

# StopWatch

## Real-Time Counter/Classifier

### More Traffic Data Without More Hardware

It's a fact - traffic volumes and congestion are growing faster than roadway capacity to handle them. Add an occasional incident, or worse an emergency evacuation, and you have a traffic crisis. Traffic can't be managed if you don't know what it's doing at the moment. We have the technology - the problem is the cost to install and maintain new sensors.

There is a way to monitor the situation in realtime using hardware you may already have installed to collect historical traffic data StopWatch+™

StopWatch+ was developed to meet the need for real-time data using existing data collection hardware. It is a simple software add-on to the already advanced and proven Oriux Automatic Data Recorder (ADR). With StopWatch+, the ADR continues to collect historical data for planning and funding purposes while at the same time reporting current traffic data to traffic centers and Websites.

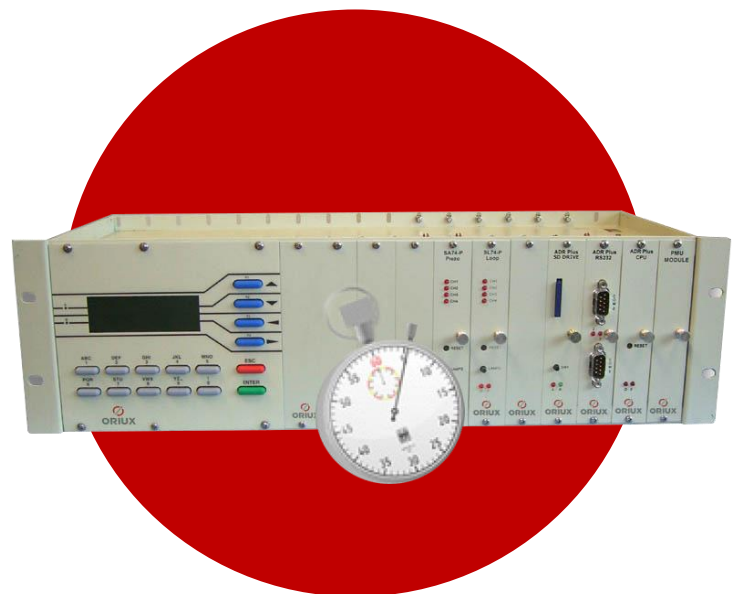
StopWatch+ provides data in a simple format for import into existing systems or software to monitor traffic, events and occurrences. Since it reports real-time data, not stored files, the application has no stand-alone end user software for viewing data. A simple communications protocol allows StopWatch+ to be easily interfaced with a variety of data systems such as:

#### Traffic Management Centers

- City or State-operated
- Routine daily traffic monitoring
- Traveler information and advisory services
- System operations performance measures

#### Emergency Response Systems

- Evacuation
- Weather and natural disasters
- Man-made disasters



#### Incident Management Systems

- Detection and monitoring of traffic accidents
- Road closures and work zones
- Special event planning and control

StopWatch+ is such a valuable addition to ADR function that it is built right in to every new ADR and requires only a site, city or state-wide license fee for activation. Once activated, the StopWatch+ application enhances the operation of the ADR to also process Count, Average Speed and Occupancy data in intervals from 10 seconds to 60 minutes. This enhanced operation is totally independent from the ADR's historical data collection studies. With its dual communications ability, data from both the historical study and real-time intervals can be monitored simultaneously. StopWatch+ can be configured to process any combination of count, average speed and occupancy data on up to 16 lanes (or 32 overall flows). The StopWatch+ data can be optionally combined into individual flow totals, lane (or sensor array) totals, directional totals or an overall site total.

## Specifications

Count rate	200 counts per second (per input)
Reporting intervals	10, 15, 20, and 30 seconds 1, 2, 3, 4, 5, 10, 15, 20, 30, 60 minutes
Data Format	Data must be imported into existing traffic monitoring system software for viewing (cannot be viewed with TOPS)
Accuracy	±1 count per record per sensed input
Communications	RS232 serial port with selectable baud rates between 300 and 19,200 via UL and CSA approved female socket, optionally available with up to 5 ports available and baud rates up to 115,200

## System Flexibility

StopWatch+ is included in every Oriux ADR-3000 Plus with firmware version 5.4 or later; manufactured September 2004 or later. Contact Oriux Sales or Customer Service to activate StopWatch+, which can be performed remotely.

For further details on the ADR models, please see the ADR product information sheets. Once activated in the ADR firmware, StopWatch+ must be configured. A setup utility called "StopWatch+ Monitor" is provided to assist in configuration.

Data from StopWatch+ can be retrieved over the comport at the user-specified time intervals. The data must be imported into third party software systems. Data from StopWatch+ cannot be viewed in Oriux's TOPS™ software.

## Features & Benefits

- One device performs the work of two, leveraging existing investment in traffic data recorders.
- Reduces maintenance by not having separate systems for historical and real-time data needs.
- Easy set up and operation.
- Operates on the reliable, proven, industry standard ADR-3000.
- Real time StopWatch+ application runs simultaneously and independently.
- Both the historical and StopWatch+ applications can be configured independently.
- Dual communications enable simultaneous monitoring of both historical and real-time data (dual comm card required in ADR).
- Can be retrofitted into existing ADR Plus products.
- Low power consumption for deployment at remote sites.
- Can process data in both directions of a lane allowing monitoring of lane reversals.
- Proven operation in state-wide deployments.

THE SAFETEA-LU REAL-TIME SYSTEM MANAGEMENT INFORMATION PROGRAM US  
Code of Federal Regulations, Title 23, Section 303

IN GENERAL.—The Secretary [of Transportation] shall establish a real-time system management information program to provide, in all States, the capability to monitor, in real-time, the traffic and travel conditions of the major highways of the United States and to share that information to improve the security of the surface transportation system, to address congestion problems, to support improved response to weather events and surface transportation incidents, and to facilitate national and regional highway traveler information.