



ATC 2070LX+

Overview

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.

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

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

The new Safetran model ATC 2070LX+ controller meets all the specifications of the ATC 2070LX controller (Caltrans TEES 2020), and has been redesigned to meet Caltrans TEES 2020 specification. The new design incorporates a new serial motherboard that routes Ethernet lines to slots A1/A2/A4/A5/A6/A7 and the front panel (2070-3B+). The new 2070-LAN module acts as an Ethernet switch for all devices and provides an extra Ethernet port through an RJ-45 connector. 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.



Key Features

- *Open architecture traffic light controller design - Linux real-time multi-tasking operating system*
- *ATC compliant Board Support Package (BSP)*
- *PowerPC with QUICC engine*
- *Meets Caltrans TEES 2020 which includes:*
 - *2070-LX+ Unit Chassis*
 - *2070-LX+ Serial Motherboard*
 - *2070-3B+ Front Panel*
 - *2070-4 Power Supply with Power Factor Correction*
 - *2070-LAN Module*
- *Combines the flexibility of open architecture hardware with the power and performance of our EOS 2070 software package*

Description

The ATC 2070LX+ may be configured with Econolite's highly capable EOS software or legacy ASC/3-LX 2070 software package, or any industry-available 2070 software meeting current Caltrans TEES 2020 specifications that have been configured to operate on Econolite's 2070-1C or 2070-1CLS CPUs.

The base model ATC 2070LX+ unit employs a standard chassis and serial motherboard along with a 2070-4A power supply (with power factor correction) and 2070-3B+ front panel which features a brilliant 8-line x 40 character LCD display module and Ethernet port. 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. Together, the redesigned motherboard and 2070-LAN module provide Ethernet communications to all devices within the controller.

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).

Special Features

- Supports EOS or 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



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Specifications

- **Temperature:**
 - 34.6°F to +165°F (-37°C to +74°C)
- **Power:**
 - 115 VAC, 60 Hz, 25-120 W
- **Dimensions:**
 - Model 2070LX+ 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 2070LX+ has a significant number of module options to custom tailor to customer-specific needs. A few of the options include:**
 - A 2070-2E+ TEES 2020 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
- Independent, self-contained, power factor corrected power supply
- Operating system
- Flexible communications module options include:
 - Asynchronous
 - Synchronous
 - Hardwire (FSK)
 - Fiber-optic communications option
 - Ethernet
- Easy software upgrade can be done via USB memory stick, or can be done via Windows Software over Ethernet

