



WHEN DOES AN INCIDENT BECOME AN ACCIDENT RISK?

Emergency vehicle operations carry inherent risks and dangers, in particular at the driver/operator to vehicle/equipment interface. Unreported incidents, the 'just misses', are the dormant risks that eventually surface into undesirable extreme events we call accidents.

So how can we best respond to these risks?

ACTIVE SAFETY MANAGEMENT

ACCIDENT & INCIDENT DATA RECORDING

It all starts with data capture and analysis, which enables us to:

- Assess what happened during an incident and accident, and even more importantly what actions lead to the event occurring.
- Use critical information to take action to prevent these incidents and accidents in the future.

THE MOTEC ACCIDENT DATA RECORDER (ADR)

The ADR has been specifically designed to capture this critical data from vehicle incidents and accident, enabling informed decisions on incident / accident prevention.

The ADR makes Active Safety Management possible, by:

- Making visible vehicle incidents and 'near misses' that don't normally get reported.
- Enabling more effective driver feedback and education.
- Enabling effective remedial actions to reduce the risk of incidents turning into accidents.

Reducing the impact and frequency of incidents, accidents and events will contribute to achieving better OH&S and business performance outcomes.

ENABLING ACHIEVING KEY OUTCOMES

ADR enabled data logging, and i2 data analysis, are essential tools to achieving improved performance in Key Result Areas (KRAs) which include:

- Improved personnel safety and OH&S requirements.
- Improved vehicle integrity and safety.
- Improved productivity.
- Reduced vehicle fleet costs of operation, servicing and downtime.
- Positively influencing driver behaviour which contributes to all KRAs performance.



ENABLING THE ACHIEVEMENT OF KEY OUTCOMES

**DATA LOGGING & ANALYSIS
ENABLES INFORMED DECISIONS
& EFFECTIVE FLEET MANAGEMENT**

ACCIDENT DATA RECORDER (ADR) FEATURES

ADR features include:

- Three axis 'g' sensor measuring from – 150 g to +150 g:
 - Programmable logging trigger level
 - Status light indication for high severity events
 - G-force loads profile experienced by the vehicle & equipment & load
 - G-force loads profile vehicle occupants were exposed to
- Logs up to 10 individual incident / accident events
- CAN BUS capture from the vehicle and logging of up to 20 data channels
- LED indicators for power, status and to indicate logged events
- Continued logging during power loss for 30 seconds and LED indication for up to 10 minutes
- Event triggered pre-event data capture – two seconds
- GPS (option) provides incident / accident time/date/location data
- ADR Manager software (MS Windows) for ADR programming and data download, with password security
- Optional i2 Data Analysis software (MS Windows)
- ADR data can be accessed, with a portable PC, at the scene of an emergency vehicle incident/accident to assist with scene severity assessment
- ADR can provide data to enable assessment of possible vehicle structural degradation from multiple high load / extreme event impacts

SPECIFICATIONS

Communications

CAN BUS (configurable), RS232, and USB (PC comms.)

Power

Power Supply 6V – 30V, Current Draw 1A peak, 200mA steady state

Continued logging during power loss for 30 seconds and LED indication for up to 10 minutes

General

Connector: 1 x 11 pin double density MIL / Autosport

Case Material: Anodised aluminium

Case Dimensions: 73.5 x 45 x 27mm

Weight: 110g



OPTIONAL VEHICLE USAGE & DRIVER BEHAVIOUR MONITORING PRODUCTS

Expand ADR event capture capabilities with the addition of a MoTeC Vehicle Operation Monitoring System (VOMS) data logger to expand capabilities and benefits to include:

- Driver behaviour and performance monitoring:
 - Driving style – e.g. acceleration, braking and cornering severity.
 - Reward positive behaviour
 - Improve driver skills and performance
 - Improve safety and reduce operating and servicing costs
- Vehicle usage and performance monitoring, including:
 - More data prior to an incident / accident event
 - Fuel usage – total and against types of operations
 - Idling time – add to fuel usage and servicing costs
 - Engine RPM use profile

Additional Capability Products

VOMS + GPS



121 Merrindale Drive,
Croydon South
VIC 3136 Australia

Ph: 03 9761 5050

commercial@motec.com.au

www.motec.com

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