

# Traffic Controllers for Traffic Operations

## 2070E Controller

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### What, exactly, is the 2070E Controller?

The standards-based Safetran ATC2070 series of controllers are designed to meet the widest variety of Advanced Transportation Controller (ATC) specifications. This design enables the ATC2070 to be easily configured to fit Caltrans 2070, 170, 170E, and NEMA TS1 and TS2 Type-1 and Type-2 applications.

### Why do agencies use 2070E Controller?

The 2070E hardware meets or exceeds industry standard traffic controller specifications, and the software base is supported through open architecture and a standard OS-9 multi-tasking operating system. This ensures ease of programming and operation to help meet virtually any ITS application in a single controller platform.

### How does the 2070E Controller benefit the driving public?

Helping to improve usability, the 2070 Series of traffic signal controllers represent the intelligence components of a signalized intersection. The Safetran family of 2070 controllers are designed to increase safety and enhance traffic signal operations.





## Special Features

- Supports ASC/2070, ASC/3-2070, or Oasis software, or any pre-qualified Model 2070 specified software
- Serial motherboard provides the communications paths between all modules
- Single board processor module includes
  - MC68EN360, 25MHz processor
  - 32MB Pseudo Static Ram (DRAM)
  - 16MB FLASH
  - 1MB "supercap" backed SRAM
- Manageable Ethernet switch with one port connected to the CPU, two ports routed to the front panel and one port routed to the serial motherboard
- Datakey receptacle with 3V and 5V key support.
- Flexible communications module options include
  - Asynchronous
  - Synchronous
  - Hardwire (FSK)
  - Fiber-optic communications option
- Independent, self-contained power supply
- Optical isolation and transient protection devices on PIO and communications ports enhances protection from lightning and surges
- Backup power supplied by capacitors – no batteries
- TEES and NEMA compliant parallel I/O port options
- 8 line x 40 char/line Liquid-Crystal Display (LCD) with LED backlight
- All peripheral microcontrollers have in-circuit programming capability
- All aluminum housing compatible with Type 170 chassis
  - Compatible with 170 or NEMA cabinets
  - Interchangeable with NEMA TS1 & TS2 controllers

## Basic Specifications

- Temperature
  - -34.6°F to +165°F (-37°C to +74°C)
- Power
  - 115 VAC, 60 Hz, 25-120 W
- Dimensions
  - Model 2070E 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)
- The Model ATC2070E has a significant number of module options to custom tailor to customer-specific needs. A few of the options include:
  - A 2070-2E TEES 2009 field I/O for use in 170 cabinets
  - A 2070-2N field I/O to provide for TS 2 type 1 operation
  - A 2070-2B + 2070-8 NEMA INTERFACE (A,B,C,D CONN) for TS1 or TS2 type 2 operation

