

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 U3-3680XCP-C-HQ
Image resolution	2592 x 1944, 5.04 MPIX
Frame rate	44
Pixel size	2.2 µm
Optical area	5.702 mm x 4.277 mm
Exposure time (minimum - maximum)	0.010 ms - 635 ms
Operating Conditions	0 °C - 55 °C, 20 % - 80 % Humidity
Interface	USB 3.0 micro-B, screwable
Lenses	IDS Lens IDS-8M118-C0828 8mm 1/1.8"
Computer unit	Intel NUC Enthusiast NUC11PHKI7CAA2 AC Adapter O/P: DC 19.5V/330W Option: InnoNet MAYFLOWER-II-Q470/i7-10700 (IPC)
Operating system	Linux Ubuntu 18.04

Computer

Keyboard/Mouse

PERIDUO-712 B

Ethernet Cable

V7 V7CAT6STP-05M-BLK-1E 5 m

Sizes/Dimension

Dimension camera

29.0 mm x 29.0 mm x 17.0 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 (NUC)

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 %