



The pmd[vision][®] CamBoard pico monstar is a platform design specifically developed to provide a quick-start for customers on their way to depth sensing modules. Gener8 has developed it for **pmdtechnologies**, based on pmd's technology. It is a functional platform which contains all core elements to facilitate a customer serial module with minor adaptations only. Form factor and power consumption enable integration into mass market devices, e.g. robots, surveillance or gaming devices.

Parameter	CamBoard pico monstar
Dimensions ¹⁾	62 mm x 66 mm x 29 mm
ToF-Sensor	IRS1125C Infineon [®] 3D Image Sensor IC based on pmd intelligence
Measurement range	0.5 – 6 m
Framerate	5 fps, 10 fps, 25 fps, 35 fps, 45 fps, 60 fps (3D frames)
Acquisition time per frame	5 ms typ. @ 60 fps
Power consumption	USB3.0 compliant, 4.5 W max. ²⁾ for IRS chip, illumination and USB3.0
Illumination	4x VCSEL, 850 nm
Software	C/C++ SDK, Matlab-SDK
Resolution	352 x 287 (100k) px
Viewing angle (H x V)	100° x 85°
Interface	USB 3.0 (data & power)
Depth resolution ³⁾	<= 1 % of distance (1 – 6 m @ 5fps) <= 1 % of distance (0.5 – 2 m @ 60 fps)
Operating System	Win 7 / 8, Ubuntu 14.04, Mac OS X ⁴⁾

1) incl. housing, without tripod mount

2) @ 25fps and 450 μs exposure time, other frame rates consume less power

3) Typical values for lambertian reflection of 90% without ambient light, center of image; due to the wide FoV the depth performance may decrease for non-central pixel

4) Mac OS in preparation