

B Series GigE Vision Board Level Cameras

Product Guide



Overview

Omron's new line of GigE Vision Board Level cameras features Sony Pregius & Exmor CMOS and is a compact, lightweight industrial camera that can be utilized in a myriad of industrial and machine vision applications. The GigE Vision B Series is focused on applications within the industrial market that require a small form factor that gives integrators and vision system designers design freedom when building machines. As well as providing design freedom for system builder and integrators, the GigE Vision B Series features resolution up to 20MP and frame rates as high as 282 FPS, making the B Series not only one of Omron's smallest camera series, but also one of the most diverse line ups of sensor options for designers.

The Omron GigE Vision B Series features access to the Omron Sentech SDK which allows users to create their own Vision application usable on a multitude of operating systems, including Windows, MAC, Linux, and Single Board computers. Integrators and Vision System Designers can expect to find a highly flexible board level camera that can tackle extremely difficult design problems by utilizing a small footprint inside of vision based machines.

Applications

- Medical Diagnostics
- Metrology
- Microscopy
- Robot Guided Vision
- Inspection
- Packaging
- Handheld Scanners
- General Machine Vision

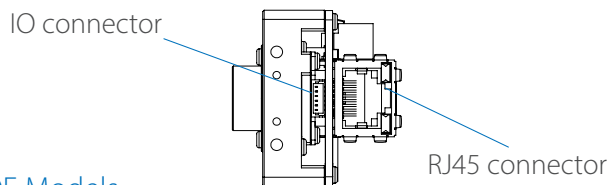
Key features

- Resolutions from 0.4 MP to 20MP from State of the Art Sony Pregius Sensors.
- Frame Rates up to 282 FPS
- GigE Vision 2.1 Compliant
- IEEE 15488 Protocol allows for simultaneous triggering of up to 100 cameras on a single network.
- Highly Customizable Configurations, including:
 - Monochrome or Color
 - Power over Ethernet or Power over I/O
 - C or S Lens Mounts
 - Remote Head Options
- Small Form factor expands design space for original equipment manufacturers and system builders.

Model No. List

Model No.	Resolution	Color/Monochrome	Frame rate	Effective pixels	Sensor size	Lens mount	Image sensor	Notes
STC-BBS43POE-BC	0.4M	Monochrome	282.8 fps	720x540	1/2.9"	C mount	IMX287	Support POE, Global shutter
STC-BCS43POE-BC		Color						
STC-BBS163POE-BC	1.6M	Monochrome	70.7 fps	1400x1088	1/2.9"	C mount	IMX273	Support POE, Global shutter
STC-BCS163POE-BC		Color						
STC-BBS202POE-BC	2M	Monochrome	54.6 fps	1624x1240	1/1.7"	C mount	IMX430	Support POE, Global shutter
STC-BCS202POE-BC		Color						
STC-BBS312POE-BC	3.2M	Monochrome	34.9 fps	2048x1536	1/1.8"	C mount	IMX265	Support POE, Global shutter
STC-BCS312POE-BC		Color						
STC-BBS500POE-BC	5M	Monochrome	21.9 fps	2448x2048	2/3"	C mount	IMX264	Support POE, Global shutter
STC-BCS500POE-BC		Color						
STC-BBS213POE-BC	2.1M	Monochrome	53.0 fps	1920x1080	1/2.8"	C mount	IMX291	Support POE, Global shutter
STC-BCS213POE-BC		Color					IMX462	
STC-BCS213POE-BC-NIR		Color NIR						
STC-BBS1242POE-BC	12M	Monochrome	9.2 fps	4000x3000	1/1.7"	C mount	IMX226	Support POE, Global shutter
STC-BCS1242POE-BC		Color						
STC-BBS2041POE-BC	20.4M	Monochrome	5.5 fps	5472x3648	1/2"	C mount	IMX183	Support POE, Global shutter
STC-BCS2041POE-BC		Color						

IO connector (External power / IO signals)



POE Models

No.	Signal Name	IN/OUT	Voltage
1	N/A	-	-
2	Opt-isolated in (Line0)	IN	Low: smaller than +1.0 V High: +3.0 to +26.4V *Potential difference between "Opto-isolated in" and "Signal GND"
3	Opt-isolated out (Line1)	OUT	+3.0 to +26.4V /Open Collector
4	Opt-isolated out (Line2)	OUT	+3.0 to +26.4V /Open Collector
5	Opt-isolated out (Line3)	OUT	+3.0 to +26.4V /Open Collector
6	Signal GND	IN	0 V

* For GE models (non-POE), IO connector is Power/IO connector.

* It is necessary to prepare connector that attached to IO connector.
connector for wireharness: SHR-06V (JST)
(SM06-RSS (JST) on camera)

GE Models (Non-POE)

No.	Signal Name	IN/OUT	Voltage
1	Power in	IN	+10.8 to +26.4 Vdc-
2	Opt-isolated in (Line0)	IN	Low: smaller than +1.0 V High: +3.0 to +26.4V *Potential difference between "Opto-isolated in" and "Signal GND"
3	Opt-isolated out (Line1)	OUT	+3.0 to +26.4V /Open Collector
4	Opt-isolated out (Line2)	OUT	+3.0 to +26.4V /Open Collector
5	Opt-isolated out (Line3)	OUT	+3.0 to +26.4V /Open Collector
6	Signal GND/ Power GND	IN	0 V

Accessories

Screw-fastened Gige Cables

Model No.	Notes
FJ-VSG 3M	3m, screw-fastened at camera side, Robot cable
FJ-VSG 5M	5m, screw-fastened at camera side, Robot cable
FJ-VSG 10M	10m, screw-fastened at camera side, Robot cable
FJ-VSG 20M	20m, screw-fastened at camera side, Robot cable
FJ-VSG 40M	40m, screw-fastened at camera side, Robot cable

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Note: Specifications are subject to change.