**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 construction site 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.



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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

