

2070EN2 NEMA CONTROLLER

CABINETS

CONTROLLERS

DETECTION

PARKING

SIGNALS

SIGNS

SOFTWARE

SPECIALTY



Overview

McCain's 2070EN2 NEMA Controller brings together the best of the Model 2070 and NEMA controllers. The 2070EN2 controller is the industry-standard 2070E controller adapted for NEMA TS 2 Type 1 applications; offering users a means of upgrading existing intersection controllers without replacing cabinet hardware.

Benefits

- NEMA TS 2 Type 1 compatible
- NEMA and Caltrans compliant
- Easily upgrades installations that may otherwise require cabinet replacement
- Open architecture ensures compatibility with off-the-shelf products
- OS-9 real-time operating system is compatible with third-party firmware

Product Description

The McCain 2070EN2 NEMA Controller is designed in full compliance with Caltrans Transportation Electrical Equipment Specifications (TEES) 2009 and NEMA TS 2 2003 standards.

The 2070EN2 controller's open architecture, modular design, and advanced functionality bring together the best of the Model 2070 and NEMA worlds.

The controller's OS-9 real-time operating system affords a robust, flexible, and expandable platform that is compatible with McCain's 2033 Intersection Control software and is also compatible with third-party control software. McCain offers a variety of compatible software programs to easily integrate the 2070EN2 into an overall Intelligent Transportation System (ITS).

2070EN2 NEMA Controller

Standard Features

Operating System

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

Modules (standard, included)

- 2070-IE CPU module
- 2070-2N field I/O module
- 2070-3B LCD front panel module
- 2070-4N(A) power supply

Microprocessors

- CPU Module: Freescale MC68EN360, 32 Bit, 24.576 MHz microprocessor
- I/O Module: Freescale microprocessor, running at 24 MHz

Memory

- 8MB Flash memory
- 32MB PSRAM
- 2MB non-volatile SRAM

Backup real-time clock (RTC)

Applicable standards

- Caltrans TEES 2009
- NEMA TS 2 2003

General Specifications

Dimensions:	7" H x 19" W x 12" D (rounded to the nearest inch)		
Form Factor:	EIA rack mount compatible		
Power:	95 VAC to 135 VAC, 60 Hz (± 3 Hz)		
	+ 5 V	1.0 A	10.0 A
	+12 V Serial	0.1 A	0.5 A
	-12 V Serial	0.1 A	0.5 A
	+12 V ISO	0.1 A	1.0 A
Environment:	Operating Temperature: -37° C to +74° C Humidity: 0 to 95% (non-condensing)		
Weight:	12 lbs		

Interfaces

Communication interfaces

- SDLC ports (2)
- ACIA ports (5)
- 10/100 Mb Ethernet (4), 4 LEDs
- Datakey removable storage device, 8Mbits, (blue color)

Front panel interface

- Display: 8 lines x 40 characters
- Keyboards: 3 x 4 navigation and 4 x 4 data entry keypads
- C50J connector

Cabinet interfaces

- NEMA Port 1 C15S
- NEMA TS 2 Type A connector

Software

Compatible with McCain's 2033 intersection control firmware, see separate data sheet for more information.

Options

- McCain's 2033 Intersection Control software

Available modules

- 2070 ATC CPU module
- 2070-3A large 4 x 40 character display
- 2070-4A-220 international voltage: 190VAC to 253VAC, 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