

# Model ATC2070 Controller

## Advanced Transportation Controller Series

Combine the flexibility of

open architecture hardware

with the power and

performance of Econolite's

ASC/2 software.



### Features

- Compatible with 170, NEMA or ITS Cabinets
- Interchangeable with NEMA TS1 and TS2 Controllers
- Open architecture - OS-9 Operating System
- High-speed serial communications
- Real-time multitasking
- Meets National ATC/ITS Standards
- Meets CALTRANS TEES Specification
- Metal housing compatible with Type 170 envelope
- Motorola 68360 Microprocessor, 25 MHz
- Flexible communications options
- Ethernet interface capability

### Description

The Econolite Model ATC2070 Controllers are a family of controllers designed to meet the widest variety of Advanced Transportation Controller specifications currently in use. This 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, an extensive controller software base is supported through open architecture and a standard OS-9 multi-tasking operating system. This may be overlaid with Econolite's highly capable ASC/2070 software package—the culmination of Econolite's 65-year plus-background in the application of traffic control techniques—or any industry available 2070 software which meets current ATC 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 two optional I/O modules - standard 170 cabinet interface or NEMA cabinet interface (2070-2A or 2070-2B). Complete 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 modules is available to configure communications for all current (CALTRANS AB3418) and future standards (NTCIP). The Econolite ATC2070 Controller series meets all applicable NEMA TS1 and TS2 standards in addition to CALTRANS 1999 TEES Specifications and joint AASHTO/ITE/NEMA ATC Standards.

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## Controller Models

The Model ATC2070 is available in two basic configurations:

- Model ATC2070L - for 170, 170E, and 2070 facilities and ATC2070L-ITS for TS2 Type 1 ITS cabinets or other serial bus applications
- Model ATC2070LN - for NEMA TS1 and TS2-Type 2 facilities

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

## Special Features

- All metal housing - serial motherboard
- Single 96-pin DIN connectors for all plug-in boards
- OS-9 multitasking operating system
- Embedded software utilities - Flash drive - RAM drive - Timer library - Validation suite for self-testing
- Direct access to serial ports under application software control
- Independent, self-contained power supplies - I/O protection
- Optical isolation - provides protection from lightning and surges
- +5 VDC standby power using capacitor backup
- Safety circuitry monitors line voltage and output
- 614 Kbps data rate CPU to field I/O modules
- SDLC compatible communications with CPU module
- 4 Mbyte DRAM - 8 Mbyte FLASH - 512 kbyte super-cap-backed SRAM (30-day retention)
- I/O modules use Motorola 68302 microprocessor (2070-2A and 2070-8)
- Backup power supplied by capacitors - no batteries
- Multiple configuration parallel I/O ports
- 8 line, 40 char/line backlit LCD



- Asynchronous, Synchronous, Hardwire, and Fiberoptic Communications Options
- Supports ASC/2070 software - NextPhase Software - or any Model 2070 specified software

## Specifications

### Power

- 115 VAC, 60 Hz, 25-120 watts

### Weight

- Model 2070L - 11 kg/25 lbs
- Model 2070LN - 14 kg/31 lbs

### Temperature

- -37°C to +74°C
- -34.6°F to +165°F

### Dimensions

- Model 2070L only
  - 483 mm long x 260 mm deep x 177 mm high
  - 19 inches long x 10.25 inches deep x 7 inches high
- NEMA interface module only
  - 432 mm long x 260 mm deep x 101 mm high
  - 17 inches long x 10.25 inches deep x 4 inches high



