

ATC-2000

Advanced Traffic Controller

The ATC-2000 is the rack-mounted version of Oriux's ATC controller. These controllers are designed to be modular and based on the widest range of traffic controller standards in the world. Emphasizing ease-of-use and easy adaptability, the ATC-2000 traffic controller features Oriux's latest ATC engine board, a full line of communications options including multiple serial ports, multiple Ethernet ports, multiple USB ports, and a range of I/O options. The ATC-2000 takes all of the capabilities of the Oriux ATC-1000 controller and places them into a form that is compatible with standard cabinet racks. At 4" in height and 17" width (43.2 cm), with 19" wide mounting brackets (28.3 cm), the ATC-2000 will fit into a variety of standard cabinet styles, CalTrans 330 and also Oriux's own ASTC-12 Central Business District cabinet, the enclosure used so successfully throughout New York, San Salvador and Ecuador. Fully programmable from the front panel, via USB data base download, via ATC Link® direct connection, via IQ Central and Spinnaker, Oriux's central systems using either serial or Ethernet connections, the ATC-2000 controller is a powerful new option that can be used wherever NTCIP and ATC compatibility is required. Oriux's ATC line of controllers are the first in the world to include both interval-based and phase-based (NEMA) traffic engines running side-by-side. In fact with these controllers, it is possible to transition between phase-based and interval based operation on the fly, with no interruption other than a programmable short stint in Red Rest operation.

The ATC-2000 controller uses NTCIP communications and is entirely compatible with Spinnaker traffic management systems, as well as other NTCIP systems.

With its powerful processor, wide range of interconnection hardware, and easy-to-perform firmware update capability, the ATC-2000 is a controller that can be relied upon to stay current with the latest ITS management schemes and algorithms.



Features & Benefits

- 40 character x 16 line Backlit LCD Display with optional heater
- Linux Operating System with memory management for process isolation
- Compliant with NTCIP 1201, 1202
- ATC 5201 Modem Slot
- 300MHz Freescale Power Quix 2 processor
- Four independent 100 Base-T Ethernet ports
- Two high speed USB port
- 32 key soft-touch keypad for front panel programming
- NTCIP protocol-Spinnaker, TranSuite & MIST Central Software

Specifications

Dimensions	48.3 cm wide x 26.7 cm deep x 17.8 cm tall (19" x 10 1/2" x 7")
Weight	9 to 11 pounds (4 to 5kg) depending on which I/O modules and comms hardware are installed
Power Requirements	89 to 135VAC 50Hz/60Hz ± 3 Hz
Environment	-40 °F to + 176°F or -40°C to +80°C 0-95% relative humidity Exceeds NEMA/ATC/CALTRANS TEES 2009
Memory	16MB Flash memory standard, 64MB SDRAM
Applicable Standards	NEMA TS2-2003 ATC 5.2b All applicable NTCIP base standards
NTCIP Compliance	The traffic application software is NTCIP software compliant, ensuring easy integration into any NTCIP or ITS traffic control system. The ATC controllers also interface with IQ Central®, Oriux's central control system, which interfaces to both legacy controllers as well as other NTCIP compliant devices.
Firmware Updates	Via USB port or via ATC Link Software
I/O Module	Supports 2070-2A 2070-2E TS2 Type 1
Applications	Greenwave

Operating System Linux v2.6.2.0

Computer Interfacing Intersection configuration programming is easily performed in the field, using the provided laptop computer interface software (ATC Link). ATC Link can be connected directly via an Ethernet or a serial cable, or it can be used to store the configuration on a portable USB "flash drive," which can then be downloaded to the device in the field in seconds. Or programming may be downloaded across a network via an NTCIP compliant central system, such as IQ Central or Spinnaker.

Communications: Connectivity is easily achieved using a variety of communications options:

- Four 10/100 Base-T Ethernet ports
- Two high-speed USB port
- One RS4 • 85 Port for SDLC
- Three RS232 Ports for serial communication
- 2070 Modem slot

These physical port options allow for interfacing to a variety of communications infrastructures

- Existing 1200 baud twisted pair
- High-speed serial (RS232) up to 115kbps
- Fiber-optic modems
- Wireless systems
- LAN/WAN applications

Additional Features:

- Power Monitoring
- Power Supply voltages available through the LCD
- Internal Temperature Sensor