



Model ATC2070 Controller Advanced Transportation Controller (ATC) Series

Description

The Econolite Model ATC2070 Controllers are designed to meet the Caltrans TEES specifications. This design allows the Econolite Model ATC2070 to be easily configured to fit all 2070, 170, 170E, and NEMA TS1 and TS2 Type-1 and Type-2 applications. While the hardware meets or exceeds industry standard traffic controller specifications, the extensive controller software base is supported through open architecture and a standard OS-9 multi-tasking operating system. The ATC2070 may be installed with one of Econolite's highly capable ASC/2070, ASC/3-2070, or Oasis™ software packages (the culmination of Econolite's 70+ year background in the application of traffic control techniques), or any industry-available 2070 software meeting current Caltrans TEES 2002 (errata 2) specifications.

The base Model ATC2070 unit employs the preferred "lite" serial backplane and chassis, along with an exceptional 8 x 40 LCD display. The "lite" chassis also supports its own CPU module (2070-1B) and one of three optional I/O modules - standard 170 cabinet interface (2070-2A) or NEMA cabinet interfaces (2070-2B or 2070-2N).

NEMA TS1 compatibility is achieved by the bolt-on addition of a 2070-8 NEMA Interface Module (chassis). The NEMA Interface Module will support all TS1 and TS2 Type-2 applications. In addition, a wide variety of communications modules are available to configure communications for all media (serial/FSK/Ethernet) or standards (AB3418/NTCIP/proprietary). The

Econolite ATC2070 Controller series meets all applicable NEMA TS1 and TS2 standards as well as Caltrans 2002 TEES (errata 2) specifications and joint AASHTO/ITE/NEMA ATC standards.

Features

- Open architecture design
- OS-9 Operating System
- Motorola 68360 Microprocessor, 25 MHz
- Real-time multi-tasking
- Meets Caltrans TEES 2002 (errata 2) specifications
- Metal housing compatible with Type 170 chassis
- Compatible with 170 or NEMA cabinets
- Interchangeable with NEMA TS1 & TS2 controllers
- Flexible communications options
- Ethernet interface capability
- High-speed serial communications

Special Features

- Supports *ASC/2070*, *ASC/3-2070*, or *OASIS* software, or any Model 2070 specified software
- All-metal housing
- Single 96-pin DIN connectors for all plug-in board modules
- Synchronous Data Link Control (SDLC) communications across controller bus, between all modules
 - 614 Kbps data rate CPU to field I/O modules
- Single board design/serial motherboard
 - 8 MB DRAM/8 MB FLASH/+800kb “super-cap” backed SRAM (30-day return)
 - Embedded software utilities: Flash drive, RAM drive, and timer library
- I/O modules use Motorola 68302 microprocessor (2070-2A and 2070-8)
 - Multiple-configuration parallel I/O ports
- Direct access to serial ports under application software control
 - Asynchronous, Synchronous, Hardwire (FSK), and Fiber-optic communications options
 - Built-in Ethernet port on CPU
- Independent, self-contained power supplies – I/O protection
 - Optical isolation provides protection from lightning and surges
 - Safety circuitry monitors line voltage and output
- Backup power supplied by capacitors – no batteries
 - +VDC standby power using capacitor backup
- 8 line x 40 char/line backlit Liquid-Crystal Display (LCD)

Controller Models

- The Model *ATC2070* is available in two basic configurations:
 - Model *ATC2070L* for 170, 170E, and 2070 facilities & *ATC2070L* for TS2 Type-1 cabinets or other serial bus applications
 - Model *ATC2070LN* - for NEMA TS1 & TS2 Type-2 facilities

There is a significant number of module options to custom tailor either of the above models to customer-specific needs.

Power

- 115 VAC, 60 Hz, 25-120 W

Weight

- Model 2070L: 25 lb (11 kg)
- Model 2070LN: 31 lb (14 kg)

Temperature

- -34.6°F to +165°F (-37°C to +74°C)

Dimensions

- Model 2070L only:
 - 19 in. L x 10.25 in. D x 7 in. H (483 mm L x 260 mm D x 177 mm H)
- NEMA interface module only:
 - 17 in. L x 10.25 in. D x 4 in. H (432 mm L x 260 mm D x 101 mm H)

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