# ATC-2000
# Advanced Traffic Controller

**PEEK**



The ATC-2000 is the rack-mounted version of Peek Traffic'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 Peek Traffic'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 Peek Traffic 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 Peek'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, Peek'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.

Peek Traffic'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 Peek Traffic's IQ Central® and Spinnaker traffic management systems, as well as TransCore's TranSuite® and MIST central software.
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

- 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
- Speaks NTCIP protocol—Spinnaker, TranSuite & MIST Central Software

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| **Dimensions** | 48.3 cm wide x 26.7 cm deep x 17.8 cm tall (19" x 10 ½" 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— 1MB SRAM |
| **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®, Peek Traffic's central control system, which interfaces to both legacy controllers as well as other NTCIP compliant devices. |
| **Firmware Updates** | Via USB port or via IQ Link |
| **I/O Module** | Supports   2070-2A 2070-2E TS2 Type 1 |
| **Applications** | Greenwave Voyage |

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| **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 RS485 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