



<b>MobileRanger Stereovision System Specifications</b>	
<b>Vision Processor Subsystem</b>	
Resolution	WVGA (752x480)
Disparity Frame Rate	30 frames per second WVGA with 92 disparity levels.
Disparity Range	64
Camera Callibration	Calibration coefficients generated at the factory. Processor rectifies and undistorts images in real-time
Calibration Error	0.1 pixel RMS error.
Stereo Algorithm	Sum of Absolute Differences (SAD) with 9x9 block matching.
Left/Right Check	Identifies places where correlation is contradictory and thus uncertain
Host Interface	33 MHz PCI or PC/104+, direct DMA access
Processor Upgrades	Ability to upgrade processor functionality in the field.
<b>6cm Baseline Stereo Vision Camera</b>	
Resolution	Two 752x480 1/3-inch wide-VGA CMOS digital image sensors.
Frame Rate	Programmable up to 60 frames per second.
Baseline	6cm. Contact us for custom baseline cameras.
Mounting	Includes three standard Tripod mounts on the bottom. Contact us for drawings.
Image Format	Monochrome: Near_IR enhanced performance for use with non-visible NIR illumination. Contact us for information regarding color sensors.
Dynamic Range	>60dB
Analog to Digital Conversion	10 bit
Shutter Type	Global shutter photodiode pixels; simultaneous integration and readout.
Controls	Automatic/Manual synchronized exposure and gain control.
Interface	LVDS on CAT6 cable up to 5 meters in length.
Focal Lens Length	Uses standard 2.9mm. Contact us for additional lens options.
Field of View	75 degree (horizontal) by 52 degree (vertical) Field of View
Power Supply	Supplied via CAT5 cables from PCI card.
Power Consumption	<500mW at maximum data rate;
Dimensions	4.25in x 1.5in x 1.25in indoors, 4.88in x 3.75in x 2.50in