



TOFrage-611

Miniaturized Range-finder

FEATURES

- ✓ 1 cluster pixel out of 8 x 8 pixel
- ✓ 0.05 ... 15 m range
- ✓ FOV 0.18° hor/ver (16 x 16 mm at 5 m)
- ✓ Up to 1'000 fps
- ✓ Light weight 12.5 g only
- ✓ Low cost
- ✓ Low power consumption
- ✓ Sunlight tolerant
- ✓ Easy to use
- ✓ Customized versions possible

FUNCTIONAL DESCRIPTION

The TOFrage-611 is a miniaturized and cost optimized range-finder. It is based on the ESPROS proprietary time-of-flight technology using the epc611 TOF chip and a small LED to illuminate the scenery. The range-finder controls the illumination and the imager chip to obtain distance and confidence information. Due to the high performance of the imager chip with its unique ambient light suppression, the range-finder can be used in outdoor applications at full sunlight. This allows a wide variety of new applications, e.g. for mobile robotics. This very small module is easy to use because it delivers fully calibrated and compensated distance values. All the complex engineering and time consuming design tasks regarding optics, illumination and signal processing are already solved.

APPLICATIONS

Gesture Recognition



In-cabin Monitoring



Humanoid and Household Robots



Doors and Gates



People Counting



Industrial Automated Guided Vehicles



SPECIFICATIONS



Range
0.05 ... 15 m



Field of View
0.18° hor/ver



Ambient-light
100 kLux



Resolution
1 pixel, range-finder



Interface
UART 1 Mbit/s



Temperature Range
-20 ... +85°C



Accuracy
< 2 m: ± 4 cm
> 2 m: ± 2%

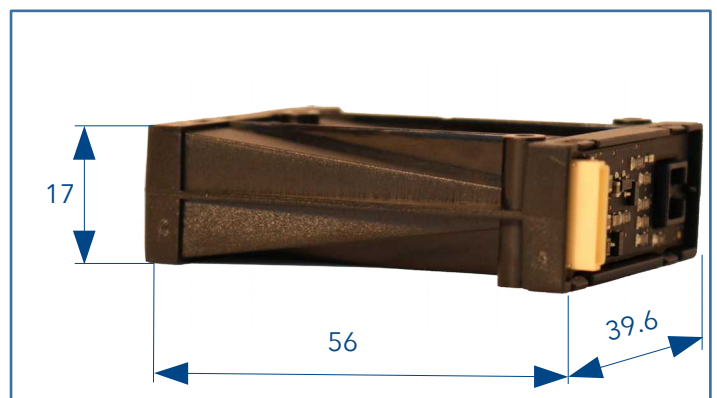


Data Output
4 Bytes per pixel
Resolution 0.1 mm
ROS driver upon request



Power Consumption
5 V, 400 mW

MECHANICAL DIMENSIONS



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