Traffic Controllers for Traffic Operations

ECONOLITE

ATC 2070C Controller

What, exactly, is the ATC 2070C Controller?

The standards-based Safetran ATC 2070 series of controllers are designed to meet the widest variety of Advanced Transportation Controller (ATC) specifications. This design enables the ATC 2070 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 ATC 2070C Controller?

The 2070C 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 ATC 2070C 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.

Description

The new Safetran model ATC 2070C controller has been completely redesigned to meet the Caltrans TEES 2009 specification. The new design allows the ATC 2070C to be easily configured to fit all 2070, 170, 170E, and NEMA TS1 and TS2 Type-1 and Type-2 applications. The controller meets or exceeds all TEES and NEMA functional and environmental requirements for traffic signal hardware. This controller, which includes the Linux multi-tasking operating system, provides a true, industry standard, open architecture platform.

The ATC 2070C may be configured with Econolite's highly capable ASC/3-LX 2070 software package, or any industry-available 2070 software meeting current Caltrans TEES 2009 (errata 1) specifications that have been configured to operate on Econolite's 2070-1C or 2070-1CLS CPUs.

The base model ATC 2070C unit employs a standard chassis and serial motherboard along with a 2070-4A power supply and 2070-3B front panel, which features a brilliant 8 line x 40 character LCD display module. The unit also features the new 2070-1C CPU module that includes larger program memory space and additional Ethernet capability. The unit can be configured with either the new 2070-2E Field I/O module, for interfacing with standard 170 cabinets, or the 2070-2N for connection to a NEMA cabinet.

NEMA TSx compatibility is achieved by attaching a 2070-8 NEMA Interface Module chassis. The NEMA Interface Module will support all TS1 and TS2 Type-2 applications. Communications modules are available to support most media used by the traffic industry (serial/FSK/Ethernet) and standards (AB3418/NTCIP/proprietary).

Basic Specifications

- Temperature
  - *-34.6°F to +165°F (-37°C to +74°C)*
- Power
  - *115 VAC, 60 Hz, 25-120 W*
- Dimensions
  - *Model 2070C 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 ATC 2070C 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 TS2 Type-1 operation*
  - *A 2070-2B + 2070-8 NEMA INTERFACE (A,B,C,D CONN) for TS1 or TS2 Type-2 operation*

Special Features

- Supports ASC/3-LX 2070 Linux software, or any pre-qualified 2070-1C CPU specified software
- Serial motherboard provides the communications paths between all modules
- ATC Engine Board
- Host Board
- Flexible communications module options include:
  - *Asynchronous*
  - *Synchronous*
  - *Hardwire (FSK)*
  - *Fiber-optic communications option*
- Independant, self-contained power supply
- Operating system
- Easy software upgrade can be done via USB memory stick, or can be done via Windows Software over Ethernet

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