



PRODUCT INFORMATION

SafEye-Nano

INTELLIGENT COLLISION AVOIDANCE FOR
MACHINES

Collision avoidance systems

 dotnetix

Collision Avoidance Systems



OVERVIEW

SafEye-Nano is an advanced camera based collision avoidance system for industrial machines that detects people and other objects and alerts machine operators of their presence.

Intelligent Collision Avoidance solutions allows mining and industrial operators to be more safe and productive by reducing fatalities and accidents.

dotNetix is concerned with machines in 'mission critical' applications, where accidents are unacceptable and where safety can be enhanced through SafEye-Nano camera based collision avoidance systems.

Audible alerts are created for the driver while real-time remote alerts can be analysed for fatigued or distracted operators.

SafEye-Nano's infrared camera continuously monitors the configured road zone and warns the operator of any potential dangers.

Advantages

- No tag or signalling device required.
- Low light sensitive camera with wide field of view
- Ultra-rugged design for harsh environments.



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www.dotnetix.co.za

810 Mary str, Rietvlei, South-Africa
Tel: + 27 79 493 7795
Email: info@dotnetix.co.za

Collision Avoidance System - Machines



BENEFITS

- Reduced incidents and accidents
- Increases operator productivity
- Increases operator awareness, reducing blind-spot related accidents
- Reduces direct and indirect operating costs
- Reduced costs to safety as the system does not require any infrastructure to operate.
- Low cost multi-camera system for all-round machine protection.
- The only system with dynamic zoning for surface operations.
- Multi-camera system for improved detection on large machines like excavators and rigid dump trucks.

Operators are immediately aware of a potential accident with a pedestrian or other object. Upon hearing the audible alarm the operator is able to take the appropriate action to regain control of their machine to avoid the accident.

SafEye-Nano lets machines "SEE"

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SafEye-Nano 3D Camera CAN Bus



FEATURES SAFEYE-NANO CAMERA

Description	Rating (DC IN)
Voltage (Input)	9-36VDC
Current (Typical)	1.3 Ampere @ 24VDC
Current (Peak)	2 Ampere @ 24VDC
CPU – Camera Sensor	GPU and ARM Cortex
RAM	4GB
Dimensions	150mm x 145mm x 125mm
Mounting	Aluminium Adjustable Bracket
Weight	3.0Kg
Optional Interface	CAN Bus – Object Threat list for system integrators, 5 Pin M12
10/100 Mbps Ethernet – Video	4-pin M12 Connector
Power over Ethernet	802.3af (PoE+, 30Watt) (Do not power both PoE and on the Input at the same time)
Cooling	Passive – NO FAN
IP Rating	IP 69 (Indoor and Outdoor)
Vision	3D with Infrared (Stereoscopic)
Range	40 Meter
Ambient Temperature	-25°C to 60°C
Illuminance	0.5Lux
Video Recording Time	60 Hours



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SafEye-Nano 3D Camera PoE+ only



FEATURES SAFEYE-NANO CAMERA

Description	Rating (PoE+ in)
Voltage (Input)	48VDC (PoE+)
Current (Typical)	0.5 Ampere
Current (Peak)	1 Ampere
CPU – Camera Sensor	GPU and ARM Cortex
RAM	4GB
Dimensions	150mm x 145mm x 125mm
Mounting	Aluminium Adjustable Bracket
Weight	3.0Kg
10/100 Mbps Ethernet – Video	4-pin M12 Connector
Power over Ethernet	802.3af (PoE+, 30 Watt)
Cooling	Passive – NO FAN
IP Rating	IP 69 (Indoor and Outdoor)
Vision	3D with Infrared (Stereoscopic)
Range	40 Meter
Ambient Temperature	-25°C to 60°C
Illuminance	0.5Lux
Video Recording Time	60 Hours



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SafEye-Nano Multi-Camera Controller



FEATURES MULTI-CAMERA CONTROLLER

Description	Rating
Voltage (Input)	9-36 VDC
Current (Typical)	5 Ampere
Current (Peak)	10 Ampere
CPU – Camera Sensor	ARM Cortex
RAM	2GB
Dimensions	300mm x 200mm x 75mm
Mounting	Aluminium Bracket
Weight	5Kg
Interface	CAN Bus – Object Threat list for system integrators
10/100 Mbps Ethernet – Video	4-pin M12 Industrial Connector
Power over Ethernet (PSE)	6 Port 802.3af (PoE+)
Cooling	Passive – NO FAN
IP Rating	IP 65
GPS	Speed, Position
IMU	Built-in
Temperature	-20°C - +75°C

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SafEye-Nano Display



FEATURES DISPLAY

Description	Rating
Voltage (Input)	9-36 VDC
Current (Typical)	1 Ampere
Current (Peak)	2 Ampere
CPU	ARM Cortex
RAM	1GB
Dimensions Display	7 Inch
Mounting	Adjustable Aluminium Bracket
Weight	2Kg
10/100 Mbps Ethernet – Video	4-pin M12 Connector
Brightness	250 Nits
IP Rating	IP 65
Temperature	-20°C - +75°C



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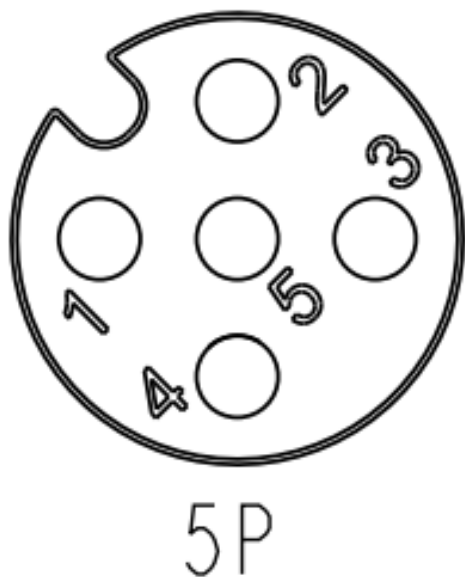
Tel: + 27 79 493 7795

Email: info@dotnetix.co.za

SafEye-Nano CAN Bus Pinout



Pinout



1. GND
2. VIN: 9-36VDC
3. GND
4. CANH
5. CANL

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CONTACT



Address:

dotNetix (Pty) Ltd
810 Mary Street
Rietvlei View
Pretoria
South-Africa

Direct:

Tel: +27 79 493 7795

Email: info@dotnetix.co.za

Website: www.dotnetix.ai

LinkedIn: <https://www.linkedin.com/company/dotnetix>



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