCain ATC and other compatible ATC traffic controllers. Built upon NTCIP 1.202 and other McCain unique traffic control algorithms, Omni eX software is a single solution for any infrastructure—NEMA TS 2 Type 1 and Type 2, ITS, and ATC.

Standard features include:
- Advanced priority operations
- Built-in data validation
- Complex and multi-intersection control
- High-resolution data
- Improved traffic control
- Peer-to-peer
- Intuitive web interface

Connected Vehicle Ready
Transform your infrastructure into a data collection hub and provide a platform for connected and autonomous vehicle applications with Omni eX software. Capable of gathering and providing essential data, such as SPaT, and revolutionizing the way signals operate.
**Traffic Signals**
McCain’s standard and programmable traffic signals are available in various configurations to meet your needs.

**Industry Standard Signals**
- 8” and 12” modular design
- Fabricated from aluminum or polycarbonate (with or without a 10% fiberglass reinforcement)

**Programmable Signals**
- 12” programmable signals
- Aluminum fabrication
- Superior, targeted visibility

**Pedestrian Signals**
Industry standard pedestrian signals are constructed from top-of-the-line aluminum or polycarbonate.

**Pedestrian Signals**
- 12” (1 or 2 section) or 16”
- Standard symbols or custom messaging
- LED or incandescent modules

**Pedestrian Pushbuttons**
- 5” x 7” or 9” x 12”
- ADA compliant options
- Tested to 10 million cycles
- Standard or custom messaging
- Double-sided options reduce inventory requirements

**Signal Accessories & Framework**
McCain offers a wide variety of accessories for traffic signals, pedestrian signals, and pushbuttons including a framework collection to cover the gamut of your mounting needs.

- Advance warning beacons
- Backplates
- Enforcer
- LED and incandescent optical assemblies
- Mushroom flasher
- Pipe fittings and hardware
- Vehicle and pedestrian mounting options
- Vandal resistant pull box insert
- Visors

**Street Name Signs**
Combining quality construction with the latest reflective materials and lighting techniques, McCain’s street name signs promote safety at every intersection.

**Illuminated Street Name Signs (ISNS)**
- Increase safety and visibility
- Uses energy-saving LEDs

**Reflectorized Street Name Signs (RSNS)**
- Various colors, sizes, and designs
- Durable aluminum construction

*Trouble with copper theft?*
McCain’s patented Vandal Resistant Pull Box Insert is a simple yet effective tool for discouraging copper theft.

The patented design is available in standard and custom sizes and easily retrofits existing pull boxes.
Dynamic Message Signs

Promote road safety and awareness by providing travelers with information about unique driving conditions, events, or alerts.

Advanced Variable Message Sign

Alert motorists of travel times, delays, or road closures, provide safety tips and Amber Alerts with the latest Caltrans-approved, overhead variable message sign.

- Energy-efficient design
- Maximum viewing space with LEDs built into front access panel
- Notifies operator of pixel failure and live sign/message status
- Complies with latest Caltrans specifications*
- Drop-in replacement for CMS 500 technology

Blank-Out Signs

Enhance driver safety with high-visibility LED blank-out signs, a great alternative to static message signs.

- Automatic dimming
- Control with NTCIP or contact enclosure
- Conforms to MUTCD standards

Variable Message Signs

Variable Message Signs (VMS), powered by SWARCO technology, provide pertinent roadside information and warnings to en-route motorists through full-color LED displays. Successfully deployed around the globe, these VMS are proven to improve overall traffic flow and commuter safety.

- Display any combination of text, symbols, and images
- Special lens system provides unrivaled contrast ratios and viewing from roadway
- Meets or exceeds NEC and NEMA standards
- Emits little to no heat, eliminating fans, heaters, and defogging equipment
- Draws a tenth of the power of traditional VMS signs

Extinguishable Message Signs

Provide pertinent notifications to the driving public with EMS signs. Ideal for carpool and toll lanes, airports, and special venues.

- Automatic dimming
- Easy to access and maintain
- Standard or custom messaging
- Non-glare window for maximum visibility

Variable Speed Limit Sign

Adjust the speed limit in response to weather or congestion, improving traffic flow. Ideal for highway active traffic management.

- Fully programmable
- Ultra-bright RGB LEDs viewable in any environment
- Lightweight, weather-proof enclosure

* At the time of printing
Overview

Intelligent transportation systems (ITS) provide a set of tools for creating a connected, automated transportation system driven by data and responsive to the needs of travelers and operators. Promoting local, regional, and statewide integration and mobility, ITS transforms the way society moves.

A powerful combination of standards-compliant technology, proprietary algorithms, and tried-and-true methodology, McCain’s integrated ITS solutions offer ways to:
- Reduce congestion
- Improve traffic flow
- Share data across jurisdictions
- Integrate systems
- Enable connected vehicle applications

Dynamic and versatile, McCain’s software solutions are easy to configure or customize to meet project requirements.

Best of all, the systems are fully complementary and compatible with McCain’s full line of traffic equipment and devices.

Consultation & Support

To accomplish its mission of providing the best quality products and service, McCain goes beyond strictly filling orders, offering top-notch customer support. Especially valuable in the ever-changing realm of ITS, McCain created a team dedicated to its intelligent transportation systems, the ITS Solutions Group.

ITS Solutions Group

The ITS Solutions Group works with customers to identify solutions that meet their needs, including custom development when warranted. The same team continues to provide support through system deployment and integration to ensure end-to-end functionality at the close of each project.

Software Maintenance Plans

Every McCain software solution is available with an optional Software Maintenance Plan. The plan covers feature additions, technical support, assistance with system backup/recovery, and personalized training sessions.

Software Maintenance Plans are available in one-year increments and provide flexibility to meet individual support requirements.

“ITS improves transportation safety and mobility, reduces environmental impact, and enhances productivity.”

ITS in Use Today
US DOT ITS Joint Programs Office
Transparency® Software

The Transparency software platform uses a modular architecture to proactively manage traffic and promote mobility through real-time traffic data collection and management tools. Fully scalable to meet the size and scope of your agency’s requirements.

Transparency® TMS

Transparency Traffic Management System (TMS) provides dependable monitoring and control of system-wide traffic conditions and devices.

Best of all, the intuitive and user-friendly interface is easy to learn, use, and customize; allowing it to be quickly implemented and mastered.

The newest release of Transparency TMS offers support for connected and autonomous vehicle (CAV) applications and data subscriptions.

- Manage your entire traffic network through real-time maps
- Improve traffic flow with advanced functionality and operations
- Monitor system-wide traffic conditions and devices
- Analyze performance and trends
- Boost accountability with user security, controller and activity logs
- Enable multiple data subscription services for CAV applications
- Support inter-jurisdictional data exchange and control strategies in regional deployments

Transparency® Adaptive

The Transparency Adaptive module optimizes signal timing on-the-fly based on current demand and system capacity, moving vehicles faster and more efficiently than pre-programmed signal timing plans.

- Ease congestion
- Reduce emissions
- Increase mobility

Transparency® IMS

An ideal companion to larger traffic management systems, Transparency IMS (intersection management system) allows users to easily manage intersection timing data and status in the field, as well as gather information from offline intersections.

Connected Vehicle Ready

Intelligent transportation systems are a fundamental component to the future of connected and autonomous vehicles. Transparency solutions help bridge the gap between today’s systems and the future of CAV through advanced data collection, reporting, and subscription services.