

ATC eX NEMA TS 2 Type 2 Controller

This specification describes the
Advance Traffic Controller (ATC) Standard
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PRODUCT SPECIFICATION

Part Number: M46539

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TABLE OF CONTENTS

1	Standards	3
1.1	Applicable standards	3
2	Components and features	3
2.1	Operating system	3
2.2	Microprocessors	3
2.3	Memory	3
2.4	Backup real-time clock (RTC)	3
2.5	Controller interfaces	3
2.6	Front panel interface	4
3	General Specifications	4
3.1	Dimensions	4
3.2	Form Factor	4
3.3	Power	4
3.4	Environment	4
3.5	Weight	4

1 STANDARDS

1.1 Applicable standards

- 1.1.1 Controller shall meet or exceed the following standards where applicable
 - 1.1.1.1 NEMA TS2-2003 v2.06
 - 1.1.1.2 ATC (Advanced Transportation Controller) 5.2b standard
 - 1.1.1.3 NTCIP (National Transportation Communications for ITS Protocol) 1201/1202

2 COMPONENTS AND FEATURES

2.1 Operating system

- 2.1.1 Linux

2.2 Microprocessors

- 2.2.1 Freescale MPC8360 PowerQUICC II Pro microprocessor

2.3 Memory

- 2.3.1 16MB NOR Flash memory
- 2.3.2 128MB DDR2 RAM (expandable)
- 2.3.3 2MB non-volatile SRAM

2.4 Backup real-time clock (RTC)

2.5 Controller interfaces

- 2.5.1 Communication interfaces
 - 2.5.1.1 SDLC port, SP-3 routed to NEMA TS2 Port 1
 - 2.5.1.2 Serial (asynchronous) on front panel (3)
 - 2.5.1.3 SP-1 and SP-2 on 2070 compatible communications modem Slot
 - 2.5.1.4 ENET 1: 100 Base-T Ethernet switch, 1 uplink, and 3 additional ports
 - 2.5.1.5 ENET 2: 100 Base-T Ethernet port dedicated for local communications (i.e. laptop or similar)
 - 2.5.1.6 4 High Speed USB v2.0 ports

2.6 Front panel interface

2.6.1 Display

2.6.1.1 16 lines x 40 characters

2.6.2 Keyboard

2.6.2.1 7 x 4 keypad (28 keys) = ESC (escape), NEXT, ENT (enter), YES, NO, ARROW DOWN, ARROW UP, ARROW RIGHT, ARROW LEFT; numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0; and letters A, B, C, D, E, and F

2.6.3 Cabinet interfaces

2.6.3.1 NEMA TS2 Type 1 Port 1 (SDLC)

2.6.3.2 A2 Connector

2.6.3.3 NEMA TS2 Type 2 A, B, C connectors of the TS1 standard plus the special configuration D connector

3 GENERAL SPECIFICATIONS

3.1 Dimensions

3.1.1 10" H x 10" W x 10.5" D (rounded to the nearest inch)

3.2 Form Factor

3.2.1 Shelf mounted

3.3 Power

3.3.1 89 VAC to 135 VAC, 60 Hz (± 3 Hz)

3.4 Environment

3.4.1 Operating Temperature -37°C to +74°C

3.4.2 Humidity 0 to 95% (non-condensing)

3.5 Weight

3.5.1 10 lbs