

ATC eX 2070N2 NEMA CONTROLLER

CABINETS

CONTROLLERS

DETECTION

PARKING

SIGNALS

SIGNS

SOFTWARE

SPECIALTY



Overview

McCain's ATC eX 2070N2 NEMA Controller, TS 2 Type 1 compatible, is designed in full compliance with ATC (Advanced Transportation Controller) 5.2b standards and Caltrans Transportation Electrical Equipment Specifications (TEES) 2009. The ATC eX 2070N2 is a rugged, multitasking field processor and communications system based on the 2070 ATC CPU and 2070-2N Field I/O Modules that are easily configurable for a variety of traffic management applications in a shelf mount configuration. This unit is available as a complete ATC eX 2070N2 controller, or the 2070 ATC CPU module can be used with your existing McCain 2070LN2 controller to create a ATC eX 2070N2.

Benefits

- NEMA TS 2 Type 1 compatible
- NEMA and ATC standards compliant
- The controller's multitasking operating system supports a variety of applications
- Open architecture promotes compatibility with off-the-shelf products
- Easily upgrades current intersection hardware
- Available with McCain's NTCIP-compliant Omni eX® intersection control firmware (available separately)

Product Description

The McCain ATC eX 2070N2 Controller's primary function is intersection control but can be used for a multitude of applications based on the controller software. Expanded applications include: ramp metering, variable message signs, sprinklers, pumps, and changeable lane control.

The ATC eX 2070N2 is NEMA TS 2 Type 1 compatible and features SDLC capability.

The ATC eX 2070N2 NEMA Controller design is based on three major assemblies: the 2070 Controller, 2070 ATC CPU, and the 2070-2N module. The controller's Linux operating system provides a robust, flexible, and expandable platform that is compatible with multi-vendor application control software.

ATC eX 2070N2 NEMA Controller

Standard Features

Operating System

- Linux

Modules (standard, included)

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

Microprocessors

- Freescale PowerQUICC II Pro microprocessor

Memory

- 16MB Flash memory
- 128MB DDR RAM (expandable)
- 2MB non-volatile SRAM

Backup real-time clock (RTC)

Applicable standards

- ATC 5.2b
- Caltrans TEES (where applicable)
- All applicable NTCIP base standards
- NEMA TS 2

General Specifications

Dimensions:	19" W x 7" H x 13" D (rounded to the nearest inch)
Form Factor:	Shelf mount or 19" EIA rack mount
Power:	90 VAC to 135 VAC, 60 Hz (± 3 Hz) +5 VDC 1.0 A 10.0 A +12 VDC Serial 0.1 A 0.5 A -12 VDC Serial 0.1 A 0.5 A +12 VDC ISO 0.1 A 1.0 A
Environment:	Operating Temperature: -37° C to +74° C Humidity: 0 to 95% (non-condensing)
Weight:	± 12 lbs (based on final module selection)

Interfaces

Communication interfaces

- SDLC ports (2)
- Serial (asynchronous) (4)
- 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 ports (2)

Front panel interface

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

Cabinet interfaces

- NEMA Port 1 C15S
- NEMA TS2 Type A connector

Software

Compatible with McCain's *Omni eX* intersection Control software (NTCIP compliant). Also compatible with ATC compliant third party software. (All software products sold separately. See separate data sheets for details on McCain's software control programs).

Options

- McCain control software

Available modules

- 2070-3A large 4 x 40 character display
- 2070-6A dual 1200 baud modem
- 2070-6B dual 9600 baud modem
- 2070-7A dual RS232 serial ports
- 2070-7B dual RS485 serial ports



Standard 2070-2N Module Standard 2070 ATC CPU Module