HB-20000-SB Series

HB-20000-SB-M Monochrome
HB-20000-SB-C Color

Back-illuminated pixel structure

HB-20000-SB: 25GigE camera with Sony Pregius S IMX531

HB-20000-SB features the Sony Pregius S IMX531 sensor. The Sony Pregius S technology features back-illuminated pixel structure that delivers distortion-free, high imaging performance and miniaturization. At full resolution (4504 x 4504) you get 100 frames per second. Its ultra high-speed 25GigE SFP28 interface offers many benefits including low-cost accessories, low CPU overhead, low latency, low jitter, and accurate multi-camera synchronization using IEEE1588. In addition, 25GigE SFP28 offers three supported cabling options for cable lengths from 1M to 10KM.

Benefits

» High-speed 25GigE SFP28
» Back-illuminated pixel structure
» 25x the speed of GigE
» Ultra high data/frame rates
» GigE Vision® and GenICam™ compliant
» Optional IP67 housing

Applications

» Virtual Reality
» Goal Line Technology
» Volumetric Capture
» Motion Capture
» Immersive 3D Content
» Finish Line Vision
» Referee Assist
» Flat Panel Inspection
» Machine Vision

Specifications
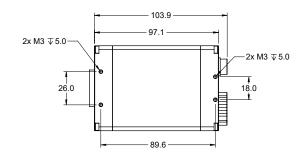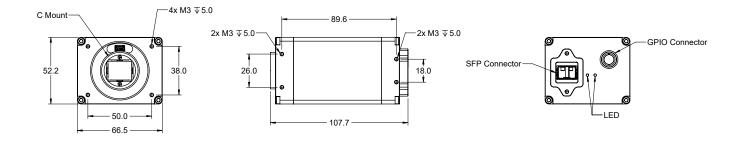
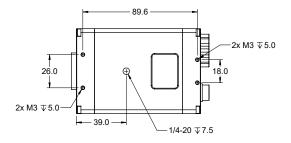|	
Sensor	IMX531
Resolution	4504 x 4504
Megapixels	20.28MP
Sensor Type	1.1" CMOS
Max Frame Rate	100fps
Cell Size	2.74x2.74µm
Standard Mount	C Mount
Shutter	Global
Bit Depth	8 & 12 bit
GPIO / Triggering	3 in, 3 out Software, External (Pulse or Edge)
Interface	25GigE SFP28
Exposure/Integration*	5µs-1s
Dynamic Range	74 dB
Monochrome Modes	Mono8, Mono12, Mono12Packed
Color Modes	RGB8, BGR8, YUV411, YUV422, YUV444
Raw Modes	BayerRG8, BayerRG12, BayerRG12Packed
Operating System	Win10 (64 bit), Linux (64 bit)
Compliance	CE, FCC, RoHS, WEEE, GigE Vision, GenICam
Power Requirements	9W, 12V
Operating Temperature	0C - 45C
Storage Temperature	-30C to +60C
Dimensions & Weight	97 x 66 x 52 - 500g
Warranty	2 Years

*all minimum exposure specs can vary from what is listed based on the limitations of each sensor as per notice from the manufacturer.

Mechanical drawings

103.9
97.1
2x M3 ⬇ 5.0
2x M3 ⬇ 5.0
26.0
18.0
89.6

C Mount
4x M3 ⬇ 5.0
52.2
38.0
50.0
66.5

89.6
2x M3 ⬇ 5.0
2x M3 ⬇ 5.0
26.0
18.0
107.7

SFP Connector
GPIO Connector
LED

89.6
2x M3 ⬇ 5.0
26.0
18.0
2x M3 ⬇ 5.0
39.0
1/4-20 ⬇ 7.5