# HR-5000-SB Series 

## HR-5000-SB-M Monochrome HR-5000-SB-C Color

| Back-illuminated pixel structure


GiGE Gen<i>CAM
Pregius S

Back-illuminated 5.1 MP 10GigE camera with Sony Pregius S IMX537 CMOS sensor

HR-5000-SB features the Sony Pregius S IMX537 sensor. The Sony Pregius S technology features back-illuminated pixel structure that delivers distortion-free, high imaging performance and miniaturization. At full resolution ( $2448 \times 2048$ ) you get up to 240 frames per second. Its ultra highspeed SFP+ 10GigE interface offers many benefits including low-cost accessories, low CPU overhead, low latency, low jitter, and accurate multi-camera synchronization using IEEE1588. In addition, SFP+ 10GigE offers three supported cabling options for cable lengths from 1 M to 10 KM .

## Benefits

High-speed SFP+ 10GigE interface
Back-illuminated pixel structure
10x the speed of GigE
Ultra high data/frame rates
» GigE Vision ${ }^{\circledR}$ and Genicam ${ }^{\text {M }}$ compliant
" Optional IP67 housing

## Applications

» Industrial inspection
» Automation
» Intelligent Transportation Systems
» Logistics
" Virtual reality
" Volumetric capture
» Referee Assist

## Specifications

| Sensor | Sony IMX537 |
| :---: | :---: |
| Resolution | $2448 \times 2048$ |
| Megapixels | 5.1 MP |
| Sensor Type | 1/1.8 CMOS |
| Max Frame Rate | 240 fps @ 8-bit 160 fps @ 12-bit |
| Cell Size | $2.74 \mu \mathrm{~m} \times 2.74 \mu \mathrm{~m}$ |
| Standard Mount | C Mount |
| Shutter | Global |
| Bit Depth | 8 \& 12 bit |
| GPIO / Triggering | 3 in, 3 out Software, External (Pulse or Edge) |
| Interface | SFP+ 10GigE |
| Exposure/Integration* | $5 \mu \mathrm{~s}-1 \mathrm{~s}$ |
| 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 | OC-45C |
| Storage Temperature | $-30 C$ to +60C |
| Dimensions \& Weight | $97 \times 66 \times 52-500 \mathrm{~g}$ |
| 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.

## emergent

vision technologies

## Mechanical drawings



