

2070L Controller

Cabinets

Controllers

Signals

Signs

Software

Specialty



Overview

The 2070L Controller is an exciting addition to McCain's traffic controller product offering; an advanced, next-generation version of the Caltrans type controllers. Designed in full compliance with Caltrans Transportation Electrical Equipment Specifications (TEES), the 2070L is interchangeable with standard 170 controllers. This allows end users to upgrade existing intersections to a modern high-performance platform without replacing cabinet hardware. The 2070L is an advanced, ruggedized, multi-tasking field processor and communications system that is easily configurable for a variety of traffic management applications.

Benefits

- The controller's multitasking operating system supports a variety of applications
- Easily upgrades current intersection hardware
- Open architecture insures compatibility with off-the-shelf products
- OS-9 real-time operating system is compatible with standard software modules from different vendors
- Interchangeable with standard 170 controllers without the need to replace cabinet hardware

Product Description

The primary design function of the McCain 2070L is to control traffic intersections, but can be used for a multitude of applications. Based on the software control package utilized, the control applications can expand to include: ramp metering, variable message signs, sprinklers, pumps, and changeable lane control.

The 2070L modular design allows various configurations based on the desired application.

The controller's OS-9 real-time operating system affords a robust, flexible, and expandable platform that is compatible with multi-vendor application control software. McCain offers a variety of compatible software programs that integrate the 2070L into an overall Intelligent Transportation System (ITS).

2070L Controller

Standard Features

Operating system

- Microware OS-9 real-time operating system (RTOS)

Modules (standard, included)

- 2070-1B CPU Module
- 2070-2A Field I/O Module
- 2070-3B LCD/Front Panel Module
- 2070-4A Power Supply

Microprocessors

- CPU Module: Freescale MC68EN360, 32 Bit, 24.576 MHz microprocessor
- I/O Module: Freescale MC68LC302 microprocessor, running at 20 MHz

Memory

- 8MB Flash memory (expandable to 16MB)
- 8MB PSRAM
- 2MB non-volatile SRAM

Backup real-time clock (RTC)

Applicable standards

- Meets or exceeds Caltrans TEES 2002 standards including ERRATA 1 and 2

Interfaces

Communication interfaces

- SDLC ports (2)
- ACIA ports (5)
- 10 Base-T Ethernet
- Datakey removable storage device

Front panel interface

- Display: 8 lines x 40 characters
- Keyboards: 3 x 4 navigation and 4 x 4 data entry keypads

Cabinet interfaces

- Rear connectors C15, C115, and C125

Software

Compatible with McCain's 2033 intersection control, 2045 arterial master control, and 2042 ramp metering control software. Also compatible with any 2070L compliant third party software. (See separate data sheets for details on McCain's software control programs).

General Specifications

Dimensions:	19" W x 7" H x 13" D (rounded to the nearest inch)
Form Factor:	EIA rack mount compatible
Power:	95 VAC to 135 VAC, 60 Hz (± 3 Hz) +5.0 VDC 1.0 A 10.0 A +12.0 VDC Serial 0.1 A 0.5 A -12.0 VDC Serial 0.1 A 0.5 A +12.0 VDC ISO 0.1 A 1.0 A
Environment:	Operating Temperature: -37°C to +74°C Humidity: 0 to 95% (non-condensing)
Weight:	± 12.5 lbs (based on final module selection)

Options

- McCain control software
- Available modules
 - 2070-2B field I/O module for ITS (SP5) / NEMA (SP3) cabinet applications
 - 2070-3A large 4 x 40 character display
 - 2070-4A-220 International Power Supply: 190 VAC to 253 VAC, 50 Hz (± 3 Hz)
 - 2070-6A dual 1200 baud modem
 - 2070-6B dual 9600 baud modem
 - 2070-7A dual RS232 serial ports
 - 2070-7B dual RS485 serial ports
 - 2070-8 NEMA adapter

To learn more about McCain's Integrated Traffic Solutions, please contact info@mccain-inc.com or call (760) 727-8100



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