

LUIS SAFE EDGE AI

Safe camera with AI for the
detection of persons



Safe AI made in Hamburg

With Safe Vision AI, we have developed a framework for the application of safe AI for commercial vehicles and mobile machines



Real-time monitoring

of hardware and software



Trustworthy AI

in compliance with upcoming
ISO standards

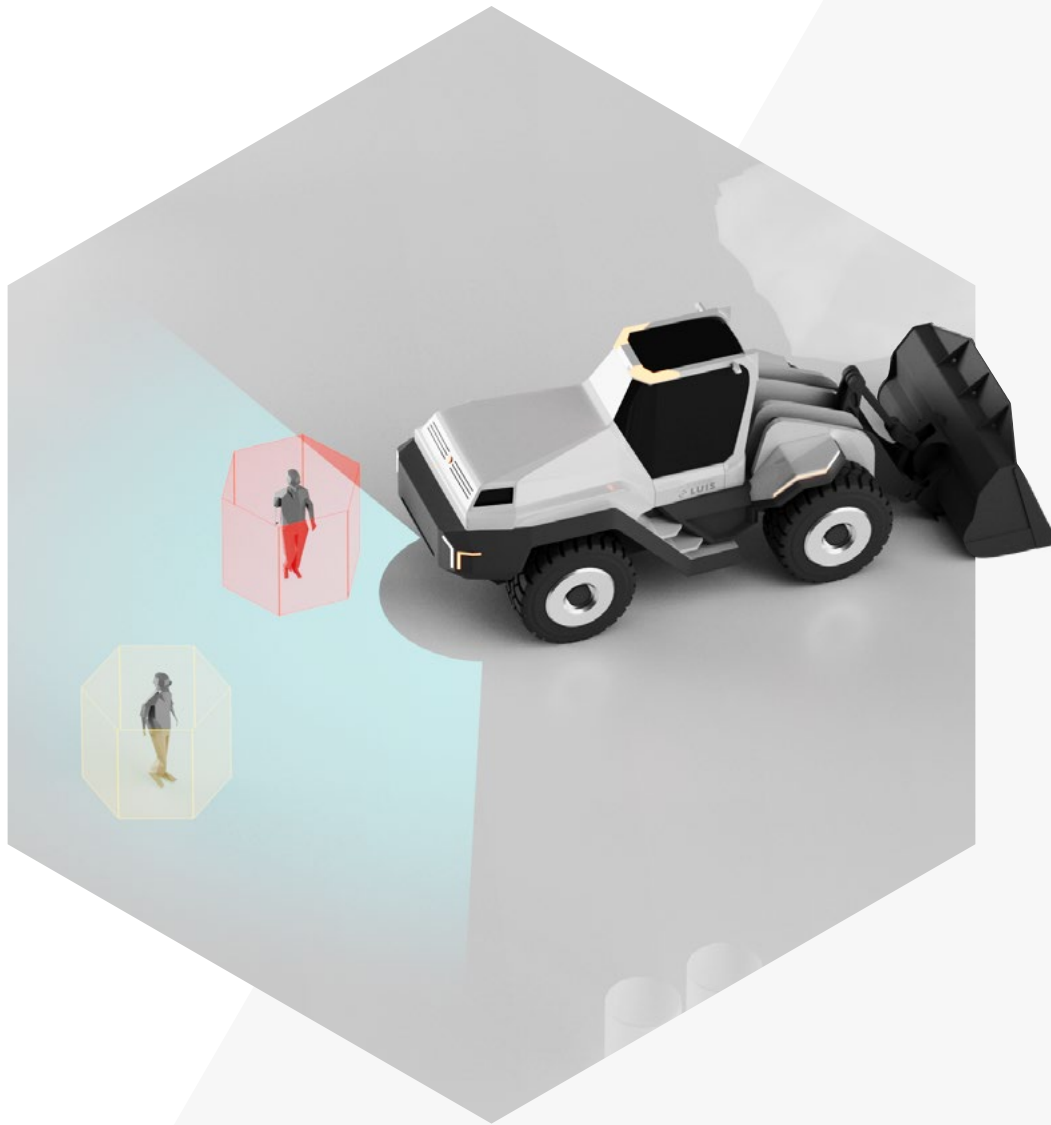


Made in Hamburg

and in compliance with
the EU AI Act

Our AI runs on secured hardware. A safety controller monitors the video pipeline and the functionality of the AI in real time. For training our AI, we also consider the latest approaches to AI explainability (»Explainable AI«). For this purpose, we train our AI models using our own data (Data Privacy) in our AI lab in Hamburg and for the context of commercial vehicles and mobile machinery (Reliable AI). We anticipate emerging AI standards for safety-critical applications in commercial vehicles and mobile machinery and work closely with leading universities.

The AI runs »embedded«, directly on the camera, without additional hardware, saving space. Communication with the vehicle occurs via CAN-Bus or GPIOs. With our Safe Vision AI Framework, we are safety ready and enable deep integration into your vehicle.



Safe Vision AI

The LUIS SAFE EDGE AI reliably detects people and provides multi-level warnings to prevent collisions. The AI operates on secured hardware and has been trained using our own data in our AI lab in Hamburg, specifically for the context of commercial vehicles and mobile machinery. Moreover, the MLOps workflow and training methods are based on the latest scientific approaches and comply with emerging standards and the EU AI Act. With the LUIS SAFE EDGE AI camera, we are introducing the first AI camera with safety features and diagnostic options to the market, setting a new industry standard. Our goal is to integrate it even deeper into our customers' vehicle architectures, enabling intervention in the vehicle (acceleration, braking) or the work process (autonomy).

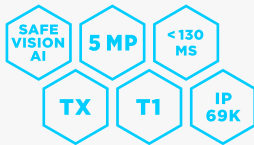
Safe Features

- › Safe Startup
- › Dirt detection
- › Safety MCU
- › Safe IO's
- › Safe CAN Communications
- › Front Heating
- › Alive Check
- › QR-Reading

LUIS EDGE AI

Rugged cameras with AI for person detection

The robust LUIS EDGE AI cameras distinguish people from other obstacles in real time and warn the driver of collisions without triggering unnecessary alarms. These systems are particularly effective in tight driving situations, helping to prevent collisions with individuals. They remain operational in harsh environments and perform object detection directly on the camera, without requiring additional hardware. Customizable detection zones and warning mechanisms allow for flexible integration into the vehicle.



LUIS SAFE EDGE AI

Digital 5-megapixel camera (TX or T1)

- ▶ 1/3" CMOS sensor
- ▶ Resolution: 5 MP
- ▶ Horizontal viewing angle: 135°
- ▶ Latency: < 130 ms
- ▶ MJPEG, H264, H265, IP, TCP, HTTP, RTSP, RTP
- ▶ Water and dust resistant: IP69k
- ▶ Fast Ethernet: 100BASE-TX / BroadR-Reach: 100BASE-T1
- ▶ AI processing up to 2.1 TFlops
- ▶ CAN interface for improved vehicle integration
- ▶ Input for camera configuration
- ▶ Up to 3 configurable outputs for warning zones
- ▶ Setting warning zones, video formats, AI confidence features, and alarms
- ▶ Shock and vibration resistant
- ▶ Heating
- ▶ Audio output
- ▶ DC 12 V / 24 V (10–32 V)



LUIS EDGE AI

Analog Full HD variant (AHD)

- ▶ 1/3" CMOS sensor
- ▶ Resolution: 2 MP (Full HD)
- ▶ Horizontal viewing angle: 140° (additional options available upon request)
- ▶ Latency: < 120 ms
- ▶ Frame rate: 25 and 30 FPS
- ▶ Water and dust resistant: IP69k
- ▶ Shock and vibration resistant
- ▶ Alarm trigger output
- ▶ Easy configuration via Wi-Fi, including setting warning zones and alarm sounds
- ▶ Heating (optional)
- ▶ CAN interface (optional), RS232 (optional)
- ▶ DC 12 V / 24 V (10–32 V)

**MOVING
SAFELY ▲**



We are here for you

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