



WEBINAR

ifm 3D collision warning system Webinar



Questions & Answers

Business Development Manager - Mobile Control Systems

Albert Louw

Presenter



New Business Development Manager - Key Accounts

Johan van Niekerk

Host



ifm – close to you!

Q & A

Can the O3M operate in sunlight?

Yes, it was designed to do so, it can handle up to 120 kilolux of extraneous light.

Can the sensor handle a dusty environment?

Yes, it works well in this type of environment

How will the sensor know if the lenses are blocked?

By activating the 'blockage detection' in the in the vision assistant, this is signaled back via the CAN interface

Can the sensor handle shocks and vibrations that one typically finds on mobile machines?

Yes, the O3M system was specifically designed to work on mobile machines

What is the temperature range of the O3M?

-40...85 deg C, one of the requirements to operate electronic equipment on mobile machines is a wide operating temperature range

Can I install it on an ordinary car and what is the supply voltage?

Supply voltage range is typically 9...32 V DC, yes you can install it on a car if you can find a suitable mounting position.

How does it connect to the machine? What are the outputs?

The O3M connects via a CAN interface, if physical outputs are required then the Part number ZZ1102 can be used as IO module (input/output module). There is a logic editor in the vision assistant software where the inputs and outputs can be programmed. Alternatively, an ifm controller can be programmed in CODESYS from scratch to interpret the CAN data from the O3M.

What effect does reflective vest have on the vision evaluation?

Reflective vest has a positive effect on the sensor as more light is reflected from them. The O3M also has the capability to distinguish between reflective and non-reflective objects.

Q & A

What is the maximum distance that the O3M can detect an object? is it size dependent the further the object is?

35m, yes, it is size dependent. The minimum range for the detection of persons in the monitoring area is 1 m to 15 m with normal ambient conditions

Can these operate underground, in dark dusty environments?

Yes, refer to questions 2 and 13 for further explanation.

Can the object detection be parametrized based on speed of vehicle?

Yes, there are two options for collision avoidance in the vision assistant, zone based as discussed in the webinar and intelligent. Intelligent collision avoidance requires speed to be sent to the sensor, if the yaw rate is also available then it can also be sent to the O3M.

What software would we need to program the system?

If you want to program the O3M only then the vision assistant will do. It can also be used to program IO on the ZZ1102 IO module via the O3M. If you are also using an ifm control system with the O3M then you will need CODESYS.

Do the sensors require well-lit conditions to detect obstacles?

No, the illumination unit illuminates the scene for the sensor and thus the O3M can work well in conditions that is perceived as complete darkness to the human eye.



Thank you for Participation in our Webinar

Do you have any questions about the products featured?



albert.louw@ifm.com

Do you have any questions about this Webinar?



johan.vanniekerk@ifm.com

