

# 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

## APPLICABLE STANDARDS

- Caltrans TEES (2020)
- ATC v6A.37

## GENERAL SPECIFICATIONS

Style:	Caltrans 2070
Dimensions <sup>2</sup> :	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 <sup>3</sup> :	±12 lbs

## 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<sup>®</sup> Intersection Control Software<sup>1</sup>.

## 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

<sup>1</sup>See separate data sheet for details.

<sup>2</sup>Dimensions rounded to the nearest inch

<sup>3</sup>Based on final module selection