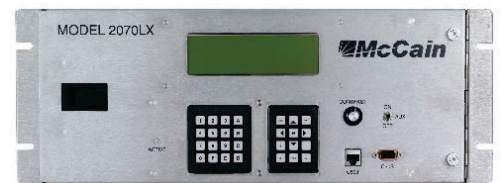


SWARCO McCain 2070LX CONTROLLER



The McCain 2070LX Controller is designed in full compliance with the 2020 Caltrans Transportation Electrical Equipment Specifications (TEES), and is part of the SWARCO McCain, Inc. ATC Controller family. This controller is a rugged, multi-tasking, field processor and communications system configurable for a variety of traffic management applications. It is interchangeable with standard 170 and 2070 controllers, allowing users to upgrade existing intersections to a higher performance platform without replacing cabinet hardware.



KEY BENEFITS

- Supports a variety of applications through modular design
- Allows users to upgrade to a more modern platform without replacing cabinet hardware
- Enables compatibility with off-the-shelf products and intersection control software

PRODUCT DESCRIPTION

The McCain 2070LX Controller is designed to control signalized intersections, though it 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 controller's modular design allows various configurations based on the desired application.

The McCain 2070LX Controller has a robust Linux operating system that provides a flexible, open-architecture that can support software from multiple vendors.

McCain 2070LX CONTROLLER

STANDARD FEATURES

Security

- California Law AB 1906, Security of Connected Devices
- Operational hardware Encryption Engine

Operating System

- Linux

Modules

- 2070-1C CPU Module
- 2070-2E+ Field I/O Module
- 2070-4A Power Supply
- 2070-LX Front Panel Module

Microprocessors

- MPC8360E Freescale PowerQUICC II Pro

Memory

- 256MB DRAM
- 512MB NOR Flash
- 2MB non-volatile SRAM
- SD card slot

Backup Real-Time Clock (RTC)

- Maxim DS1390

ENGINE BOARD

Engine Board 4

- Linux Kernel: 5.10.105
- Processor: MPC8360 Rev 2.1 at 400 MHz
- Main Memory: 256 MB, 64 bits, 533.333 MHz
- Nor Flash Memory: 512 MB
- SRAM Memory: 2 MB
- Ethernet ports: 2 ports 10/100 Mb/s
- USB ports: 1 port USB 1.1

APPLICABLE STANDARDS

- Caltrans TEES (2020)
- ATC v6A.37

GENERAL SPECIFICATIONS

Style:	Caltrans 2070
Dimensions ² :	19"W x 7"H x 13"D
Form Factor:	EIA rack mount compatible
Power:	89 VAC to 135 VAC, 60 Hz (±3 Hz)
Environment:	Operating Temperature: -37°C to +74°C Humidity: 0 to 95% (non-condensing)
Weight ³ :	±12 lbs

¹See separate data sheet for details.

²Dimensions rounded to the nearest inch

³Based on final module selection

INTERFACES

Communication interfaces

- SDLC (5)
- Serial (ASYN) (7)
- ENET 1: 100 Base-T Ethernet switch, 1 uplink and 3 additional ports
- ENET 2: 100 Base-T Ethernet port dedicated for local communications (i.e. laptop or similar)
- USB port

Front Panel Interface

- Display: 8 lines x 40 characters
- Keyboard: 3 x 4
- Keypads: 4 x 4

Cabinet Interfaces

- C1S, C11S, and C12S rear connectors

SOFTWARE

Compatible with SWARCO McCain, Inc.'s Omni eX[®] Intersection Control Software¹.

OPTIONS

Available Modules

- 2070-2ct field I/O module for ITS (SP5)/NEMA (SP3) cabinet applications
- 2070-4A-220 international voltage: 190 VAC to 253 VAC, 50 Hz (±3 Hz)
- 2070-6A dual 1200 baud modem
- 2070-6B dual 9600 baud modem
- 2070-7A ASYN communication module