

# RAPISCAN AUTONOMOUS INSPECTION

## DRIVERLESS EAGLE® M60

Fully automated vehicle and cargo screening

Scanning Operation handled from onboard inspection office

Reduces operating costs and allows improved resource allocation

Rapiscan's Driverless Eagle® M60's doesn't stop for shift changes or suffer from fatigue – improving cycle times, increasing inspection rates, reduce safety and lone worker risks; ultimately lowering the cost per scan.

- The Eagle® M60 with the driverless option allows the operator to scan vehicles and containers in the autonomous inspection mode whilst freeing the driver to perform other duties.
- When operating in driverless mode, the start and stop scan actions are controlled from the on board Inspection office
- During the scanning process, the vehicle drives in a straight line between two points which are established during the system set up process.
- A target marker is placed at the end of the scan lane and a second marker is placed at the start of the scan lane. The markers should be placed up to 35m apart, providing space for a 22m long scan length.
- Once these markers are in position, and the boom has been deployed, the Autonomous Eagle® M60 automatically aligns itself between the two markers with its onboard control system until the Eagle® M60 is positioned correctly.
- An automated scan can then be then started by the system operator in the onboard Inspectors office.
- A sensor system detects the location of the start and stop markers relative to the Eagle® M60 at all times during a scan, making minor corrections to direction of the Eagle® M60 as necessary in order to ensure that the Eagle® M60 continues to move in a straight line.
- Integrated over height and over width sensor systems ensure that if a collision is likely, then the scan will be terminated automatically so preventing damage to either the vehicle under inspection or the Eagle® M60.
- The automated steering system is permanently attached to the main steering column. When in normal driving mode or the vehicle is moving between one scanning site and another, the system is not energised so the steering wheel operates as normal.
- Wireless Remote Steering System - The wireless remote steering system enables the truck to be moved from outside of the vehicle. This procedure is particularly useful when manoeuvring the truck into position prior to the automated alignment process.

Rapiscan's Autonomous Inspection System is available on:

Eagle® M60 - 6 MeV X-ray imaging system deployed on a truck chassis for scanning dense and densely-loaded cargo



Rapiscan Eagle® M60 with Driverless option.



Wireless Remote Steering System

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# DRIVERLESS EAGLE® M60



Front Positioning Sensor



Rear Positioning Sensor

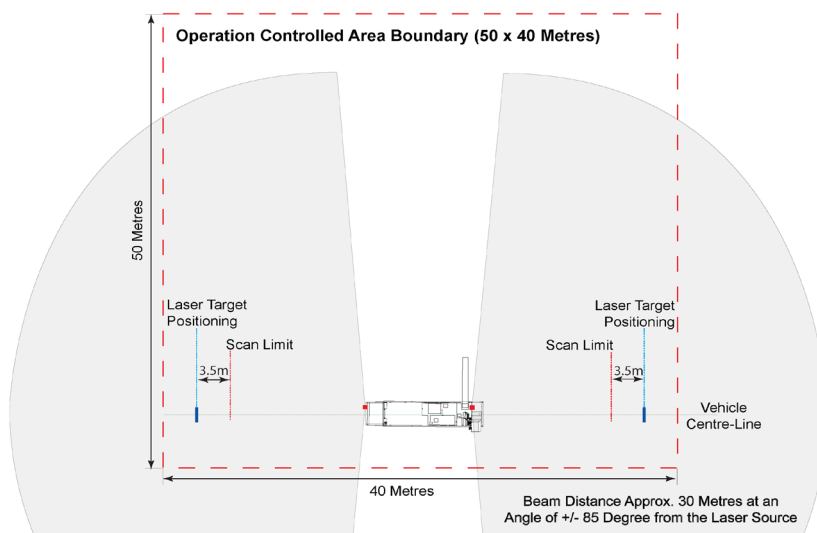
Rapiscan's Driverless Eagle® M60's Autonomous Detection System utilises a front and rear positioning sensor, each sensor emits a 270° cone of light, around the front and the rear of the vehicle.

The lasers are programmed to identify Positioning Marker Boards, which are set at approximately 2 metres inside the Operational Controlled Area, to mark the 'Start' and 'End' positions of the Inspection Zone.

Once aligned with the front and rear marker boards, the system maintains the vehicle in a straight line with a maximum deviation of 25mm from the centre line whilst a scan is in progress, achieved by continually measuring and adjusting the angle and position of the vehicle.

The system also calculates the stopping distance between the vehicle and the marker, which is set to approximately 3.5 metres, automatically bringing the Eagle® M60 to a halt following the inspection process.

The autonomous inspection technology incorporates an in-built safety system where the sensors operate as light barriers, if an object breaks the beam between the truck and the target during a scan; the X-rays cease automatically and the vehicle brakes are applied to stop the truck safely.



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ONE COMPANY - TOTAL SECURITY

Superior Quality, Comprehensive Standard Features and Flexible Options - Included with Every Rapiscan Eagle Cargo and Vehicle Inspection System.

Our commitment to value and innovation make Rapiscan the first choice in cargo and vehicle inspection solutions. Rapiscan Systems is a global leader in high quality inspection solutions and advanced threat identification techniques. Security is our only concern, and we focus on developing customer-centric solutions that are future-proof and cost effective. All Rapiscan products are backed by a 24 x 7 worldwide training, maintenance and service organization.

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With continual development of our products Rapiscan Systems reserves the right to amend specifications without notice. Product pictures are for general reference. Please note that due to US laws and regulations, not all Rapiscan products are available for sale in all countries without restriction. Please contact your Rapiscan Systems sales representative for more information.



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ISO 9001:2008 Certified

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