

Cambrian vision system datasheet

Data

<u>Precision values* +/-</u>	<u>Standard camera module</u>	<u>Custom camera module</u>
Max. precision X/Y	1 mm	0.2 mm
Max. precision Z	1.5 mm	0.8 mm
Rotation precision X/Y	2,5°	1°
Rotation precision Z	1°	0.3°
Prediction time	< 200ms	
Working distance	100 mm to 800mm (standard camera module), custom camera modules can have higher working distances	
Minimum size of parts	1mm * 1mm * 1mm	
Part coverage standard cameras	From 5mm * 5mm * 5mm to 200mm * 200mm * 200mm For larger parts, we supply a different camera module.	
3D technology	AI/Neural network. No Structured light needed.	
Parts coverage	Wide range of parts incl. Black, Shiny and Transparent parts, including some cable configurations.	

Hardware

Cameras	IDS UI-5880CP-C-HQ Rev.2
Image resolution	3088 x 2076, 6,41 Mpix
Frame rate	17.0 fps
Pixel size	2.40 µm
Optical area	7.410 mm x 4.980 mm
Exposure time (minimum - maximum)	0.032 ms - 999 ms
Computer unit	
Operating system	Linux Ubuntu 18.04
Network switch	Netgear 8 port GS308P
Cables	Ethernet CAT7 Flat cables

Power Supply

Cameras	Power over Ethernet (PoE) IEEE 802.3af or 12 V - 24 V
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Power consumption	1.8 W - 2.9 W (per Camera)
Computer	AC Adapter O/P: DC 19.5V/330W

Sizes/Dimension

Dimension camera	29.0 mm x 29.0 mm x 29.0 mm
Camera module dimension	100mm x 81mm x 32mm
Weight of the module	220g
Material	AL
IP Class	IP 30 (IP65/67 version can be provided on request)
Screws	M3 (provided with the package)

Computing module dimensions	283 x 268 x 139 mm
Computing module weight	4.2 kg

Environmental Data

Temperature range operation	0 °C to 55° C, passive cooling
Temperature range storage	-20 °C to 60 °C
Humidity (relative, non-condensing)	20 % to 80 %