



## MULTISENSE

A second-generation stereo computer sensor with an on-board processing system, intelligently designed to facilitate complete and stand-alone sensor solutions.

## **CARNEGIE ROBOTICS** SPEC SHEET

## MULTISENSE

PHYSICAL	<u>o</u>
Height:	19.1 cm
Width:	13 cm
Depth:	13 cm
Weight:	2.6 kg

ENVIRONMENTAL	Þ
Operating Temperature:	-10 to 50 C
Environmental Rating:	IP 67

RUGGEDIZATION	
Corning® Gorilla® Glass Lens Shields:	The unique composition of Gorilla® Glass allows for a deep layer of high compressive stress, that acts as "armour", making the lens shields exceptionally tough and resistant to chips and scratches.
Vibration Testing*:	<ul> <li>Frequency: 5 Hz to 500 Hz</li> <li>Vertical Axis: 2.24 g RMS Transverse Axis: 1.48 g RMS</li> <li>Longitudinal Axis: 1.90 g RMS</li> <li>Test Duration: 2 hr/axis</li> </ul>
*Engineering samples of the MultiSense S7 have passed extended MIL-STD-810G vibration and shock tests and displayed no change in range measurements and no drift in calibration from before to after the tests.	

ELECTRICAL	(J)
Voltage (nominal):	24 V
Voltage (range):	18–48 V
Power (nominal):	20 W
Power (full lighting)*:	75 W
External Connector:	<ul> <li>Power: M12-A5/Male</li> <li>Ethernet: M12-X8 Female</li> <li>External Lighting: M12-A8/Female</li> </ul>

IMAGE SENSORS 44	
Model*:	CMV2000 or CMV4000
*Monochrome, color, and IR sensitive options available.	
Resolution:	2048 x 1088 or 2048 x 2048
Active Area:	• 11.2 x 6 mm (CMV2000) • 11.2 x 11.2 mm (CMV4000)
Frame Rate:	30 FPS max
Sensitivity*:	5.56 V/lux-s
*Value for monochrome imagers. Bayer filter on color imagers reduces sensitivity.	

Color Filter Array:	Baver
color ritter Array.	Duyer

LENSES	00
Focal Length*:	6.5 mm
Field of View:	• 80° x 45° (2MP sensor) • 80° x 80° (4MP sensor)
Aperture:	Fixed to f4.0 at factory
Focus:	Fixed at factory

ILLUMINATION	Ţ
Number of LED Illuminators*:	2
*Supports up to two additional ex	xternal LEDs.
Color Temperature:	4100K
Brightness:	690 lm each
Power*:	6 W per LED
*Light power is at 100% duty, no strobing. Strobing is user-adjustable.	
Field of View:	• 1 @ 18° • 1 @ 44°
Synchronization:	Continuous illumination or synchronized to camera exposure.