

ATC CABINET FAQ

General Overview

- **Why is it called the ATC cabinet?**

The cabinet was named for its ability to support the fundamentals behind the Advanced Transportation Controller (ATC) Family of Standards, offering a platform for truly advanced transportation control that greatly exceeds that of legacy traffic cabinets.

- **Is there a published standard for the ATC cabinet?**

The ATC cabinet combines the best elements of all established standards, such as AASHTO, Caltrans, ITS, and NEMA. Currently, there is no approved standard for the ATC cabinet.

Acknowledging the benefits of industrywide standards, such as competitive procurement options, McCain has submitted specifications for the ATC cabinet to leading national agencies and will continue to work towards getting the standard adopted by leading organizations and agencies.

- **Has the ATC cabinet been deployed?**

Yes, the ATC cabinet has been successfully deployed across North America with notable deployments by the City of Cedar Park, Texas, Federal Highway Administration, Georgia Department of Transportation, and the Oklahoma Department of Transportation.

- **I am happy with my cabinets. Why would I want to change?**

Just like any equipment, there is always a need to improve performance, reliability, and compatibility. The ATC cabinet helps address the gap between older standards, some of which are more than 30 years old, and modern needs. Additional benefits include increased safety and operational efficiencies.

- **How do I learn more about ATC cabinets?**

You can learn more about the ATC cabinet a number of ways. Start by contacting your local sales representative or attending one of McCain's free, educational webinars. For up-to-date webinar information visit www.mccain-inc.com/webinars.

Cabinet Components

- **What controllers are compatible with the ATC cabinet?**

The ATC cabinet was designed for controllers compliant with the ATC standard version 5.2b and later. However, the cabinet is compatible with any controller that has the proper software support and serial communication facilities. To that end, Model 170 controllers are not compatible because they do not support the high speed serial bus communications protocol required to operate the ATC cabinet.

- **Can I use existing switch packs, flashers, and flash transfer relays in the ATC cabinet?**

Legacy switch packs (Model 200), flashers (Model 204), and flasher transfer relays are not supported by the ATC cabinet. Instead, these components have been replaced by high-density (HD) components that are half the size and more efficient than their legacy counterparts.

- **Can I use the CMU, SIU, and AMU from existing ITS cabinets?**

The AMU is not used in the ATC cabinet, while the CMU and SIU have been redesigned and replaced by the new CMU2 and SIU2. The new components are more technologically advanced.

- **Can I use off-the-shelf detectors, isolators or preemption such as 222, 242, video detection, etc.?**

Yes, the ATC cabinet input assembly was specifically designed to be compatible with all existing 2- and 4-channel, 24 VDC rack-mounted detection, isolation, and preemption equipment.

- **Why is the service assembly mounted to a single rail rather than the full cabinet width?**

In addition to freeing up more cabinet space, the reduced-width service assembly was designed with several considerations in mind, including conduit accessibility, enhanced access to the rear of the cabinet, and the vicinity to the service/power entry point.

- **What troubleshooting tools are available for the ATC cabinet?**

The ATC cabinet's increased intelligence provides multiple tools to observe, track, and record the operations of the cabinet, including: Ethernet-enabled CMUs with remotely retrievable logs, momentary activation of switch pack outputs during cabinet flash, the auxiliary CMU display unit (ADU), and SIU input and output testing utilities.

- **Can I use NEMA TS 2 BIUs in an ATC cabinet?**

The ATC cabinet is not compatible with BIUs. Instead, it uses the SIU2, which supports higher communications speeds and more I/O.

- **Are my existing signal heads compatible with the ATC cabinet?**

The ATC cabinet is compatible with existing LED signal heads; however, it is not compatible with incandescent signal heads.

Form Factors

- **Do I have to change my NEMA "P" or "R" cabinet foundation if I want to use an ATC cabinet?**

In addition to models that are compatible with 332/336 foundations, McCain's ATC cabinet series offers many different form factors compatible with NEMA "P" and "R" cabinet foundations.

- **Is there a single-door ATC cabinet available for wall or pole mounting?**

McCain's ATC cabinet series comes in multiple configurations, including a single-door cabinet suitable for wall or pole mounting. For a list of available cabinet configurations please visit www.mccain-inc.com.

DC Power and Low-Voltage Alternative

■ **What are the benefits of a low-voltage ATC cabinet?**

The low-voltage ATC cabinet offers numerous benefits, including:

- ✓ Prolonged equipment life due to lower operating temperatures
- ✓ Decreased need for personal protective equipment
- ✓ Reduced liability
- ✓ Increased safety for personnel entering the cabinet through reduced risk of accidental contact with high-voltage components
- ✓ Increased effectiveness of backup power in the event of power outages

■ **Is McCain's low-voltage ATC cabinet fully DC?**

No, while most in-cabinet components are available in low-voltage, 48 VDC versions, there are still many components that require 120 VAC to operate, such as the controller, video detection, preemption, and networking/communication gear.

■ **I have been working with cabinets for a long time and have never been shocked. Why should I care about 50V+ or guarding against live parts?**

OSHA and NEC have explicit requirements intended to protect personnel when working in high-voltage environments, defined as 50V or greater. While these standards have yet to be fully adopted by all bodies in the transportation industry, there are a growing number of agencies with enhanced safety requirements, which most commonly include personal protective equipment.

■ **Can the high-voltage ATC cabinet be converted to the low-voltage version?**

Converting a high-voltage ATC cabinet to a low-voltage cabinet is possible. To do so, the following high voltage components would have to be replaced with their low-voltage counterparts: power management unit, high density switch packs, signal heads, CMU, and circuit breaker.

■ **Are DC signals available?**

Yes, all signal head manufacturers have or are working on 48 VDC versions.

■ **How much more efficient are DC signals?**

DC LED signals may be as low as 2 to 8 watts, compared to today's AC LEDs, which are typically 8 to 20 watts.