

# 3000E™ Series Traffic Controllers

NEMA Traffic Signal Controllers

## Traffic Control

The 3000E Series is one of a global range of Traffic Signal Controllers developed by Peek Traffic to meet the differing demands of governments, traffic authorities and vehicle users world-wide.

The 3000E Traffic Signal Controller is designed specifically to meet US NEMA standards and is an enhanced version of the Peek 3000 Series Advanced NEMA Traffic Controller. The proven software of the current 3000 series controller has been improved with a new user interface and complimented by a new front panel layout. The rugged enclosure design facilitates easy access to all components from the front of the controller resulting in simpler maintenance and adaptation to ITS applications.

The 3000E utilizes the proven Motorola 68302 32-bit processor with extended memory for data logging. An efficient power supply and the use of surface mount technology and HCMOS logic provides added quality and improved reliability.

Available in a variety of configurations exceeding both NEMA TS/1 and TS/2 standards, the 3000E unit offers extensive customized D module configurations that are directly compatible with legacy Peek Transyt / TCT and other vendors' D modules.

In the TS/2 Type 1 configuration, the 3000E controls all inputs and outputs through the Port 1 high speed EIA-485. In the TS/1 and TS/2 Type 2 configuration, the unit includes the features of the TS/2 Type 1 unit, plus the TS/1 standard MSA, MSB, MSC connectors, and various available D modules, for downward compatibility with NEMA TS/1 cabinet facilities. Both models also provide a Port 2 EIA-232 terminal and a Port 3 telemetry interface capable of supporting protocols for various systems. For example, the Port 3 slot can host an Ethernet or an IQ Central translator card.



3000E TS/2 Type 1 Controller



3000E TS/2 Type 2 Controller

## Features

- Enhanced functionality and user interface
- 8 row x 40 column character display
- Smart keyboard with user customized menu
- Extensive context sensitive help screens
- NEMA TS1 and TS2 standards compliant
- NTCIP compliant
- 16 vehicle and pedestrian phases
- 16 vehicle and pedestrian overlaps
- 4 rings and 8 barriers
- Compatible with IQ Central®
- Optional Ethernet

## Additional Features

Property	Description
Built-in special capabilities	Multiple sequences including double clearance overlaps, not ped and exclusive ped overlaps, 4 timing plan sets, dynamic third max for each phase, extensive copy and diagnostic utilities
Pedestrian override	Allows over-timing of phases due to peds, without skipping or short timing other phases during coordination
Cycle-based measure of effectiveness	Provides data on volume, speed and green utilization of phases
Automatic full-time diagnostics	Power On Self Test (POST) diagnostics to verify microprocessor, memory, and programming. Continuous automatic diagnostics to verify essential elements of controller operation. Dynamic testing of memory and processor. Logging of controller, BIU, MMU failures and detector inputs with descriptive error routines for each test.
Systems compatibility	Optional modem for hardwire communications, capable of operating in existing Bell 202 systems at 1200 baud and/or private line metallic systems at 9600 baud. Compatible with IQ Central, Smartways, CLMATS, MATS, NTCIP, and many UTCS systems
Super twist LCD display	320 character (8 row - 40 column) adjustable contrast and timed backlight that automatically illuminates when any key is pressed. The LCD also supports 64 - 240 pixels for graphics.
Smart keyboard	Audible (selectable) and tactile feedback, group copy, context sensitive help and a user customized menu to eliminate unnecessary menu items
Printer, computer remote control	EIA-232 (Port 2) Data Terminal Equipment (DTE) port for printer, unit to unit data transfer, upload and download with personal computer, dial-up modem, and radio
Backups	Controller databases can be backed up to optional non-volatile EEPROM Cards

## Specifications

Property	Description
Control	16 vehicle and pedestrian phases 16 vehicle and pedestrian overlaps Programmable 4 rings and 8 barriers Steering of outputs
Coordination	120 patterns, 24 cycles, 5 offsets/cycle, 24 splits, automatic permissives, 3 offset seeking modes, offsets to beginning or end of artery green, multi-arterial capability, fixed and floating force-offs, alternate timing plans by COS, split entries in seconds or percent. Auto calculation routines. Adaptive split selections.
Preemption	6 Preempt inputs with programmable priority
Detectors	Assignable ped call inputs. 32/64 vehicle detector inputs with switching, stretch, delay and stop bar detector Lock/non-lock function by phase and input
Calendar scheduler	99 year clock with 220 events, 20 base weeks, 32 day plans, 50 exception days, 255 circuit functions by TOD, programmable Daylight Savings Time, time clock reset input
Dimensions	10.86H x 13.7W x 8.84D inches (275.5H x 349.74W x 224.34D mm)
Weight	12.6 lb. (5.72 Kg)
Temperatures	-30°F to +165°F (-34°C to +74°C)
Options	<ul style="list-style-type: none"> <li>• NEMA overlap program card</li> <li>• Supercap backed RAM</li> <li>• Various modularized D connectors</li> <li>• Hardwire interconnect</li> <li>• Port 3 communications options:               <ul style="list-style-type: none"> <li>- Integral fiber optic interface (MM 850nm)</li> <li>- Integral DSP modem (1200 / 9600 baud)</li> <li>- Auxiliary EIA-232 (1200-19,200 baud)</li> </ul> </li> </ul>



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