Safetran BY ECONOLITE

ATCC Plus

Achieving ITS Objectives with the ATC Cabinet

ECONOLITE
part of Umovity

Advanced Traffic Controller Cabinet (ATCC) Plus

Safer, smaller, and more efficient with alternative power options!

The Safetran ATCC Plus™ is built to meet and exceed the ATC 5301 V02 ATCC Standard. Each ATC Cabinet is designed to provide safer, smarter, and greener intersections. This intelligent cabinet design is based on the most popular features of Safetran's Caltrans, NEMA, and ITS cabinets. The ATCC Plus uses high-speed serial communications, providing modern features, advanced diagnostics, enhanced safety, simplified cabinet wiring, and reduced cabinet size. The ATCC Plus supports both 120 VAC and 48-volt DC signal heads, while high-density load switches and quad detector modules allow for up to 32 signal outputs and 120 detection inputs.

The ATCC Plus provides both voltage and current monitoring of all signal outputs - even ultra low-power LEDs. The innovative Safetran power assembly accepts 120 VAC and a variety of alternative off-grid power sources, providing safer, smarter, and greener intersection operations.

Certifications: The ATCC Plus is designed to meet FCC Part 15 Class A, IEC61000-4-2, IEC61000-4-4, IEC6100-4-5, UL60950-22, and NFPA 70 article 110-27 and UL508 depending on selected configuration.

ATCC Plus Options/Dimensions:

332 66"H x 24"W x 30"D
332S 66"H x 24"W x 30"D
333S 48"H x 42"W x 21"D
333SD 62"H x 44"W x 26"D
332D 67"H x 48"W x 30"D
340 67"H x 44"W x 26"D
336 (50/50 only) 46"H x 24"W x 22"D
336 (50/50 only) 46"H x 24"W x 22"D
337 (50/50 only) 46"H x 24"W x 22"D
P38 DDE 55"H x 38"W x 26"D
P44 DDE 55"H x 44."W x 26"D
P65 DDE 65"H x 44"W x 26"D
R77 DDE 77"H x 44"W x 26"D
M60 DDE 60"H x 30"W x 17"D

Power Assembly

The intelligent Power Assembly, designed to work in ATC-type controllers, can be ordered in two different configurations: 1) AC-only configuration which drives standard 120 VAC LED signals without battery backup; or 2) DC configuration for driving 48 VDC signal heads and includes battery backup capabilities. Features include the following:

- The flasher is located in the Power Assembly – keeps the intersection running in flash mode during maintenance or equipment replacement
- Optional Maximum Power Point Tracking (MPPT) solar charge controller, or Solar battery charging system with the 48 VDC configuration
- Supports alternative power solutions to enable off-grid operation
- Clean power outlets for voltage sensitive electronic equipment
- Support for multiple NEMA TS-2 detection devices
- 16 NEMA-compliant 24-volt I/O ports provide additional user definable functionality flexibility
- Serial Bus connectors enable assemblies to be 'daisy-chained" together
- 15-pin Molex connector array provides standardized single connector to power all assemblies in the cabinet
- Dimensions: 5.25" x 9" x 19"
- Power Supply: 24 and 48VDC

Input Assembly - 24 or 48 Channel

The ATCC Plus supports 120 channels by using a combination of 24-channel or 48-channel detector racks.

- 24-channel rack has 1 SIU for 4 optically-isolated inputs
- 48-channel rack has 2 SIUs that provide 8 (4 each) optically-isolated inputs
- Detector cards are hot swappable
- 24-channel test inputs with D-sub connectors for test panels or other instrumentation
- Dimensions: 5.25" x 9" x 19"

Output Assembly

The ATCC Plus houses up to two Output Assemblies. Each Output Assembly supports up to 16 output channels. The design leverages dual channel, or High Density Switch Packs (HDSP). The Output Assembly also contains the Cabinet Monitor Unit (CMU) and the Main Contactor. The CMU uses a Datakey rather than a traditional CMU/MMU programming card.

- Eight HDSPs provides 16 output channels in a 5.25" x 9" x19" enclosure
- Available in 48 DC - and 120-VAC versions
- Front panel technician switches to test outputs and control equipment, stop time, flash, and 24V test PB
- Eight Output Termination Assembly interface connectors

Auxiliary Display Unit (ADU)

The optional ADU is a useful diagnostic tool. Developed to provide the full set of intersection display indicators and includes additional diagnostic capabilities.

- Visual status of load switches
- LCD screen displays voltage and current levels of each output
- LCD screen provides interface screen for CMU
- Built in diagnostic wizard

Traffic Controllers

The ATC Cabinet is designed to work with the Cobalt Rack Mount controller, or a 2070 controller with an Econolite 2070-1C module installed.

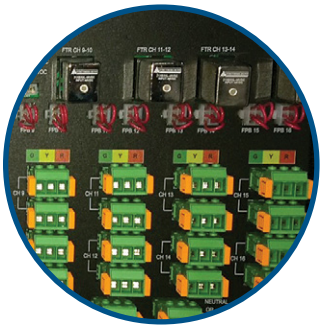
- Options for complex intersections
- Customized features

Econolite EOS software has been developed for the Econolite Cobalt and other properly configured ATC controllers to operate and leverage all of the enhanced capabilities of the ATC Cabinet. EOS has been designed to support the latest in:

- Emergency Vehicle Preempting (EVP)
- Transit Signal Priority (TSP)

EOS also provides:

- Cabinet Configuration and Mapping
- Controller Sequencing
- Event /Coordination Planning
- Enhanced Detector Configuration by Lane



Output Termination Assembly

Each Output Termination Assembly supports 16 channels. It is designed to provide mounting flexibility for rear or front cabinet access, and at different angles and depths to optimize field wiring configurations and ease of maintenance. The assembly also provides 48 VDC and 120 VAC source outputs to confirm signal head function before the load switches are installed.

- HD flash transfer relays with LED indicators
- Miniature flash program blocks
- Configurable for 48 VDC or 120 VAC operation
- Each output line is protected by a three-stage, over-current, and transient protection circuit
- Transparent rear panel to observe transient protection circuit condition
- Test ports for easy installation and for signal display unit

Service Panel Assembly

AC power is attached to the cabinet through the Service Panel Assembly. The SPA provides two terminal blocks: One for utility power input; the other for generator connection.

- Power transfer relay automatically changes over to remote power input
- 10-AMP main breaker and 15-AMP GFI breaker
- TEES-compliant plug-in 40,000-volt transient suppressor module
- EMI/RFI filtering
- Right side mounting
- "Touch Safe" enclosure
- Rack mount option available

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