

# Sentis<sup>3D</sup> - M520

Time-of-Flight Smart Sensor

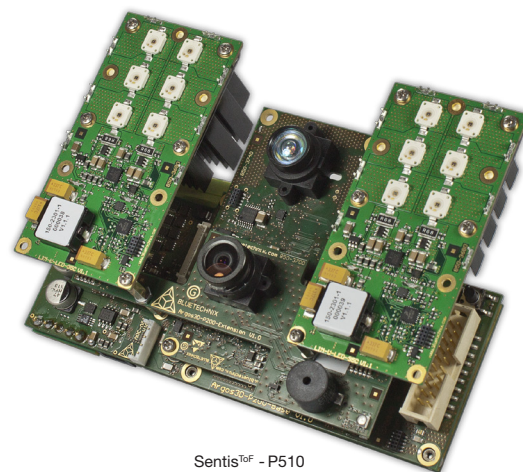


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Embedding Ideas

The Sentis<sup>3D</sup> - M520 is a new depth sensor, operating on the Time-of-Flight (ToF) principle. The M520 is equipped with a PMD Photonics® 19k-S3 Time-of-Flight 3D IC and a high resolution 2D CMOS sensor.

The smart depth sensor IC delivers depth information and gray value image data for each pixel simultaneously. An integrated 2D CMOS imager captures scenes with a resolution of up to 1080p. Therefore, it's possible to analyze scenes based on 3D depth data only or in combination with 2D data.

Using active IR illumination, the sensor is able to capture 3D and 2D information. With a range of 10 m indoors, a field of view of 90° and a size of only 130 x 95 x 40 mm, this Gigabit Ethernet connected sensor can be used for next generation sensor systems in various application fields like robotics, automation and people counting.



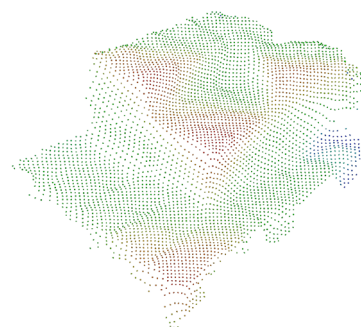
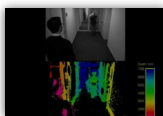
Sentis<sup>ToF</sup> - P510

## Highlights

- » 3D depth sensor (160 x 120 pixel)
- » 2D CMOS imager (5 MP)
- » Up to 160 fps\*
- » Up to 10 m application range\*
- » Gigabit Ethernet
- » PoE++ Support
- » Field-of-View 90°

## Applications

- » People counting / tracking
- » Building Automation
- » 3D light barrier - safety area
- » Gesture Recognition
- » HMI for industrial robots
- » Range measurements



Sentis<sup>3D</sup> - M520 point cloud for e.g. goods inspection

# Sentis<sup>3D</sup> - M520

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## Feature Overview

Depth Sensor	PMD ToF (19k-S3) 160 x 120 Pixel up to 160 FPS*
2D CMOS	OV5640 (5MP) 720p @ 60 FPS*
Range	up to 10 m*
LED	up to 2 x 6 high power LEDs
Power Supply	12 - 30 V <sub>DC</sub>
Ethernet	10 / 100 / 1000 Mbit/s
PoE++	up to 60 W
OWIRE	1
Mod Interface	1
GPIO I/O	1 (galvanic isolated)
I <sup>2</sup> C	1
Trigger In	1
Trigger Out	1
Temperature Range	Industrial -20 to +60 °C depends on heatsink
Supported OS	Windows Linux
Cooling	Heatsink required
Dimensions	W130 x H95 x D40 mm

\*FPS & Range depends on integration time, ambient temperature,  
FoV and software configuration

Based on **pmd**  
intelligence

## Software

Sentis<sup>3D</sup> - M520 software support

- » **Free Linux BSP**  
with multi core support



## Customization

Sentis<sup>3D</sup> - M520 is focused on modularity. Individual base boards with your required interfaces can easily be implemented.

For further information please contact  
[sales@bluetechnix.com](mailto:sales@bluetechnix.com)

## Ordering Information

Order No.	Info
150-3040-1	Sentis <sup>3D</sup> - M520 Kit Time-of-Flight smart sensor

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