

**AUTOTEST**  
Products Pty Ltd®

# **Auto**Monitor

Complete Vehicle Condition Monitoring

Minimise Vehicle Rollovers  
Track Your Fleet Effectively  
Monitor Vehicle and Driver Performance



# AutoMonitor

## Complete Vehicle Condition Monitoring

Efficiently and safely managing vehicle assets is of great concern to fleet owners, who need to know the real-time location and monitor constant performance of fleet vehicles and drivers. Access to up-to-the-minute data enables fleet owners to plan more efficiently and better utilise specific vehicles.

### Safety

Safety of drivers, vehicles and other road users is paramount. Where passenger vehicles such as buses are concerned, safety takes on a whole new dimension as minimising the risk of injury or loss of life in a rollover or collision is essential to maintaining passenger and public confidence.

Vehicle safety and dynamics need to be constantly monitored and measured, allowing immediate feedback to the vehicle owner outside of the regular maintenance inspection cycle.

Logging of driver hours is often a mandatory safety requirement and while equipment is available to do this it often ignores additional safety features such as vehicle dynamics and location monitoring.

### AutoMonitor Information and Safety System

AutoMonitor from AutoTest uniquely incorporates three vehicle information and safety technologies including tachograph vehicle dynamics, and GPS-based tracking into one easy to use device.

AutoMonitor is a compact, all in one, space saving dash mounted solution that enables the vehicle owner to track the vehicle, keep an electronic logbook and measure vehicle dynamics to provide outputs such as brake and suspension condition, driving hours and over-speeding. Data logged can be securely accessed via internet, or downloaded directly to a PC via communication port.

### Driver Alerts

AutoMonitor constantly monitors vehicle dynamics and alerts the driver when a vehicle is likely to roll over. This enables the driver to make informed decisions when applying defensive driving techniques to avoid impending danger.

- In-vehicle personnel visual and audio alerts
- Alerts driver when vehicle becomes unstable and rollover is likely



Under normal conditions where vehicle is stable the green light will be illuminated.



When the likelihood of rollover reaches 40%, the yellow warning light will turn on.



When the likelihood of rollover is above 60%, the red 'danger' light will illuminate, and the unit will sound a high-pitched alarm.

- Alert events are recorded in the device, which can be later downloaded to a PC
- Alert sensitivity can be adjusted to suit specific topography and training needs.

### Vehicle Condition and Safety Monitoring

Provides an economical method of measuring mass and safety monitoring

- Potential rollover events
- Axis of vehicle including gyroscopic effects
- Gross mass of the vehicle dynamically
- Suspension condition
- Long term brake efficiency

### Driver Monitoring

Provides valuable data to monitor and evaluate driver and performance, and aids in the promotion of best driving practice.

- Driver identification via smartcard
- Driving style
- Hours of operation for each driver
- Speed and over-speed events

### Vehicle Location

GPS enables the vehicle owner to always be aware of its location

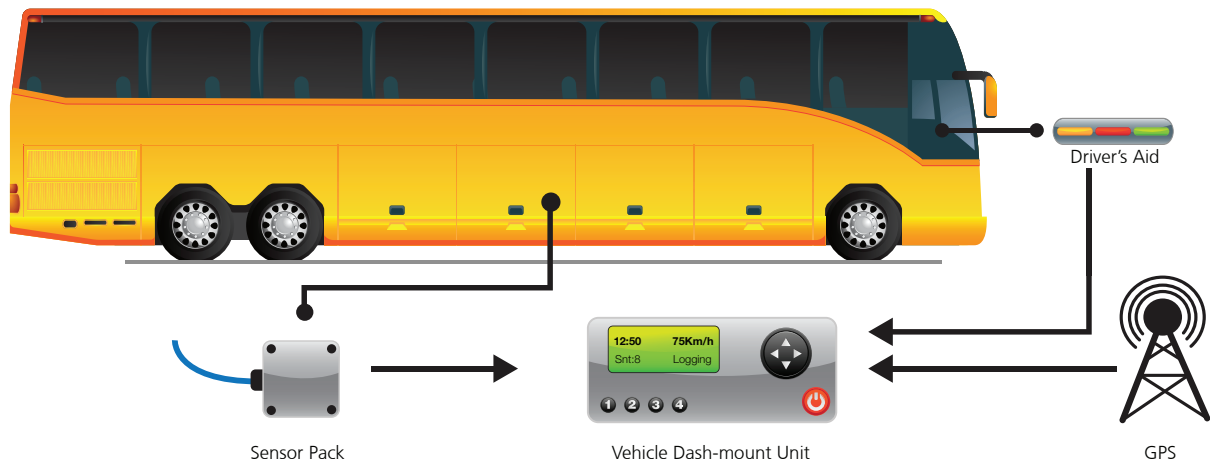
- Position and tracking data

### Data Records

Record keeping and analysis is simple and convenient

- Print recorded data
- Transmit data to a central database via the internet for analysis





#### Minimise Vehicle Rollover Risk

- Increases driver and passenger safety

#### Track Your Fleet Effectively

- Know your vehicles location at a glance

#### Monitor Vehicle and Driver Performance

- Know dynamics, brake and suspension data
- Monitor driver performance in real time

AutoMonitor is a fully featured vehicle information and safety system. In addition to the common features of a vehicle tracking system, this innovative device comes with enhanced functionality and provides the vehicle owner with all essential operational and safety information

#### Speed, Distance and Engine Hour Measurement

AutoMonitor automatically measures and calculates mileage of the vehicle, as well as engine hours and speed exceedances

#### Digital Input/Output

AutoMonitor can report the status of four digital sensors, for example transmission position, engine status or other diagnostic information in addition to vehicle speed, location and dynamics information. It can communicate with the vehicle's computer (ECU) via CAN Bus and retrieve diagnostic codes (DTC).

#### Email and SMS Alert

AutoMonitor can send an alert via SMS and email to the user or to a supervisor if the vehicle violates any of the preset limits, for example speed, operation time or service requirements

#### Tracking Device

AutoMonitor's tracking system allows the vehicle to be tracked in real-time using the GPS via Internet.

#### Driver Management

AutoMonitor provides the driver/operator with immediate safety benefits such as driving hours, speed and rest time. It maximises safety by monitoring dynamic vehicle stability and proactively alerts the driver of any behaviour outside a safe driving "window".

#### Vehicle Condition

AutoMonitor is capable of providing the vehicle owner with long term outputs including valuable service information such as detailed speed log, suspension/shock absorber condition, brake condition, load characteristics and engine diagnostic information via CANbus.

#### Real Time Monitoring

AutoMonitor enables the driver/operator to see the vehicle position and condition displayed in real time on a map on any Internet enabled device. The reporting interval from the vehicle is set in accordance with the users requirements.

#### History Playbacks

AutoMonitor enables the user to load and replay the vehicles route and condition via a sophisticated web-based interface.

#### Event and Fault Loggin

AutoMonitor constantly monitors a range of events and faults, and keeps them stored in the internal memory.



AutoTest Products was awarded the Gold Award for AutoMonitor - AutoTest's complete vehicle condition monitoring system in the Heavy Vehicle Category at the Society of Automotive Engineers (SAE) Australasia 2014 Mobility Engineering Excellence Awards.

# AutoMonitor

Complete Vehicle Condition Monitoring

## Specifications

Tri-axial acceleration resolved to	Forward, Lateral and Vertical vectors	
Maximum angular velocity	± 400 degrees per second	
Angular velocity accuracy	1%	
Maximum acceleration/acceleration	± 2g	
Acceleration accuracy	<2%	
GPS Receiver type	50 channels GPS L1 frequency, C/A Code	
Horizontal position accuracy	GPS	2.5m
Time-to-first-fix	Cold start	26s
	Warm start	26s
	Hot start	1s
Frequency response	0 - 5Hz	
Temperature stability	Internally compensated	
Temp. compensation accuracy	5%	
Outputs	Speaker: 85 DBA @1Metre	
Warning lamps	40 mcd	
Danger lamps	70 mcd	
Digital interface	RS232c - Standard 9 pins	
GPRS interface	Broadband modem	
Live GPS tracking - resolution	2m	
Historical GPS	Audit trail analysis	
Memory retention	5 years	
Radiated RF emissions	SAEJ1113 Class 3	
Power supply	12 - 32V dc Nominal	
Compliant with	SAE J1455	

Note: Product appearance and specifications are subject to change without prior notice.



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