

# O3M372

Mobile 2D/3D camera with AI person detection



## Product description

# O3M372 – camera with AI person detection



### O3M – 3 times “oh”!

The new O3M is more than just a mobile camera. It is the camera for mobile applications redefining the limits of what's possible. Once again.

How? Well, it is the **world's first AI-supported 2D/3D camera with PMD technology** designed specifically for mobile machines. It is supported by **ifm's on-board algorithm** that enables it to recognise and distinguish between people and objects. Collision warnings can thus be issued in an even more accurate way. This increases safety for everyone in the vicinity of the mobile machine and reduces the number of false alarms to the adequate minimum. We offer all this as a **solution fully integrated in one device**.

3 times “oh”, 3 times “Made in Germany”. That's the new O3M AI.

You can find out more about those “ohs” and the O3M AI at **[o3m.ifm](https://www.o3m.ifm)**



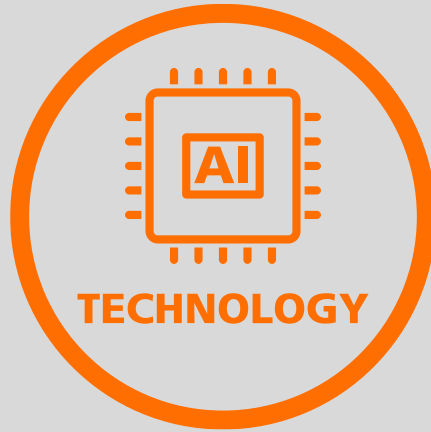
## Product benefits

# The right choice for the right reasons



### Person detection

Reliable differentiation between people and objects in real time.



### AI – made by ifm

ifm's own algorithm runs on a powerful on-board AI processor.



### Robust design

Developed for use in mobile machines: extremely vibration and shock resistant.



### Easy to use

Parameter setting and updates with the ifm Vision Assistant via CAN or Ethernet.





## Application overview

# Person detection for forklift trucks

### Challenges

The forklift truck drivers' view is often restricted by warehouse racks, goods and loads. Workers moving in unpredictable ways nevertheless require quick reactions to unexpected obstacles.

### Benefits of O3M AI

- Precise detection of workers and obstacles up to 25 metres away.
- Reliable function in different lighting conditions and in confusing environments, thanks to the fusion of 3D and 2D data.
- Collision warning can be focussed on people to reduce alarms.





## Application overview

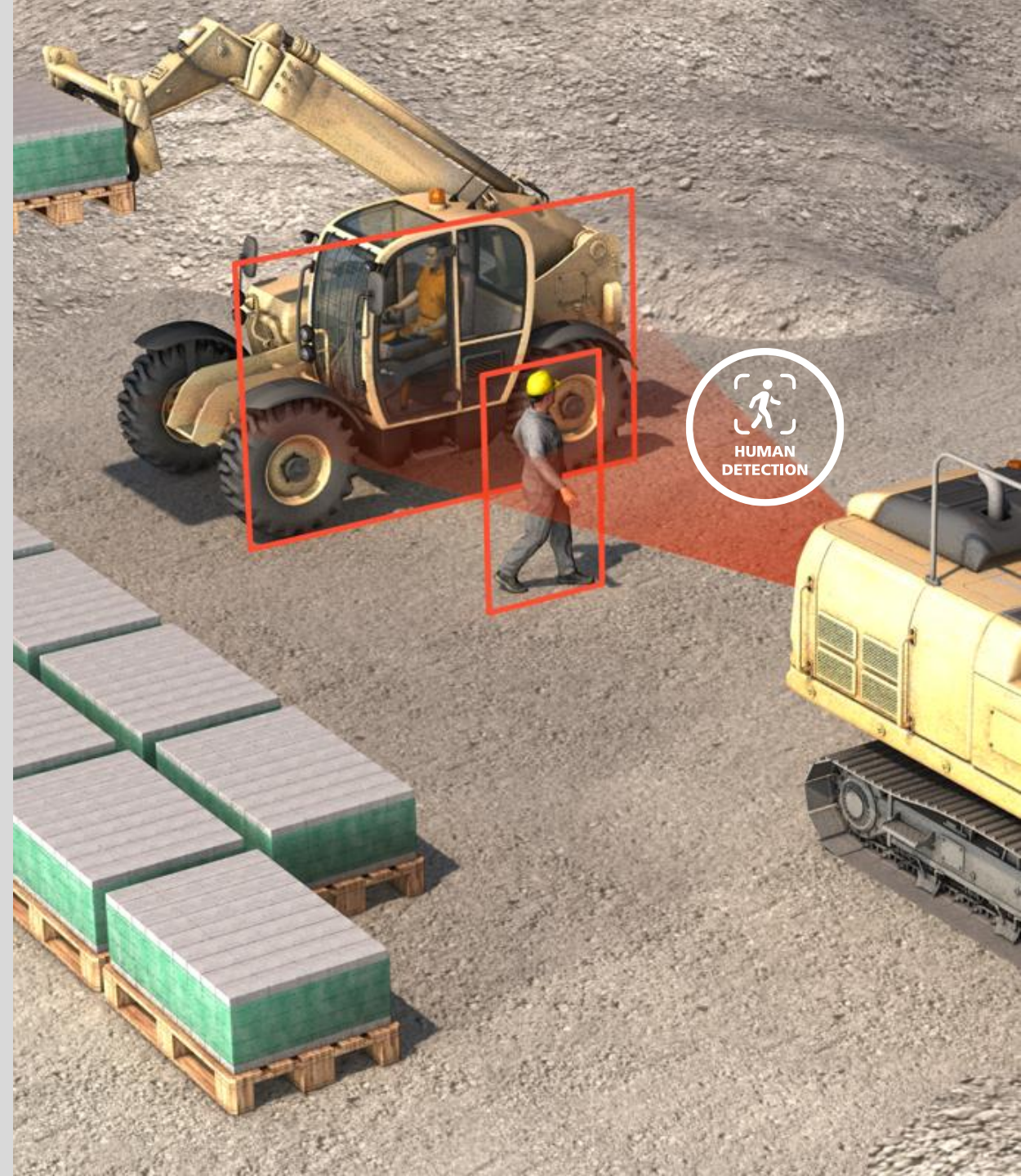
# Area monitoring for construction machines

### Challenges

Dust, dirt and poor lighting conditions impair the machine operator's vision. Construction site environments are often confusing and require quick reactions to unexpected obstacles or people.

### Benefits of O3M AI

- Detects pedestrians and objects up to 25 metres away.
- Reliable function in different weather and light conditions.
- Warnings only in the event of an actual risk of collision in order to reduce driver alerts to the appropriate minimum.





## Application overview

# Collision protection for refuse collection vehicles

### Challenges

The visibility of drivers of refuse collection vehicles is often restricted, especially when reversing. Narrow streets with many obstacles and pedestrians suddenly crossing the road pose additional risks.

### Benefits of O3M AI

- Precise differentiation in real time between pedestrians and other objects such as vehicles.
- Avoidance of unnecessary collision warnings caused by small branches in the driving path, thus increasing the focus on protecting human life.
- As the only system equipped with PMD technology in Germany, the O3M is allowed to replace the mandatory spotter when reversing.



O3M372  
Product presentation



## Application overview

# Collision protection in port areas

### Challenges

In port areas, vehicles often move in narrow, high-traffic areas with potential collision hazards, especially in the blind spot. If people are inattentive, this increases the risk of accidents.

### Benefits of O3M AI

- Precise detection of people and objects up to 25 metres away.
- Intelligent warning system alarms if there is a risk of collision with a detected person.
- Early warnings reduce collisions and accidents, which in turn leads to higher vehicle availability and lower insurance and employers' liability insurance contributions.



Good to know

# AI for person detection and collision protection



## Deep learning at the highest level – made in Germany, made by ifm

ifm has developed the world's first 2D/3D PMD camera using artificial intelligence that meets the applicable global standards for the development and use of AI. Hardware, software and AI algorithms made in Germany. Everything from a single source – made by ifm.



## Customisable – your own logic, directly in the O3M AI camera

The O3M AI makes it possible to execute customised logics and mathematical functions, to pre-process data and to display individual overlays in the video stream. This is easily done via the ifm Vision Assistant with drag-and-drop interface.



## Outstanding image quality – your reliable 2D/3D AI sensor

The 2D AI camera with very high light sensitivity delivers razor-sharp images for reliable person detection even at dusk. The video stream is transmitted via Fast Ethernet and supports H.264, H.265 and MJPEG.





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