



2070

ATC 2070LX+ Controller

World-Class Advanced Transportation Controller (ATC) Technology

Econolite's standards-based Safetran ATC 2070 series of controllers are designed to meet the widest variety of Advanced Transportation Controller (ATC) specifications. Flexible configuration allows the 2070LX to fit Caltrans, NEMA and ATC cabinet applications.

The ATC 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 Intelligent Transportation System (ITS) application in a single controller platform.

Helping to improve usability, the ATC 2070 series of traffic signal controllers represent the intelligent components of a signalized intersection. Safetran ATC 2070 controllers are designed to increase safety and enhance traffic signal operations. The Safetran ATC 2070LX+ controller has been redesigned from previous generations to meet the requirements of the Caltrans TEES 2020 specification.



Key Features

- Open architecture traffic controller design
- Linux operating system
- ATC compliant Board Support Package (BSP)
- PowerPC CPU with QUICC engine
- Modular design can be tailored to customer needs
- Meets requirements of Caltrans TEES 2020 specification and ATC 5201 standard
- Supports multiple software applications, including Econolite's powerful EOS intersection controller software program



ATC 2070LX+ : Hardware Description

The ATC 2070LX+ may be configured with Econolite's highly capable EOS software, or any other software package that is designed to operate in 2070 controllers with the 2070-1C CPU module. 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 eight-line by 40-character Liquid Crystal Display (LCD) module and Ethernet port.

The unit also features the new 2070-1C CPU module that includes larger program memory space and additional Ethernet capability, compared to the previous generation 2070-1E module. The unit can be configured with either the 2070-2E+ Field I/O module for interfacing with Caltrans or ATC cabinets, or the 2070-2N for connection to a NEMA TS2 Type-1 cabinet. Together, the redesigned motherboard and 2070-LAN module provide Ethernet communications to all devices within the controller.

NEMA TS1 and TS2 Type-2 compatibility is achieved by installing a 2070-2B+ and 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).

The design of the ATC 2070LX+ controller incorporates a serial motherboard that routes Ethernet lines to all of the motherboard slots and the front panel (2070-3B+). The 2070-LAN module acts as an Ethernet switch for all devices and provides extra Ethernet ports through RJ-45 connectors. The Safetran ATC 2070LX+ controller meets or exceeds all TEES and NEMA functional and environmental requirements for traffic signal hardware. The controller features a standard engine board module and Linux operating system, providing a true open-architecture platform.

Module Options

The Model ATC 2070LX+ has different I/O module options to adapt to customers' specific needs. Options include:

- A 2070-2E+ field I/O for Caltrans 33X or ATC cabinets
- 2070-2N field I/O for TS2 Type-1 cabinets
- 2070-2B+ and 2070-8 NEMA interface (A,B,C,D connectors) for NEMA TS1 or TS2 Type-2 cabinets

Flexible communications module options include:

- Serial (2070-7A)
- FSK Modem (2070-6A, 2070-6B)
- Ethernet (2070-LAN)

Hardware Features

- Supports Econolite's EOS or ASC/3-LX Linux software, or any prequalified 2070-1C CPU specified software
- Serial motherboard provides the communications paths between all modules
- ATC engine board
- Independent, self-contained, power factor corrected power supply

Specifications	ATC 2070LX+
Dimensions	Model 2070LX+: 19 in L x 10.25 in D x 7 in H NEMA interface module: 17 in. L x 10.25 in. D x 4 in. H
Power	115 VAC, 60 Hz, 25-120 W
Temperature	34.6°F to +165°F (-37°C to +74°C)