

EDGEYE

Protecting Operators.
Preserving Equipment.



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EDGEYE is an intelligent edge detection system designed to safeguard heavy machinery from roll-over incidents during near-edge operations. Built specifically for mining, quarrying and near-edge operating environments, the camera acts as a digital co-pilot, continuously scanning for drop-offs, voids, and dangerous terrain. Whether a berm is present, damaged, or entirely missing, **EDGEYE** alerts the operator in real-time, helping prevent costly rollovers or life-threatening incidents.

Smart Technology That Sees the Unseen

EDGEYE intelligently identifies compromised berms or voids before they become threats. With real-time edge and hazard detection, **EDGEYE** delivers proactive alerts that give operators the critical time needed to react, reduce accidents, and maintain smooth operations across even the most demanding terrain.

Smarter Safety at the Edge

When working near high-risk zones like voids and drop-offs, **EDGEYE** technology detects the void to deliver unmatched safety. With advanced deep edge detection, the system continuously measures the precise distance between the machine and the edge, ensuring operators are always aware of their surroundings. This intelligent system helps prevent rollovers, reduces operational risk, and enhances safety in the most demanding mining environments. **EDGEYE** forms a proactive shield against the unseen dangers.

Engineered for Precision

At the heart of **EDGEYE** is a powerful built-in Vision Detection & Ranging (VIDAR) system that accurately measures the distance between the machine and the edge. As machines reverse or work near hazardous zones, **EDGEYE** ensures the operator maintains a safe buffer. This allows for confident manoeuvring without accidental contact, ensuring both operator safety and equipment preservation in high-risk areas.

ENVIRONMENTAL



Wide temperature specification:
Smart Display: -20°C to +55°C
EDGEYE Camera: -25°C to +70°C



Waterproof and dustproof (IP69K sensor, IP65 display and controller)

MAKING
MACHINES SEE

FEATURES

Prevents over the edge roll-over events

Detects pitch and roll limits

Built-in VIDAR edge detection

CLEARVIEW integration

Real-time operator alerts

Designed for dozers, excavators & more

Technology

- Uses advanced digital 3D processing & smart technology to detect voids at a range of <10 meters day/night (with **NIGHTEYE**)
- Advanced logic to determine the direction of the approaching void
- Real-time processing inside the **EDGEYE** sensor
- Operational with & without internet connectivity
- Remote reporting and trend analysis of forming voids and high-risk areas

Monitoring

- Reversing over a berm/windrow
- Turning into and over a berm or windrow edge
- Exceeding safe dozer pitch/roll limits
- Video recording = 200 hours continuous

Warning

- A berm or windrow is not a guarantee to stop a haul truck
- Preventing rollovers
- Reducing human error
- Enhancing operational safety
- Supporting site safety compliance



BENEFITS



EDGEYE sensors, in combination with external **NIGHTEYE** IR illuminators, allow for accurate detections during both day and night shifts.



System is highly configurable ensuring compatibility with most machines.



System has BIT (Built-in-Test).



Reduce the risk of heavy equipment roll-overs.



Reduce the risk of reversing into or over a stockpile.



Reduce the risk of injury to operators.

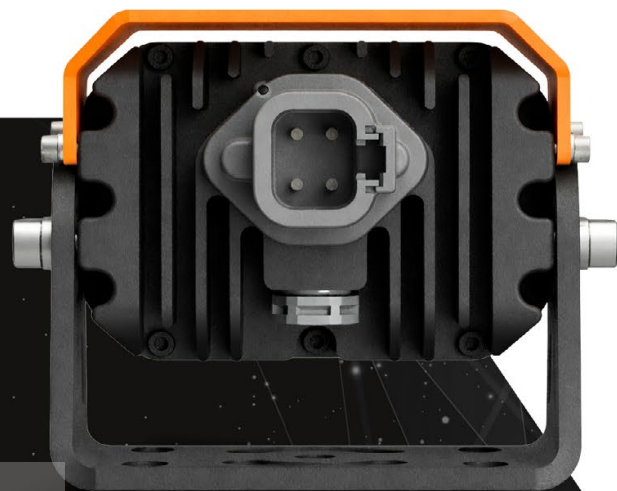


NIGHTEYE

NIGHTEYE is a smart infrared (IR) illuminator engineered for harsh and industrial environments. It automatically activates in low-light conditions to provide optimal illumination and powers down when the environment is sufficiently lit, ensuring reliable performance while saving energy.

System Benefits

- Built-in intelligence ensures operation only in dark circumstances.
- System BIT (Built-in-Test) green LED indicators.
- High brightness IR illuminators allow for accurate detections in low-light scenes.



Description	Rating
Voltage (Input)	9-36 VDC
Current (Typical)	1 Ampere
Current (Peak)	3 Ampere
Dimensions	100mm x 100mm x 50mm
Mounting	Adjustable
Weight	650g
Power Cable	4-pin Deutsch
Cooling	Passive – No Fan
IP Rating	IP69K
Temperature	-20°C to +55°C



Prevents over the edge events



Video display delivers audible and visual warning to operator

Detection Area

CLEARVIEW

Safety Trends, Analytics,
and System Health Information

CLEARVIEW offers a valuable online tool to improve safety and traffic management on an industrial site.

CLEARVIEW supports a complete alarm terminal to keep track of safety problems, including:

- Edge detection & roll-angle event reporting & analytics
- Remote video monitoring
- Remote **EDGEYE** configuration
- Remote software updates
- GNSS position monitoring of machines
- Speed monitoring of machines
- Connectivity monitoring to **EDGEYE** sensors
- **EDGEYE** system health (including Obscured-Lens monitoring)
- Customised alerts via email/SMS
- Edge detection heatmap
- Event snapshot videos
- Machine utilisation



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SAVING LIVES
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AI

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

SAFEYE



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NCXEYE



EDGEYE



NIGHTEYE



ARGOS



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