

DotNetix
making machines see

ARGOS
MOBILE

MAKING
MACHINES
SEE

ZERO HARM.
STAY SAFE, STAY COMPLIANT.
SAFETY FIRST. EVERYONE GET HOME SAFE!
ENGINEERED FOR SAFETY, DESIGNED FOR RELIABILITY.
SAVING LIVES THROUGH AI.



**Pedestrian and Machine Detection
for Industrial Collision Prevention**

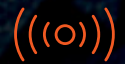
The DotNetix **ARGOS Mobile** collision prevention system is a sophisticated warning system designed to enhance safety in industrial environments where mobile machinery and human workers operate in close proximity. Unlike systems that can actively control the machinery, **ARGOS Mobile** focuses on providing timely warnings to prevent potential collisions, allowing operators to take necessary actions.



Operators are immediately alerted when pedestrians or other machines are detected nearby through the **ARGOS Mobile** detection system.



Upon hearing the audible alert, the operator can take immediate action to avoid potential collisions and ensure safety.



Advanced detection technology is utilized. Computer vision AI identifies pedestrians and machines in the vicinity, delivering real-time alerts to operators in various environments.



Each alert is independently verified with **CLEARVIEW** at monitoring centers to ensure accuracy.



ARGOS Mobile conducts thorough evaluations of alerts, ensuring precision before notifying operators of critical situations requiring immediate attention. This approach ensures a comprehensive, data-driven safety assessment for all users.



ARGOS Mobile can be easily installed and functions effectively under diverse lighting conditions. Installation is straightforward, and configuration is efficient.

Person Detection

Machine Detection

Impact Monitoring

Harsh Braking

Fully Integrated

Canbus for machine integration and telematics

Upon event detection



Event data and video clips are synchronized with **ARGOS Mobile** Integrated with **CLEARVIEW**



Voice or Audio with visual alerts

Alerts



Supervisor Alerts



Office Alerts



Operator Alerts

Key Features and Components

LOW-LIGHT SENSITIVE VISION SENSORS

ARGOS Mobile is equipped with advanced vision sensors that are highly sensitive to low-light conditions. These sensors enable the system to accurately detect people and objects even in environments with poor or inconsistent lighting, such as warehouses, outdoor work areas at night, or dimly lit facilities.

AI-POWERED DETECTION AND ANALYSIS

The system uses Artificial Intelligence (AI) to process the data captured by the vision sensors. The AI is trained to distinguish between different types of objects, including humans and machinery, and to recognize movement patterns that indicate potential collision risks. This intelligent detection minimizes false alarms and ensures that warnings are both timely and relevant.

EASE OF INTEGRATION

ARGOS Mobile is designed to be easily integrated into existing industrial vehicles and machinery without requiring significant modifications. This flexibility allows companies to enhance the safety of their operations without disrupting their existing processes.

REAL-TIME WARNING SYSTEM

ARGOS Mobile continuously monitors the area around the machinery in real-time. When a potential collision is detected, the system promptly issues warnings to the machine operator and, if applicable, to nearby personnel. These warnings can be visual, auditory, or a combination of both, depending on the setup and the environment's requirements.

ADAPTABILITY IN DIVERSE ENVIRONMENTS

The combination of low-light sensors and AI enables **ARGOS Mobile** to function reliably in a wide range of industrial environments, from indoor facilities with variable lighting to outdoor sites exposed to different weather conditions. This makes the system versatile and effective in ensuring safety under various operational scenarios.

Benefits

IMPROVED WORKER SAFETY

By providing real-time warnings, **ARGOS Mobile** helps prevent accidents and injuries, ensuring that both operators and other workers are aware of potential hazards in their immediate vicinity.

The DotNetix **ARGOS Mobile** collision prevention system is a highly effective warning system that enhances safety in industrial settings by providing real-time alerts to prevent potential collisions. Its use of low-light sensitive vision sensors and AI-driven detection ensures reliable performance in challenging environments, making it a valuable tool for maintaining safe operations without interfering with machine control.

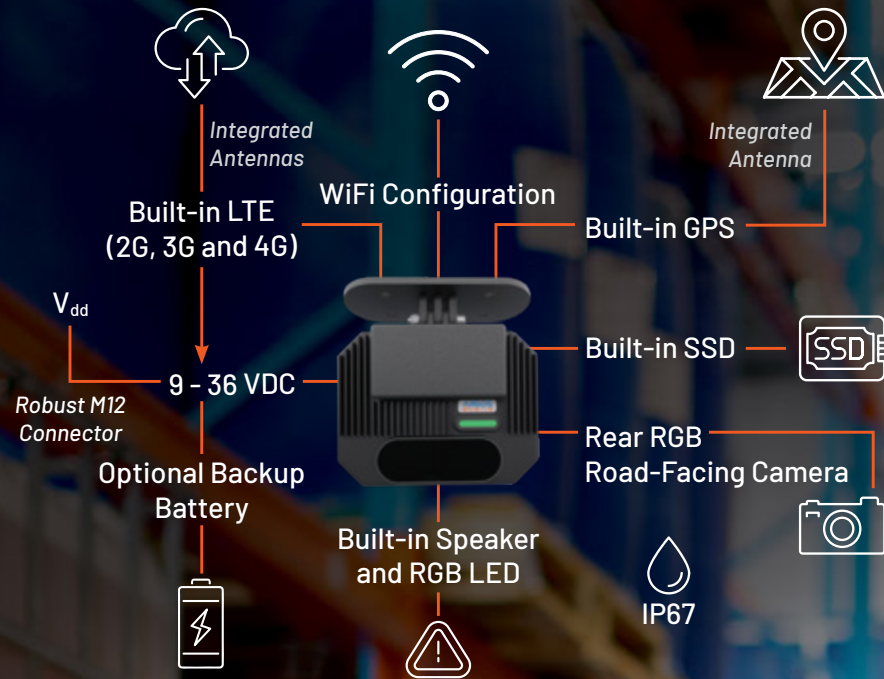
VERSATILITY ACROSS APPLICATIONS

Whether in warehouses, manufacturing plants, construction sites, mining operations or outdoor logistics operations, **ARGOS Mobile** offers a flexible safety solution that can be tailored to a variety of industrial environments.

OPERATIONAL CONTINUITY

Since the system does not interfere with the control of the machinery, it allows operations to continue smoothly while still enhancing safety, reducing the likelihood of costly downtime due to accidents.





Specifications

Power:
• 12VDC/24VDC
• 0.5 Ampere

Enclosure:
• IP67

940nm IR Illuminator

Voice activated warnings to operators

Pedestrian and Machine detection
• 0.65 to 1.8 meter

Various Bracket Options

Speed and positioning

Backup battery included

Image Capture:
• Through **CLEARVIEW**

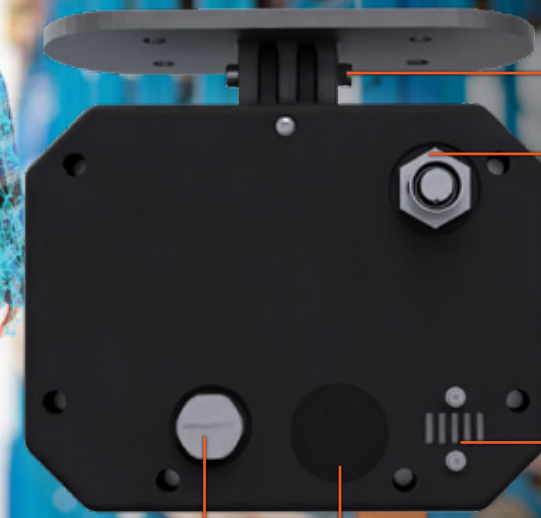
IMU for operator behaviour.

Local DVR
• Built-in Solid State Drive



In-cab facing sensor

Environment:
• Temperature: -20 °C to 85 °C
• Operation: Dust, Day, Night



Quick install and tamper resistant bracket

Robust M12 Multi function connector including:
• Can bus
• Power
• Ethernet (10/100 BaseT)

Audio and Voice

Forward Facing RGB sensor

Environmental Management Valve

Technology

Advanced Machine Learning

Robust functionality and various conditions in low light conditions

Local storage for event analysis

Ruggedized with IP67 rating

Works in most conditions

Real-Time Videos

Camera-based fatigue status monitoring device

Works for most industrial applications

Integrated mobile monitoring system

Complete pedestrian and machine detection for static installations and mobile applications
Can be used for temporary installations.

GSM Networks and Wi-Fi



DotNetix's web-based **CLEARVIEW** solution displays various safety trends and pedestrian detections for each machine and system. Additionally, designated supervisors and managers can opt to receive customized alerts via email whenever an operator is at risk of incidents.



Benefits of Collision Prevention System

No RFID tag required for pedestrians, reducing cost.

-  Low light sensitive machine vision sensors with wide field of view.
-  Ultra-rugged design for tough environments.
-  Improved operator awareness through real-time monitoring.
-  Enhances safety around industrial machines by consistently evaluating the real-time fatigue risks associated with individual operators and the entire fleet, enabling timely intervention when needed.
-  Multiple machine vision sensor configurations and options for any type of machine installation.
-  Customizable detection zones and three distance configuration zones.
-  Compliant with DMR regulation 8.8(2) (d), 8.10(9), 20.9.2, 20.9.1, 8.2(1)(c), Section 10 MHSa. In line with EMESRT Level 9 ISO 21815.

FEATURES

- Accurate pedestrian detection.
- Suitable for surface and underground applications.
- Void and berm detection with warning included.

PREVENTING SERIOUS DAMAGE EFFECTIVELY

Consistently evaluate the real-time risks associated with pedestrian and machine interactions enabling timely intervention when needed

SAFEGUARD VALUABLE ASSETS

Ensure that your operators sustain the required level of alertness for managing extended hours and repetitive duties in both light and heavy vehicles.

FACILITATE SEAMLESS BUSINESS OPERATIONS

Stay on top of your operators behaviour when operating machines and vehicles to avert hazardous circumstances and guarantee the safe return of everyone

Ordering

-  **Power Cable**
1-20 meters
-  **Configuration Cable**
-  **ARGOS Mobile Fatigue Sensor & Recording Camera Sensor required**
-  **Controller with built-in Wi-Fi**
Wi-Fi interface
3G/4G required
-  **Alarms**
External audible and visual alarms



SAFEYE



NCXEYE



**ARGOS
MOBILE**



ARGOS



CLEARVIEW

Contact Us:

+27 (0) 82 314 8116
info@dotnetix.co.za
www.dotnetix.ai
DotNetix (Pty) Ltd
1 Viceroy Link, Route 21
Corporate Park, Irene,
Pretoria, 0178
South Africa

SAVING LIVES
THROUGH

AI

Cutting edge technology
meets **unmatched safety**
for a secure tomorrow.