

## ADR-2000 Plus™

### Portable Traffic Counter/Classifier

The Peek ADR-2000 Plus provides optimal functionality as a portable or semi-permanent unit. In its basic configuration as a counter/classifier, 2 or 4 road tubes are available. With optional internal sensor modules, the ADR-2000 Plus can monitor up to 42 inputs using a combination of loops, piezos or contact inputs.

Available data types include per vehicle records, per lane data, binned vehicle classification by axle, speed, length, gap, headway or combinations of the above. Vehicles may be classified according to the FHWA Scheme "F" or a user-defined, custom classification scheme.

Water-barrier air switches eliminate the worry of internal water exposure from failed road tubes. Peek's weatherproof housing provides a barrier against the elements of nature, helping Peek to set the standard for durability and longevity in our entire ADR line of counter/classifiers. Quality control is based on ISO9000 standards of operation, enabling Peek to provide environmental chamber tested, inspected, high-quality products.

Each unit can perform up to 8 studies, plus per vehicle records, with up to 356 bins of data, for example, classification by speed, by lane. The type, configuration and format of data to be collected can be custom programmed or selected by the user from menu-driven choices.



#### Features

- Portable traffic counter/classifier
- Simple to setup and operate
- 2 MB onboard memory
- PCMCIA memory option for additional storage
- Multilane operation up to 42 inputs
- Scheme "F" or user-defined classification
- Solar power option
- US standard or metric units
- Water-resistant air switch
- Weatherproof housing
- Integral keyboard with 4 line LCD readout
- Separate battery compartment
- Battery "sentinel"
- Auto daylight savings time

## Specifications

Characteristic	Description
Housing.....	Rugged, stackable interlocking weatherproof cast aluminum housing and integrally cast carrying handle supplied with brass body lock, two matching keys
Weight.....	Less than 17.6 pounds (8.0 kg) with battery
Size.....	6.5"H x 9.5"W x 13"D (162mm x 242mm x 332mm)
Temperature	-40°F to +165°F (-40°C to +74°C)
Display.....	20 digits x 4 line liquid crystal display
Inputs.....	Up to 42 sensor inputs plus four water-barrier air switches
Counter Rate.....	Handles 200 counts per second per input
Interval.....	1, 2, 5, 6, 10, 15, 30 and 60 minutes 2, 3, 6, 12 and 24 hours, real time events Four daily peak periods available
Study Period.....	Preset 24, 48, or 72 hours, 7 days . . . or continuous
Microprocessor.....	Intel 80C186
Capacity.....	Approximately 3,280 days of volume data
Accuracy.....	± 1 count per record per second input
Autonomy.....	90 days, indefinite with solar option
Battery.....	6 volt 10 amp-hour rechargeable, sealed lead-gel battery protected by an automatic disconnect at 5.3 volts Note: Battery is retained in a separate compartment sealed from electronics and individually accessible for maintenance.
Communications.....	Selectable RS-232 serial baud rates between 300 and 19,200 baud via UL and CSA approved female socket
Options.....	- Solar power option - Up to 24 loop inputs, 24 piezo inputs, or 48 contact inputs - 8 or 16 WIM inputs - PCMCIA memory card socket

## Operational Characteristics

The Peek ADR-2000 Plus is a self-contained, portable multiline automatic vehicular traffic counter/classifier that can be set up and operated via the integral smart keypad and interactive liquid crystal display. Alternatively, full operational control can be granted either remotely via telemetry or directly in the field via a computer with appropriate software. Easy to use menus allow configuration flexibility. Preloaded setup files reduce confusion and operator errors. Collected data is held secure from unintentional erasure or loss.

## Physical Description

The Peek ADR-2000 Plus is packaged in a self-contained weatherproof cast aluminum enclosure. The enclosure is sealed against environmental precipitation (IP67 accidental submersion up to three inches). The ADR-2000 Plus is expandable by function with individual plug-in modules. Compact, individual plug-in sensor modules are Eurocard in size with DIN standard connectors. Electrical connections (external) are via rear mounted UL and CSA approved weatherproof connectors. An internal 6 volt 10 amp hour rechargeable battery is supplied. The ADR-2000 Plus provides immediate access to the separate battery compartment without tools. Power options include a lid mounted integral solar power and a battery charger. An internally-supported hardware real-time clock keeps time and date, regardless of unit power, for up to ten years. The clock can also be set to adjust automatically for Daylight Savings Time.

## Peek ADR-2000 Plus Supportive Software

Of importance to the user of modern counters/classifiers is the operating and reporting software, which supports, controls and formats the resultant data. A user-friendly Windows software package is available to complement the Peek ADR-2000 Plus. This software is the Traffic Operations Processing Software (TOPS) program, which is available from Peek.

The TOPS program provides multi-file processing, stores data files into a single database for easy file sharing among TOPS users, allows for edit and preview of reports before printing, provides for both ADR and 241 data processing protocols, enables remote or local setup of Peek ADR units and collection of data by direct manual connection or by the added functionality of automatic telemetry polling of field sites via modem connection (auto polling and weigh-in-motion support are add-in options). The TOPS program reads all files and generates a suite of daily, weekly and monthly reports. A user-definable classification function, within the program, provides the ability to customize classification and to transfer the new scheme to the Peek ADR-2000 Plus. Processed data may be exported to various other software packages.

## Quality Assurance Testing

Each unit is individually tested for correct operation during a computer controlled environmental chamber test cycle, based on the NEMA TS-2 standards. All input circuits have been designed and tested to the NEMA TS-2 standards for surge (lightning) protection.

## Two Year Limited Warranty

Peek Traffic warrants this product against manufacturing defects in materials and workmanship for two years from date of shipment from Peek. Specific contracts and regional laws may vary or alter these terms.

***Making the World a Safer Place to Travel™***

<http://www.peek-traffic.com>

Please contact Peek Traffic Corporation for customer inquiries about any of the company's Traffic Control, Data Collection, Enforcement, Detection, or Tolling products. To learn how Peek Traffic is making the world a safer place to travel, visit the Peek Traffic web site at <http://www.peek-traffic.com>.

The information contained in this publication is presented for informational purposes only, and while every effort has been made to ensure its accuracy, the information is not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. No license is granted by implication or otherwise to any of Peek Traffic's intellectual property. Peek Traffic reserves the right to alter or revise any of its products or published technical data relating thereto at any time without notice.

Copyright © 2004 Peek Traffic Corporation, A Quixote Company. All rights reserved. Printed in the United States.

**Peek Traffic Corporation**

A Quixote Company  
2511 Corporate Way  
Palmetto, Florida 34221  
phone: (941) 845-1200  
toll free in the US: 1 (866) 260-7335  
fax: 1 (941) 365-0837