ATCC STANDARD™

Achieving ITS Objectives with the ATC Cabinet

Safetran BY **ECONOLITE**

ECONOLITE

About the Advanced Traffic Controller Cabinet (ATCC) Standard

The Safetran ATCC Standard Cabinet is built to meet the ATC 5301 V02 Advanced Transportation Controller Cabinet 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 uses high-speed serial communications, providing modern features, advanced diagnostics, enhanced safety, simplified cabinet wiring, and reduced cabinet size. The ATCC Standard 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 Standard™ 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 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.

Input Assembly - 24/48 - Channel

The ATC Cabinet supports 120 channels by using a combination of 24-channel and 48-channel detector racks.

- 48-channel rack has 2 SIUs that provide 8 optically-isolated inputs for ped buttons (4 per SIU)
- 24-channel rack has 1 SIU for 4 optically-isolated inputs
- Detector cards are hot-swappable
- Supports I and J file cabinet configurations
- Expansion slot
- Dimensions: 5.2" x 9.7" x 19"

## Output Assembly - 16/32 - Channel

The ATC Cabinet houses a 16 or 32 channel Output Assembly. Both Output Assemblies leverage the new dual-channel, or High-Density Switch Packs (HDSP). The Output Assembly also contains the CMU and the Main Contactor. The CMU uses a datakey rather than a traditional CMU/MMU programming card.

- 8 HDSPs provides 16 output channels
- Available in 48 DC - and 120-VAC versions
- Custom labeling options
- Circuit breakers protect each pair of HDSPs
- Front panel technician switches for stop time, flash, and CMU reset
- Dimensions: 5.2" x 10.9" x19"

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
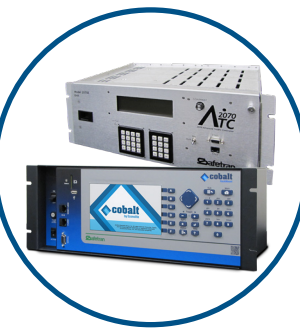
Traffic Controllers

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

New 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 new 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
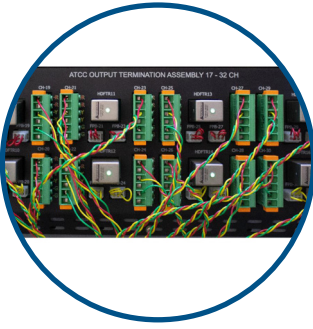
Output Termination Panel

Each Output Termination Assembly panel supports 16 channels. It is designed to provide mounting flexibility for rear or front cabinet access, with integrated cable management features. The assembly also provides 48 VDC and 120 VAC source outputs to confirm signal head function before the load switches are installed.

- New HD flash transfer relays with LED indicators
- New miniature flash program blocks
- Configurable for 48 VDC or 120 VAC operation
- Hinged panel and integrated wire management
- Pluggable surge protection
- Dimensions: 7.7" x 4.3" x 19"
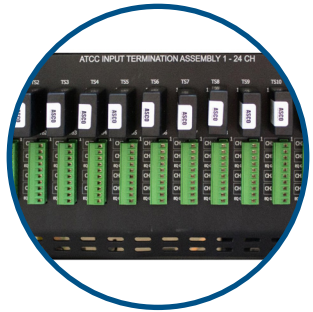
Input Termination Panel

Each Input termination panel provides connections for up to 24 loops. The panel is designed to provide flexible mounting options, hinged for easy access to components behind the panel, and offers integrated wire management features to support clean cabinets with support for long wire runs. The panel also provides connections for pluggable surge protection to make sure transient voltages do not damage the traffic equipment.

- Removable terminal blocks for easy wiring
- Hinged panel with integrated wire management
- Dimensions: 19"W x 4.4"D x 7.8"H

Power Supply

The PS-2216-2412 is a 1u high power supply that provides 175 watts total power with a 48 Vdc auxiliary output, and two fully isolated 24 Vdc and 12 Vdc outputs over the full -34C to +74C NEMA operating temperature range.

- Power Factor Corrected (PFC): A Power Factor Correction circuit ensures a full load power factor of 0.98 or better, reducing peak AC Line input current and associated stress on wiring. Inrush current limited.
- Output Protection: The outputs are fused for over-current protection. The outputs are also protected against voltage transients by a 1500 Watt suppressor.

Service Assembly

AC power is attached to the cabinet through the Service Assembly. The Service Assembly provides 2 terminal blocks: one for utility power input, the other for generator connection, or external BBS.

- Removable Flasher (single or dual)
- 20-amp main breaker, 15 amp Clean Bus, 5-amp HDFU, 15-amp Output Assembly and 15-amp GFI breaker
- TEES-compliant plug-in 40,000-volt transient suppressor module with health indicator
- EMI/RFI filtering
- Flexible mounting
- Dimensions: 5.1" x 9.1" x 7.5"
- "Touch Safe" enclosure

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