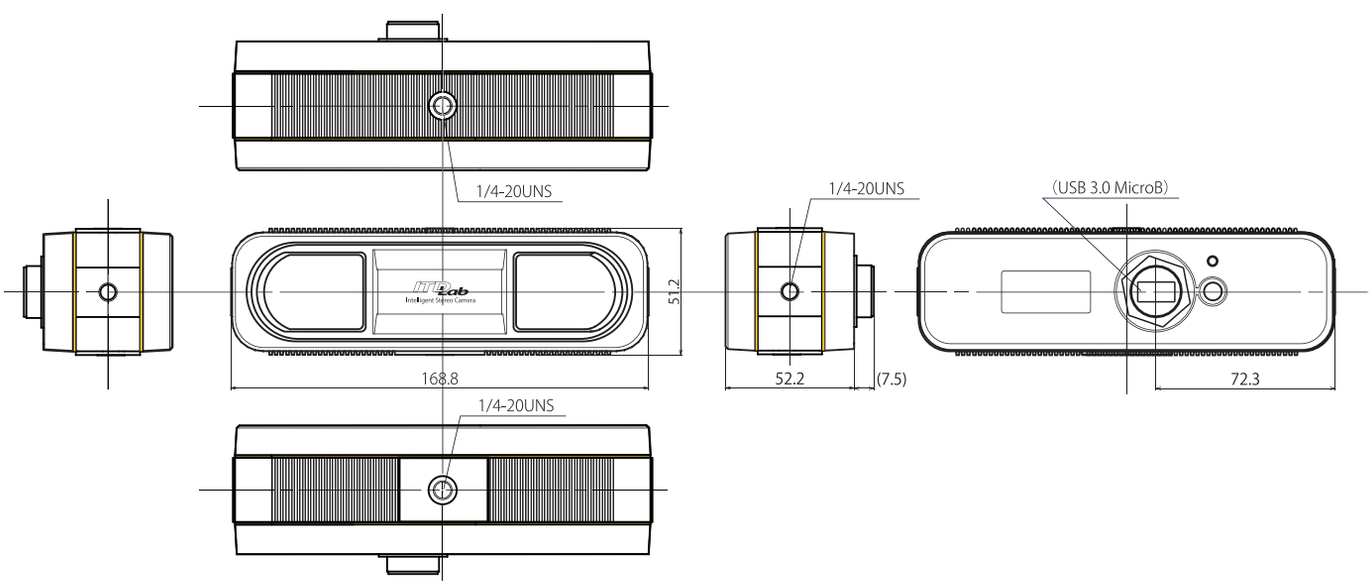
ITD Lab
Intelligent Stereo Camera

Intelligent Stereo Camera
ISC-100VM, ISC-100XC

This product is an evaluation kit for the purpose of providing a better understanding of ITD Lab's top-notch technologies and algorithm advantages. Different specifications of stereo camera, in terms of baseline length, CMOS resolution and FOV, are also available, depending on your various requirement.

ISC-100 Dimension



Intelligent Stereo Camera ISC-100 Specification

Intelligent Stereo Camera Specification

Item		ISC-100VM	ISC-100XC
Baseline Length		100 mm	100 mm
CMOS Resolution		752 x 480	1,280 x 960
Effective Resolution		640 x 480	1,024 x 720
Lens Type		Tele / Normal / Wide Lens Available	Tele / Normal / Wide Lens Available
Algorithm Type		Original Algorithm Based on SAD	Original Algorithm Based on SAD
Effective FOV	Tele	Approx 30°	Approx 30°
	Norm	Approx 50°	Approx 50°
	Wide	Approx 85°	Approx 85°
※1 Detectable Range	Tele	1.5 m to 40 m	2 m to 60 m
	Norm	0.8 m to 20m	1 m to 30 m
	Wide	0.5 m to 10 m	1 m to 15 m
※2 Distance Accuracy (Depth dir.)	Tele	2% (5m), 4% (10m), 6% (15m), 13% (30m)	2%(5m), 4%(10m), 5%(15m), 10%(30m), 17%(60m)
	Norm	2% (1m), 4% (5m), 8% (10m), 13% (15m)	2%(1m), 3%(5m), 5%(10m), 8%(15m), 16%(30m)
	Wide	2% (1m), 8% (5m), 17% (10m)	2%(1m), 5%(5m), 10%(10m), 15%(15m)
※3 Distance Accuracy (Horizontal dir.)	Tele	2% (2m), 4% (10m), 7% (20m), 14% (40m)	2%(2m), 3%(10m), 7%(30m), 14%(60m)
	Norm	2% (1m), 8% (10m), 14% (20m)	2%(1m), 5%(10m), 13%(30m)
	Wide	2% (1m),15% (10m)	2%(1m), 10%(10m)
Frame Rate		60 FPS	60 FPS
Automatic Calibration		Yes	Yes
Output Data		Parallax Data + Original B/W Image Data	Parallax Data + Original B/W Image Data
OS supported		Windows10、Linux ※4	Windows10、Linux ※4
Interface		USB 2.0	USB 3.0
Power Supply		5 V （BUS Powered ） 3 W	5 V （BUS Powered ） 8.5 W

※1：The detectable range of an object on the far (long distance) side may be extended or reduced depending on the tolerance of distance accuracy.
※2：Distance accuracy (depth direction) may change depending on factors such as operating environment including temperature, illuminance, and ambient light; texture of an object; and difference in brightness between an object and the background.
※3：Distance accuracy (horizontal direction) represents a margin of width error in the measurement of an object having a width of 1m at the front of a camera. Distance accuracy (horizontal direction) may change depending on factors such as operating environment including temperature, illuminance, and ambient light; texture of an object; and difference between brightness of an object and brightness of the background.
※4：Should you have any questions on supported Linux operation system versions, please contact us at sales@itdlab.com.

SDK Function

・OpenISC()	Open the connection.	・CloseISC()	Close the connection.
・StartGrabt()	Start the image capture.	・StopGrab()	Stop the image capture.
・GetImage()	Get the current image.	・GetDepthInfo()	Get the current parallax information.
・GetImageSize()	Get the current image size.	・SetAutoCalibration()	Set the automatic cariblation mode and start.
・GetAutoCalibration()	Get the current automatic caliblation information.	・SetShutterControl()	Set the shutter control mode and start.
・GetShutterControl()	Get the current shutter control information.	・GetGainValue()	Get the current gain value.
・SetGainValue()	Set the gain value.	・GetExposureValue()	Get the current exposure value.
・SetExposureValue()	Set the exposure value.	・GetCameraParamInfo()	Get the current camera parameters.

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