

atlasMX-900 for heavy lifting

blind spot free vision for safe operation



use real-time imagery

to improve safety when reversing or changing lanes

monitor all actions on site

and mitigate claims with recorded and stored footage

reduce insurance premiums

with an on-site and roading event-recording vision system

eliminate accidents

Heavy machinery suffers from a lack of vision both during transportation and on-site. Accidents can easily occur, which results in expensive claims and increased insurance premiums.

The **atlasMX-900 system** solves both problems by

- » providing operators with real-time 360° surround vision to **avoid accidents**, and
- » recording captured footage on a rolling basis for a specific period to **mitigate insurance claims**.

Implementing **blind spot free surround vision** minimises risks while operating these heavy vehicles. By adding **unrestricted vision with topVIEW** real-time imagery and object detection capabilities, safety around their vehicles improves significantly and

accidents are reduced. With a **decrease in accidents**, machine uptime is maintained at high levels and insurance premiums can be lowered. An operator's business becomes **more efficient** while also **saving money**.

If an incident should occur, the **extensive recording capability** of the atlas system provides high definition imagery for a comprehensive investigation, even at the job.

The atlas system enhances safety dramatically. In addition, **significant savings** from claim mitigation, claim supporting, vehicle uptime and insurance premium reduction make the atlasMX-900 a **must-have solution** for forward looking crane contractors.

atlasMX-900



minimising risks

The atlasMX-900 supplies vision at 180° horizontally from every camera. The camera array therefore gives the operator full blind spot free surround vision, and topVIEW enables this complete view of the vehicle with a single glance. The enhanced vision **significantly reduces risk** while driving, manoeuvring, and repositioning vehicles, both on the road and on-site.

The smart cameras of the system **record in full high definition** and utilise HDR [High Dynamic Range] sensors to ensure **premium image quality** in the harshest conditions, including weather extremes of both temperature and rain, and dusty bright sunlight.

A fifth camera is located with an upward facing aspect to record a **full hemispherical image** map at all times. Safety of personnel around the vehicle can be **constantly monitored** with only a glance, especially at **critical danger times** such as when moving heavy machinery on a congested site. In the event of a dispute, the operator can use recorded footage to prove exactly what occurred and potentially **mitigate claims**.

Recorded footage gives the ability to review procedures and safety breaches, even **at the jib** and when **in motion**. This footage is extremely helpful to support arguments in compensation situations.

system benefits

- » **Claim Mitigation While Roading:** Utilise footage to mitigate accident claims especially due to unsafe driving actions of other road users around the vehicle.
- » **Claim Mitigation On Site:** Review of footage gives conclusive evidence of events on site during a lift procedure. This ability allows an owner to review all aspects of the machine's operation and to prove fault in the event of an incident.
- » **Site Safety:** topVIEW enables total safety around the vehicle with one glance when moving materials, on the road 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.
- » **Increased Vehicle Uptime:** With less accidents comes less vehicle repairs/downtimes and more days to create income.
- » **Insurance Premium Reduction:** Premiums could potentially be reduced/renewed based on the added security provided by the system.



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.



hemispherical view

- » A fifth camera can be mounted upward for both **real time functions** and **analysis of recorded events** at a later stage.
- » The recorded imagery therefore gives the operator a full hemisphere of footage **to review** in case of an incident.



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 using an **SMS** code.
- » 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-900 allows a synchronised start and stop 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-900 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.

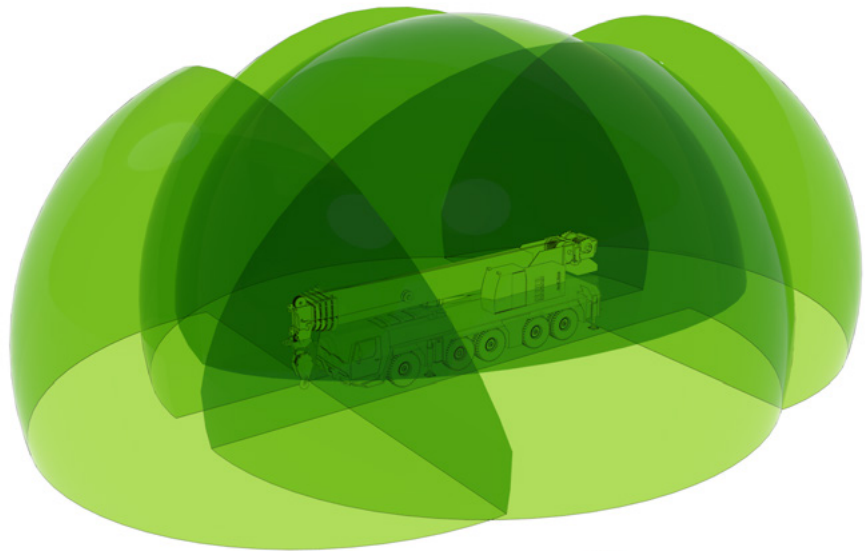
- » Has a secure cast **aluminium enclosure**
- » Uses industrial grade high sensitivity **HDR image sensors**
- » Equipped with a powerful **multi-core ARM® processor**
- » Operates from **-40°C to +65°C**
- » Offers the **highest available ingress protection** (IP69K)



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.

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