

# atlasMX-720 for construction

blind spot free vision for safe operation



## use real-time imagery

to improve driver awareness and avoid accidents

## increase safety on-site

by lessening contact events for personnel and machinery

## maximise machine and site uptime

by minimising accidents and claims

## increased safety

Machine operators experience challenging weather conditions, difficult terrain and busy construction sites on a daily basis. At the same time, poor visibility around their vehicles impacts their movement, which often results in accidents.

Implementing blind spot free surround vision **minimises risks** while operating these machines. By adding 360° vision with topVIEW and **object detection capabilities**, safety around these vehicles improves significantly.

With improved visibility, the **number of accidents drops** and fewer injuries occur, whereby machine uptime increases and **insurance claims are lowered**.

If an incident should occur, the **extensive recording capability** of the atlas system provides all information for a comprehensive investigation. High definition footage can be used to review the incident **from all angles** and to investigate the site of the incident and the actions that took place prior to the event occurring.

The atlasMX-720 vision and event recording system enhances safety for construction sites' operators and equipment. **Significant savings** from claim mitigation, site uptime and insurance premium reduction add to the safety benefits making the atlasMX-720 a **must-have solution** for forward looking construction companies.

# atlasMX-720



## minimising risks

The atlasMX-720 supplies vision at 180° horizontally from every camera. Imagery is recorded in full high definition using HDR [High Dynamic Range] sensors. This ensures **premium quality** in even the harshest extremes of temperature [+65°], rain [IP69K], and dusty bright sunlight. The operator gains blind spot free surround vision, and topVIEW enables a complete view of the vehicle with a single glance.

Object detection and automatic alarming, both in and outside the machine, add to the vision benefits of the system, further **lowering the risk** of serious or fatal injuries on-site.

A **fifth camera is incorporated** into the system to be used for a variety of purposes, e.g. for a high view of a dump truck's load bay, or a low view of a cutting edge, etc.

In the case of an event, imagery can be **retrieved immediately** via cellular data transfer. This enables immediate deployment of correct emergency response to the site, and faster investigation to rectify possible safety issues for the future.

## system benefits

- » **Incident Response:** Fast retrieval of imagery gives an instant view of reported incidents. A correct response can be activated immediately [e.g. cutting tools or lifting equipment].
- » **Incident Review:** Review incidents, identify their cause, and improve safety regulations as a result.
- » **Audit Safety Inspections:** Random auditing encourages correct procedures to be followed and leads to safer equipment and less accidents on site.
- » **Claim Mitigation:** Utilise footage to mitigate accident claims and to demonstrate safety checks were correctly performed.
- » **Site Safety:** topVIEW enables total safety around the vehicle with one glance when moving off from stationary and manoeuvring into tight spaces.
- » **Ease of Use:** The system is designed to operate autonomously without any driver interaction [no menus to follow]. Gridlines on each camera also allow easy estimation of distance to objects.
- » **Compensation Claims:** Fewer accidents means less expensive compensation claims.
- » **Machine and Site Uptime:** Achieve savings by reducing site disruptions, downtime for repair, and costs for replacement vehicle hire.
- » **Insurance Premium Reduction:** Premiums could potentially be reduced/renegotiated based on the added security provided by the system and the potential reduction in accidents and claims.

## system highlights

### high quality imagery

- » Footage is recorded in **high definition** using **High Dynamic Range** [HDR] sensors for best possible image quality, even in poor lighting conditions.

### environment-proof components

- » The system utilises four smartMX-180 cameras built to withstand the **harshest environments** and **high pressure** wash downs [IP69K].
- » Ratings for **temperature** [-40°C to +65°C], **vibration**, and **dust and water ingress** are all at the highest levels, ensuring operation even in toughest conditions.
- » Cable connectors are all Swiss high quality **LEMO®** components.
- » The tigerMX-5 server contains a **480GB SSD hard drive** and the housing is a **single cast** fanless design.
- » Combined with the viewMT-101 **sunlight readable** LCD touch screen, this is the toughest, most fit-for-purpose, and powerful system on the market.

### special purpose camera

- » A fifth camera can be used in a **variety of locations** depending on the vehicle.
- » An operator, therefore, has the benefit of 360° vision around his vehicles as well as vision and recorded footage at any other **location of interest**.

### remote access

- » In the case of an incident, either on-site or while roading, footage is able to be **immediately retrieved** remotely via the **built-in cellular module**.
- » **Update software** and **wake up switched off systems** remotely by simply sending an **SMS** message.
- » Data can be downloaded automatically when in range of the base **Wi-Fi** hub without any interaction from the operator.

### zero operator interaction

- » The **built-in power management** of the atlasMX-720 allows a synchronised starting and stopping with vehicle operation [incl. cranking periods]. No operator interaction is required.



The atlas system represents a leap forward in safety and risk mitigation, which ultimately results in lower operating costs.

## atlasMX-720 system for 360° blind spot free vision



### smartMX-180 camera

The smartMX-180 delivers high-quality streamed imagery for efficient and seamless monitoring of operations.

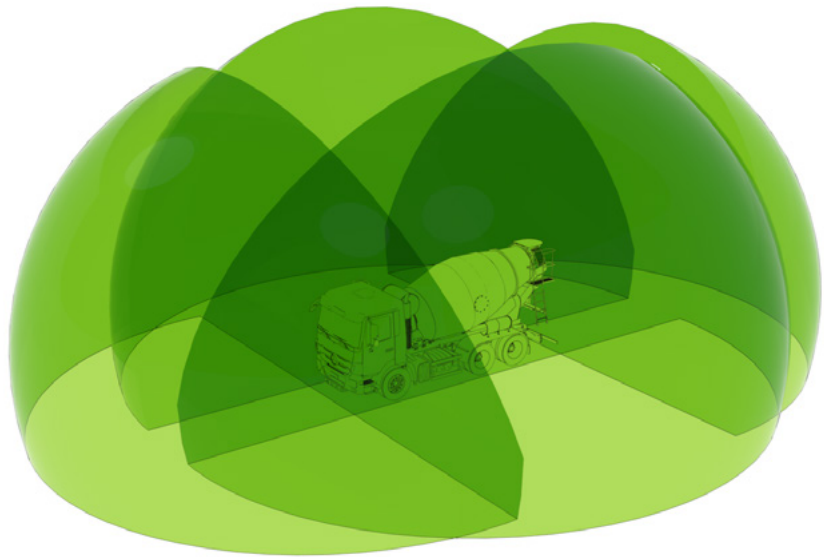
- » Has a secure cast aluminium enclosure
- » Uses industrial grade high sensitivity HDR image sensors
- » Equipped with a powerful multi-core ARM® processor
- » Operates from -40°C to +65°C
- » Offers the highest available ingress protection [IP69K]



### viewMT-101 display

The viewMT-101 displays clear and detailed footage in a wide viewing angle, to improve safety around vehicles.

- » True sunlight readable 10.4" touch screen
- » Variable backlight functionality for night operations
- » Equipped with DEUTSCH and LEMO® connectors
- » Configurable to wide angle or split-screen scenarios
- » Compact design allows ease of set up
- » Internal speaker for audio and warning tones



### tigerMX-5 server

The tigerMX-5 records high resolution imagery providing conclusive evidence in the event of an incident.

- » Provides two computer modules
- » Processes footage of up to five smartMX-180 cameras
- » CAN interface for vehicle communication
- » Wi-Fi for enhanced compatibility
- » Cellular module to connect to 3G/4G phone networks
- » Tested for severe vibration and extreme temperature



#### Vision in Motion

Black Moth's intelligent mobile vision and communication solutions improve worksite safety for heavy machinery. We provide cutting-edge technology and rugged products to support operations in a wide range of transport and heavy industries.

Black Moth Vision Systems Pty Ltd  
Brisbane Technology Park  
42 McKechnie Drive  
Brisbane 4113, Australia

