COLLISION AVOIDANCE SYSTEM

When a one-second error can mean the difference between a near miss and a SIF (serious injury or fatality), you need the most advanced collision avoidance system working for your team. OmniPro® Vision AI's award-winning technology helps reduce mining operation incidents with powerful features.

Triggers audible &

visual alerts

LERT ZONE

Accurate, high-speed detection of people and equipment

- Each camera can generate up to five fully customizable alert zones
- Identifies and alerts on specified hazards, such as pedestrians, equipment and key object) no tags required
- Identifies people in multiple positions and wearing PPE

perso

- Cloud Reporting with photos
- Minimal nuisance alerts

OmniPro "sees"

people in the'

operator's blind spots.

Customized alert zones for the unique requirements of your operation.

Which Safety Challenges Apply to Your Operation?

These are the most common reasons we get inquiries about OmniPro Vision AI

- Large Equipment Operator Blind Spots
- Pinched or Narrow Travel Corridors
- Restricted View Corners
- ☐ High Traffic Zones
- Complacent Operators
- □ Vendors or Guest Vehicles on Job Site
- □ New & Inexperienced Workers
- □ Fatigued Workers, Especially Near End of Shift
- Experienced a Pedestrian-Involved Incident
- Experienced a Serious Injury or Fatality





COLLISION AVOIDANCE SYSTEM

OmniPro Vision Al Hardware Package





COLLISION AVOIDANCE SYSTEM



Features & Benefits



Vision AI Camera

- Compact and water/weather resistant IP67-rated
- Alert zones that can apply to different objects and perform various actions
- Time of Flight (ToF) sensor reports if a camera is blocked or obstructed
- Ambient light sensor detects if the vehicle is in low-light conditions or if it transitions from light to darkness
- Infrared (IR) Cut Filter for low-light support
- Gorilla® Glass lens cover





OmniPro Hub

- Designed to minimize false positives and nuisance alerts
- Can identify pedestrians in any posture, including standing sideways, crouching, kneeling and partial view, as well as people wearing PPE
- Cameras auto-switch to monitor the direction of travel
- Simple plug-and-play set-up and troubleshooting
- Built-in web UI interface eliminates the need for software on local laptops/PCs and provides a single configuration point of all connected devices
- Easily integrates with most OEMs
- Low maintenance with wireless future upgrades
- Advanced system architecture accommodates future sensors and devices
- Operates up to four cameras
- Visual and audible alerts
- Mobile or fixed cameras: intersection control, safety doors, pedestrian access
- Rugged design IP67-rated
- Multiple I/O connections five digital inputs and five relay outputs
- Wide operating voltage of 12-48 VDC



Reporting System

OmniPro Vision Al's desktop reporting provides authorized users with 24/7 access to software tools and a dashboard with real-time metrics and analytics.

- Records and stores zone breach incidents with photo and time-stamp
- Pre-event and post-event image capture capabilities
- Provides real-time, full-data capture with analysis: average daily breaches per machine; trending breaches over time; event graphs
- Facial blurring (optional)
- Data can be accessed on the system locally for up to 30 days. Additionally, data accessed over Wi-Fi or remote through the cellular cloud 24/7/365 can be reviewed for an extended period of time.



COLLISION AVOIDANCE SYSTEM





Matrix can work with you to create a system that's tailored to your operation's unique safety requirements









COLLISION AVOIDANCE SYSTEM

Matrix Design Group LLC

Company

Headquartered in Newburgh, Indiana, Matrix is a wholly owned subsidiary of Alliance Resource Partners, L.P. Since 2006, our core business has been industrial safety and providing operations-friendly applications that meet evolving industry regulations.

Experience

Matrix has been producing proximity detection/ collision avoidance technology since 2006. Safety technology is our core competence.

Team

Matrix's 60+engineers continuously innovate, iterate and improve our products to provide a best-in-class solution to our customers.

Support

Matrix is an industry leader in service and support. We have a large North American service group as well as certified thirdparty technicians to support OmniPro Vision Al.

The Path to Automation

Online Resources

Visit the Matrix Website Visit the OmniPro Vision Al Page

Visit the OmniPro FAQ Page



Help make your operation safer!

Learn more or schedule a demonstration

sales@matrixteam.com 812-490-1525

