

# ATC eX2 NEMA Controllers

TS 2 Type 1  
TS 2 Type 2



TS 2 Type 1



TS 2 Type 2

Cabinets

**Controllers**

Signals

Signs

Software

Specialty

## Overview

McCain's ATC eX2 NEMA Controller is an advanced, multi-application controller that simultaneously supports multiple software applications through a single platform. Designed in full compliance with NEMA TS 2 and ATC 5.2b standards, the ATC eX2 NEMA controller provides revolutionary flexibility and control. Best of all, the single ATC eX compliant housing can be configured for either TS 2 Type 1 or TS 2 Type 2 applications and is backward compatible with TS 1. This allows end users to upgrade existing intersections to a modern, high-performance platform without replacing cabinet hardware.

## Benefits

- Compliant with NEMA and ATC 5.2b standards
- Powerful CPU and generous memory configurations
- Multi-tasking ability minimizes the amount of hardware required at intersections
- Robust, open-architecture Linux platform supports application software from multiple vendors
- Wide variety of communication options for connectivity in any environment
- Multiple configuration options include NEMA TS 1, TS 2 Type 1, and TS 2 Type 2

## Product Description

The McCain ATC eX2 NEMA Controller is a revolutionary, multi-application controller.

The ATC eX2 NEMA controller features a wide variety of communications options, including a standard 3-port hardened switch, two USB ports, serial, and Ethernet for secure connectivity in any kind of environment. Quick data transfers, firmware upgrades, and log retrievals can be done via USB directly from the front panel.

The oversized screen features an auto-contrast making it easily legible in a variety of conditions.

The controller's Linux operating system provides a robust, flexible, open-architecture platform that can support application software from multiple vendors.

## Hardware Features

### Operating system

- Linux

### Microprocessor

- Freescale PowerQUICC II Pro microprocessor

### Memory

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

### Backup Real-Time Clock (RTC)

### Applicable standards

- NEMA TS 2-2003 v2.06
- ATC 5.2b
- All applicable NTCIP base standards

## Controller Interfaces

### Communication interfaces

- SDLC ports (2) including SP3 routed to NEMA TS 2 Port 1
- Serial (asynchronous) on front panel (3)
- Serial (asynchronous) on 2070 compatible modem slot (2)
- ENET 1: 100 Base-T Ethernet switch, 1 uplink, and 1 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: 16 lines x 40 characters
- Keyboard: 7 x 4 keypad (28 key)

### Cabinet interfaces

- NEMA TS 2 Type 1 Port 1 (SDLC)
- NEMA TS 2 Type 1 A connector
- NEMA TS 2 Type 2 A, B, C and D connectors

## Software

- Compatible with McCain's Omni eX® Intersection Control Software. (See separate data sheet for details.)

## General Specifications

Dimensions: TS 2 Type 1: 7" H x 10" W x 10.5" D  
TS 2 Type 2: 10" H x 10" W x 10.5" D  
(rounded to the nearest 0.1")

Form Factor: Shelf mount configuration

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: TS 2 Type 1: 7 lbs  
TS 2 Type 2: 10 lbs

## Options

- 256MB DDR memory expansion
- Optional modules
  - Various communication modules (2070 form factor)
  - GPS module
- Custom D connectors
- International Input Voltage: 190VAC to 253VAC, 50 Hz (± 3 Hz)

To learn more about  
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