

## 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?

Yes. ATC cabinets combines the best elements of all established standards, such as AASHTO, Caltrans, ITS, and NEMA and in 2018, the official ATC 5301 v02 standard was released.

### Has the ATC cabinet been deployed?

Yes. McCain ATC cabinets have successfully deployed thousands of units 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. ATC cabinet technology 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 ATC cabinets a number of ways. Start by contacting your local sales representative or attending one of SWARCO McCain's free, educational webinars. For up-to-date webinar information visit [mccain.swarco.com/webinars](http://mccain.swarco.com/webinars).

## CABINET COMPONENTS

### What controllers are compatible with ATC cabinets?

ATC cabinets were 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 an ATC cabinet.

### Can I use existing switch packs, flashers, and flash transfer relays in an 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 Instead, these components have been replaced by high-density (HD) components that are half the size and more efficient than their legacy counterparts.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 an ATC cabinet, while the CMU and SIU have been redesigned and replaced by the more advanced CMU2 and SIU2.

### 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?

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

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

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

# McCain ATC CABINET FAQ

## CABINET COMPONENTS *CONTINUED*

### Are my existing signal heads compatible with ATC cabinets?

ATC cabinets are 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, SWARCO 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?

SWARCO 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 [mccain.swarco.com/atcc](http://mccain.swarco.com/atcc).

## DC POWER AND LOW-VOLTAGE ALTERNATIVES

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

Low-voltage ATC cabinets 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

### Are SWARCO McCain's low-voltage ATC cabinets 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 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 a 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.



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