

SWARCO

McCain ATC eX2 NEMA CONTROLLER

TS 2 TYPE 1
TS 2 TYPE 2

The McCain 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 McCain 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.



TS 2 Type 1

TS 2 Type 2

KEY 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

PRODUCT DESCRIPTION

The McCain ATC eX2 NEMA Controller features a wide variety of communication options, including a standard 3-port hardened switch, 2 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 auto-contrast making it 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.

McCain ATC eX2 NEMA CONTROLLERS

STANDARD FEATURES

Operating System

- Linux

Microprocessors

- Freescale PowerQUICC II Pro microprocessor

Memory

- 256MB Flash memory
- 256MB DRAM
- 2MB Non-volatile SRAM

Backup Real-Time Clock (RTC)

Applicable Standards

- NEMA TS 2-2003 v2.06
- ATC 5.2b
- NTCIP 1201, 1202 and applicable base standards

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

GENERAL SPECIFICATIONS

| | TS 2 TYPE 1 | TS 2 TYPE 2 |
|---------------------------|--|----------------------|
| Dimensions ¹ : | 10"W x 7"H x 10.5"D | 10"W x 10"H x 10.5"D |
| 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: | 7 lbs | 10 lbs |

¹Dimensions rounded to the nearest 0.1"

²See separate data sheet for details

INTERFACES

Communication Interfaces

- SDLC ports (2) incl. SP3 routed to NEMA TS 2 Port 1
- Serial (ASYN) on front panel (3)
- Serial (ASYN) on 2070 compatible modem slot (2)
- ENET 1: 100 Base-T Ethernet switch, 1 uplink, and 1 additional port
- ENET 2: 100 Base-T Ethernet port dedicated for local communications (i.e. laptop or similar)
- USB ports (2)

Front Panel Interfaces

- 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 SWARCO McCain, Inc.'s Omni eX® Intersection Control Software²

OPTIONS

- Custom D connectors
- International Input Voltage: 190 VAC to 253 VAC, 50 Hz (±3 Hz)

Available Modules

- Various communication modules (2070 form factor)
- GPS module