Industrial Cameras
STC/FS Series

Make It Faster, Make It Simpler

OMRON has been developing high speed & high performance image processing systems in order to meet the needs of the automation world pursues. And now, image processing began to spread all over the world and the evolution speed of people want is getting higher. For our customers' satisfaction, we start to deliver OMRON SENTECH (former SENTECH)'s cameras. OMRON SENTECH is a manufacturer specializing in industrial cameras that became a new member of the OMRON group. Those cameras make the conventional systems simpler, faster and more flexible. Also they make it easy to assist the visual inspection to capture enlarged images without pc.

OMRON　**SENTECH**

Notes for Purchase
- Please contact the trading company for delivery date.
- All cameras in this catalog can not be connected to the image processing system such as FH / FZ / FJ series.

Dimensions
- This catalog contains the dimensions (unit : mm) of a typical model. Please confirm the CAD data for the dimensions of models not mentioned.

How to Choose a camera

GigE

USB3.0

CoaXPress

Opt-C:Link

Camera Link

HDMI/DVI/SDI

Analog Progressive

TV Format

Small Board Camera

Accessories

Broad Product Selection

We offer a wide range of products, with both analog and digital interfaces. Our lineup of basic products alone boasts an extensive roster of 360 models with support for 12 interfaces.
The same sensors are provided with different interfaces, allowing you to choose the right product for your purpose.
We offer a wide range of models—from case cameras to board cameras, remote head cameras, and ultra-compact cameras—all built on our unique machined aluminum casing platform that guarantees durability and reliability.

GiGE VISION®

CoaXPress®

CAMERA Link® REGISTERED PRODUCT

USB3 VISION™

Opt-C:Link

| HDMI/HD-SDI | Analog Progressive | TV Format |

Reliable Manufacturing

Our products are manufactured in dedicated lines in our partner plants in Japan.
The annual production volume is 150K units.

Our cameras can be reliably used on the ground in factory automation applications.

Designed for excellent
shock/vibration resistance

Robust casing

Cools efficiently

Multi-surface
mounting

Advanced
shield structure
(for noise resistance)

Casing designed to be symmetrical
around optical axis center for resistance
to heat-induced optical axis displacement

2-piece casing structure made
of machined aluminum
(except some models)

How to Choose a Camera
Camera Line-up Chart

How to Choose an Image Sensor

☐ Monochrome
　→ Mono or Color?
☐ Number of Pixels
　→ Optimal Resolution for Your Application
☐ Scan Speed
　→ Required FPS
☐ Sensor Size?

How to Choose the Interface

☐ Connect to
　→ Monitor or PC?
☐ Cable Length
　→ Distance Between the Camera and the Equipment
☐ The Number of Cameras
　→ How many cameras for one PC?

Based on factors such as decided specifications, system outline and cost image, refer to the following per-interface comparison table and product lineup chart to choose the optimum Sentech camera.

Interface when using a PC /　　Interface when not using a PC /　　Interface not offered by OMRON

| Interfaces | GigE Vision® | USB | | CoaXpress | Opt-C:Link | Camera Link | | Analog | HD-DVI | HD-SDI | TV Formats | IEEE1394b | Camera Link HS |
		USB2.0	USB3.0			Base	Full						
Monitor Display	PC Required							Can be connected directly to monitor					
Connection Port	Gigabit Ethernet Port	USB2.0 Port	USB3.0 Port	CoaXpress Grabber Board	Opt-C:Link Grabber Board	Camera Link Frame Grabber Board		Analog Frame Grabber Board	HDMI Port DVI Port	SDI connector	RCA connector BNC connector	Required	Camera Link HS Grabber Board
Cable	Ethernet cable Cat 5e or higher	USB2.0 Cable	USB3.0 Cable	Coaxial Cable	Optical cable	Camera Link Cable		12-pin Cable	HDMI/DVI Cable	Coaxial Cable for SDI	Coaxial Cable	IEEE1394b Cable	Camera Link HS Cable
Max. Cable Length	100 m	5 m	3 m	25 m	150 m	Approx. 5 m to 12 m		100 m	5 m	100 m	100 m	100 m	15 m
Image Transmission Capacity	☆☆	☆	☆☆☆	☆☆☆☆☆☆	☆☆☆☆☆☆	☆☆	☆☆☆☆☆	☆☆	☆☆	☆☆	☆	☆☆	☆☆
Max. Transmission Speed	1 Gbps	0.48 Gbps	5 Gbps	25 Gbps	12.5 Gbps/ 40 Gbps	240 fps 30 Megapixel - 16 fps 500 Megapixel (2.38 Gbps)	600 fps 30 Megapixel - 60 fps 1200 Megapixel (7.14 Gbps)	90 fps 30 Megapixel - 15 fps 200 Megapixel	60 fps 1080 p	60 fps 1080 p	59.94 fps 30 Megapixel (interlaced)	800 Mbps	2,100 Mbps
Power over Cable	○(PoE Model)	○(All Models)		○	Separate Power Supply	○(PoCL Model)		Separate Power Supply	Separate Power Supply	Separate Power Supply	Separate Power Supply	○	○
Software Provider	Camera Manufacturer	Camera Manufacturer		Board Manufacturer	Board Manufacturer	Board Manufacturer		Board Manufacturer	Not required			Camera Manufacturer	Board Manufacturer
System Cost	Low	Low		High	High	High		High	Low	Mid	Low	Low	High
Multiple Device Connection	Add Ethernet card or use switching hub	Add USB port expansion card (hub not recommended)		Add frame grabber board	Add frame grabber board	Add frame grabber board		Add frame grabber board	Use switcher			IEEE1394b expansion card, use hub	Add frame grabber board
Advantages	- Long cable length - Cheap cost to connect multiple cameras - Frame grabber not required	- Easy to connect - Low cost - Cheap cost to connect multiple cameras		- Long cable length - High transmission capacity	- Long cable length - Strong to noise	- Proven track record - High transmission capacity		- Proven track record - Long cable length	- Can easily be connected directly to monitor	- Long cable length	- Proven track record - Low cost - Long cable length	- Proven track record	- High transmission capacity - Smaller connector compared with Camera Link
Disadvantages	- Lower fps comparing with other interfaces	- Short cable length		- No extensive track record - High board cost	- No extensive track record - Few compatible board	- Short cable length - High board and cable cost - High cost to connect multiple cameras		- High board and cable cost	- Short cable length - No trigger function	- Few SDI-compatible monitors	- Low resolution	- Short cable length - IEEE1394b card required	- High board and cable cost
Main Applications	- Image processing - Monitoring	- Image processing - Monitoring		- Image processing - Monitoring	- Image processing - Monitoring	- Image processing		- Image processing	- Monitoring			- Image processing - Monitoring	- Image processing

* System costs, advantages and disadvantages are subjective opinions by OMRON

Per-interface comparison table
Camera Line-up Chart

	0.4 - 0.5 M	1.3 - 1.6 M	2 M	3.2 M/4 M	5 M	6 - 9 M	12 M	16 - 20 M	25 M
GigE Vision	0.4M IMX287	1.3M EV76C560	2M IMX430	3.2M IMX265	5M MT9P031	6.4M IMX178	12M IMX226	20M IMX183	
	0.5M IMX433	1.6M IMX273	2.3M IMX249	4M CMV4000	5M IMX264	8.9M IMX267	12M IMX304		
USB3 Vision	0.4M IMX287	1.3M EV76C560	2.3M IMX249	3.2M IMX265/252	5M MT9P031	8.9M IMX267/255	12M IMX226	20M IMX183	
		1.6M IMX273		4M CMV4000	5M IMX264/250		12M IMX304/253		
Camera Link	0.4M IMX287	1.6M IMX273	2M IMX430	3.2M IMX265/252	5M MT9P031	8.9M IMX267/255	12M IMX304/253		25M Python25k
	0.5M IMX433		2M CMV2000	4M CMV4000	5M IMX264/250		12M CMV12000		25M GMAX0505
CoaXPress	0.4M IMX287	1.6M IMX273	2M IMX422	3.2M IMX252	5M IMX250		12M CMV12000		
				4M CMV4000			12M IMX304/253		
Opt-C:Link							12M CMV12000		
HD Camera			1080P IMX291			2160P IMX274			
Analog Progressive	VGA RJ33B4AA0DT								
TV Format	0.65M ISX017								
UVC (USB 3.0)		1.3M ISX017							
MIPI		1.3M ISX017							

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GigE Vision Small CMOS Camera M Series

Description

PoE-compatible GigE Vision camera with high-resolution, high-speed CMOS sensor

Features

More compact (29 mm square) than previous model (35 mm square)

30 mm x 40 mm casing that can accommodate large image sensors of 1 inch or more

Supports GigE Vision ver. 2.1 and newly provides PTP support and other features

Extensive lineup of 0.4-20 MP products

Product Line-up

Global shutter models									
Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	Dimensions (mm)
STC-MBS43POE	Monochrome	0.4M	282.8 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	C	29 × 29 × 53
STC-MCS43POE	Color								
STC-MBS52POE	Monochrome	0.5M	166.5 fps	816 × 624	1/1.7	9 × 9	IMX433	C	
STC-MCS52POE	Color								
STC-MBE132POE	Monochrome	1.3M	61 fps	1280 × 1024	1/1.8	5.3 × 5.3	EV76C560	C	
STC-MCE132POE	Color								
STC-MBS163POE	Monochrome	1.6M	70.7 fps	1440 × 1088	1/2.9	3.45 × 3.45	IMX273	C	
STC-MCS163POE	Color								
STC-MBS202POE	Monochrome	2M	54.6 fps	1624 × 1240	1/1.7	4.5 × 4.5	IMX430	C	
STC-MCS202POE	Color								
STC-MBS231POE	Monochrome	2.3M	41.6 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX249	C	
STC-MCS231POE	Color								
STC-MBS312POE	Monochrome	3.2M	34.9 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX265	C	
STC-MCS312POE	Color								
STC-MBS500POE	Monochrome	5M	21.9 fps	2448 × 2048	2/3	3.45 × 3.45	IMX264	C	
STC-MCS500POE	Color								
STC-MBS881POE	Monochrome	8.9M	12.4 fps	4096 × 2160	1	3.45 × 3.45	IMX267	C	30 × 40 × 54.5
STC-MCS881POE	Color								
STC-MBS122BPOE	Monochrome	12.3M	8.9 fps	4096 × 3000	1.1	3.45 × 3.45	IMX304	C	
STC-MCS122BPOE	Color								

Rolling shutter models									
Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	Dimensions (mm)
STC-MBA503POE	Monochrome	5M	14 fps	2592 × 1944	1/2.5	2.2 × 2.2	MT9P031	C	29 × 29 × 53
STC-MCA503POE	Color								
STC-MBS642POE	Monochrome	6.4M	17.4 fps	3072 × 2048	1/1.8	2.4 × 2.4	IMX178	C	
STC-MCS642POE	Color								
STC-MBA1002POE	Monochrome	10M	10.3 fps	3856 × 2764	1/2.3	1.67 × 1.67	MT9J003	C	
STC-MBS1242POE	Monochrome	12M	9.2 fps	4000 × 3000	1/1.7	1.85 × 1.85	IMX226	C	
STC-MCS1242POE	Color								
STC-MBS2041POE	Monochrome	20.4M	5.5 fps	5472 × 3648	1	2.4 × 2.4	IMX183	C	30 × 40 × 54.5
STC-MCS2041POE	Color								

Note. Supply power via PoE or power supply and I/O cable.
        PoE NIC or Ethernet switch separately needed to supply power via PoE.

GigE

Accessories

Screw-Fastened GigE Cables	
Model	Length
FJ-VSG 3M	3 m
FJ-VSG 5M	5 m
FJ-VSG 10M	10 m
FJ-VSG 20M	20 m
FJ-VSG 40M	40 m

Power Supply and I/O Cables	
Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.

Note. Connect the shell to FG.

Conversion Cables		
Model	Applicable Model	General Specifications
CAB-KWA-IEA		Converts 6-pin connector to S Series pin assignment

Tripod		
Model	Applicable Model	General Specifications
TP-KWA	GigE Vision M Series	
TP-KWA-IEA	GigE Vision M Series	Use to set M Series at same height as S Series sensor center
TP-KWA2	STC-MBS/MCS881POE, STC-MBS/MCS122BPOE, STC-MBS/MCS2041POE	

Drawing dimension

Monochrome

STC-MBS43POE
STC-MBS52POE
STC-MBE132POE
STC-MBS163POE

STC-MBS202POE
STC-MBS231POE
STC-MBS312POE
STC-MBS500POE

STC-MBA503POE
STC-MBS642POE
STC-MBA1002POE
STC-MBS1242POE
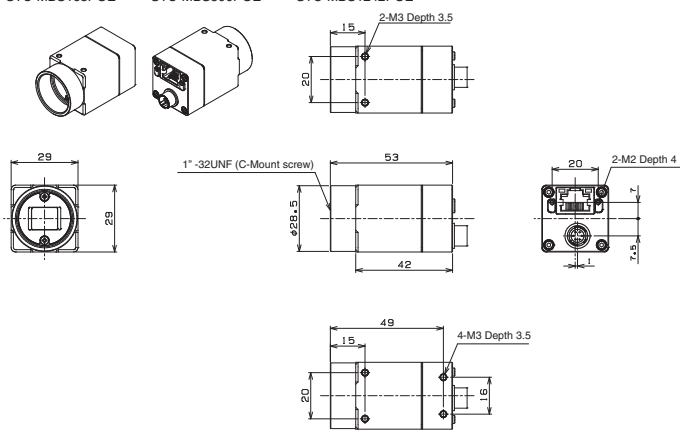
STC-MBS881POE
STC-MBS122BPOE
STC-MBS2041POE

Both sides
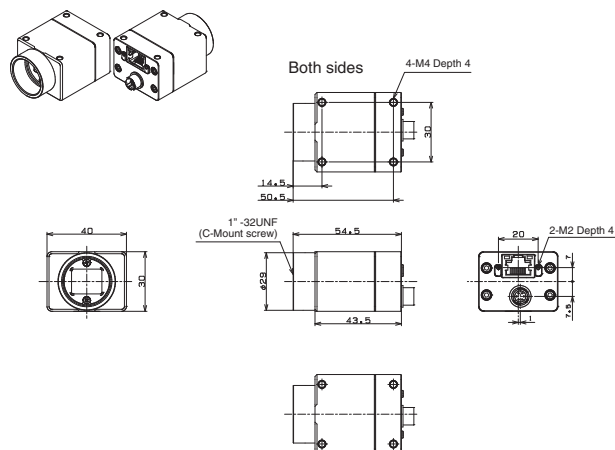
Color

STC-MCS43POE
STC-MCS52POE
STC-MCE132POE
STC-MCS163POE

STC-MCS202POE
STC-MCS231POE
STC-MCS312POE
STC-MCS500POE

STC-MCA503POE
STC-MCS642POE
STC-MCS1242POE
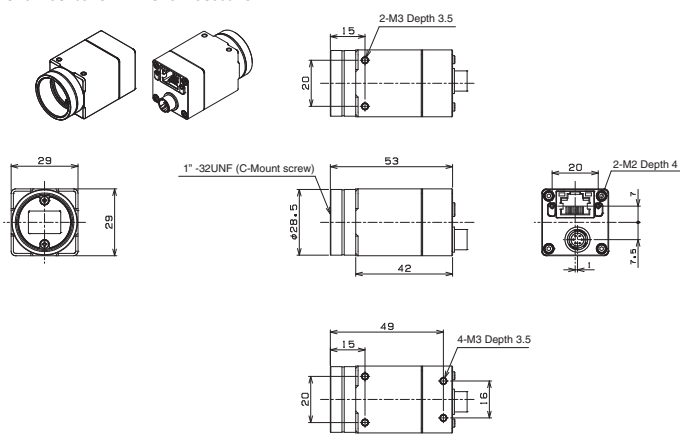
STC-MCS881POE
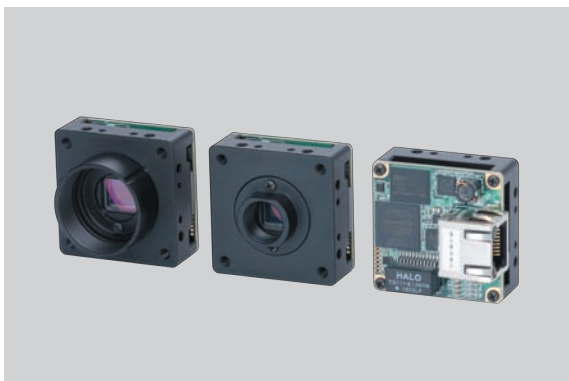STC-MCS122BPOE
STC-MCS2041POE

Both sides
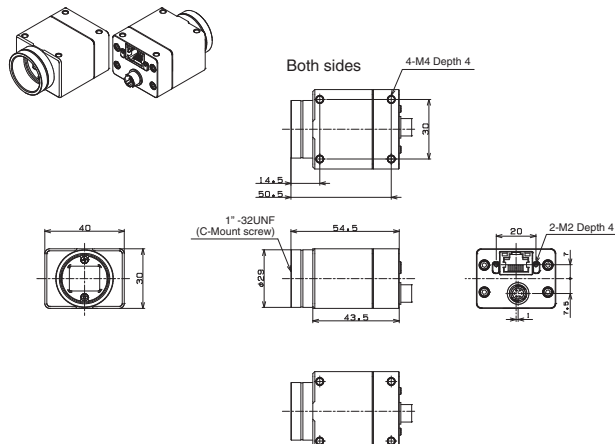
GigE Vision Small CMOS Board Camera

Description

GigE Vision board camera with high-resolution, high-speed CMOS sensor

Features

Board model that can be installed in spaces with limited depth

Extensive lineup of 0.4-20 MP products

Both PoE models and external power supply models available

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (µm)	Connecter	Type	Power Supply	Lens Mount	Sensor	Shutter Type
STC-BBS43POE-BC	Monochrome	0.4M	282.8 fps	720 x 540	1/2.9	6.9 × 6.9	RJ45 supported	All-in-one	PoE power supply	C	IMX287	Global
STC-BBS43GE-BC									External power supply (PoE not supported)			
STC-BBS43POE-BL									PoE power supply	S		
STC-BBS43GE-BL									External power supply (PoE not supported)			
STC-BCS43POE-BC	Color								PoE power supply	C		
STC-BCS43GE-BC									External power supply (PoE not supported)			
STC-BCS43POE-BL									PoE power supply	S		
STC-BCS43GE-BL									External power supply (PoE not supported)			
STC-BBS163POE-BC	Monochrome	1.6M	70.7 fps	1,440 x 1,088	1/2.9	3.45 × 3.45	RJ45 supported	All-in-one	PoE power supply	C	IMX273	Global
STC-BBS163GE-BC									External power supply (PoE not supported)			
STC-BBS163POE-BL									PoE power supply	S		
STC-BBS163GE-BL									External power supply (PoE not supported)			
STC-BCS163POE-BC	Color								PoE power supply	C		
STC-BCS163GE-BC									External power supply (PoE not supported)			
STC-BCS163POE-BL									PoE power supply	S		
STC-BCS163GE-BL									External power supply (PoE not supported)			
STC-BBS202POE-BC	Monochrome	2M	54.6 fps	1,624 x 1,240	1/1.7	4.5 × 4.5	RJ45 supported	All-in-one	PoE power supply	C	IMX430	Global
STC-BBS202GE-BC									External power supply (PoE not supported)			
STC-BBS202POE-BL									PoE power supply	S		
STC-BBS202GE-BL									External power supply (PoE not supported)			
STC-BCS202POE-BC	Color								PoE power supply	C		
STC-BCS202GE-BC									External power supply (PoE not supported)			
STC-BCS202POE-BL									PoE power supply	S		
STC-BCS202GE-BL									External power supply (PoE not supported)			
STC-BBS312POE-BC	Monochrome	3.2M	34.9 fps	2,048 x 1,536	1/1.8	3.45 × 3.45	RJ45 supported	All-in-one	PoE power supply	C	IMX265	Global
STC-BBS312GE-BC									External power supply (PoE not supported)			
STC-BBS312POE-BL									PoE power supply	S		
STC-BBS312GE-BL									External power supply (PoE not supported)			
STC-BCS312POE-BC	Color								PoE power supply	C		
STC-BCS312GE-BC									External power supply (PoE not supported)			
STC-BCS312POE-BL									PoE power supply	S		
STC-BCS312GE-BL									External power supply (PoE not supported)			
STC-BBS500POE-BC	Monochrome	5M	21.9 fps	2,448 x 2,048	2/3	3.45 × 3.45	RJ45 supported	All-in-one	PoE power supply	C	IMX264	Global
STC-BBS500GE-BC									External power supply (PoE not supported)			
STC-BCS500POE-BC	Color								PoE power supply			
STC-BCS500GE-BC									External power supply (PoE not supported)			

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (μm)	Connecter	Type	Power Supply	Lens Mount	Sensor	Shutter Type
STC-BBS213POE-BC	Monochrome	2.1M	53.0 fps	1,920 x 1,080	1/2.8	2.9 x 2.9	RJ45 supported	All-in-one	PoE power supply	C	IMX291	Rolling
STC-BBS213GE-BC									External power supply (PoE not supported)			
STC-BBS213POE-BL									PoE power supply	S		
STC-BBS213GE-BL									External power supply (PoE not supported)			
STC-BCS213POE-BC	Color								PoE power supply	C		
STC-BCS213GE-BC									External power supply (PoE not supported)			
STC-BCS213POE-BL									PoE power supply	S		
STC-BCS213GE-BL									External power supply (PoE not supported)			
STC-BCS213POE-BC-NIR	Color NIR								PoE power supply	C	IMX462	
STC-BCS213GE-BC-NIR									External power supply (PoE not supported)			
STC-BCS213POE-BL-NIR									PoE power supply	S		
STC-BCS213GE-BL-NIR									External power supply (PoE not supported)			
STC-BBS1242POE-BC	Monochrome	12M	9.2 fps	4,000 x 3,000	1/1.7	1.85 x 1.85	RJ45 supported	All-in-one	PoE power supply	C	IMX226	Rolling
STC-BBS1242GE-BC									External power supply (PoE not supported)			
STC-BCS1242POE-BC	Color								PoE power supply			
STC-BCS1242GE-BC									External power supply (PoE not supported)			
STC-BBS2041POE-BC	Monochrome	20.4M	5.5 fps	5,472 x 3,648	1/2	2.4 x 2.4	RJ45 supported	All-in-one	PoE power supply	C	IMX183	Rolling
STC-BBS2041GE-BC									External power supply (PoE not supported)			
STC-BCS2041POE-BC	Color								PoE power supply			
STC-BCS2041GE-BC									External power supply (PoE not supported)			

Note. Supply power via PoE or from external power supply (if PoE is not supported).
PoE NIC or Ethernet switch separately needed to supply power via PoE.
JST's SHR-06V connector or equivalent wiring harness separately needed to supply power from external power source (camera equipped with SM06-SRSS (JST) equivalent connector).
For details on pin arrangement, refer to product specification documents, available for download on our website (https://sentech.co.jp/en/).

Accessories

Screw-Fastened GigE Cables

Model	Length
FJ-VSG 3M	3 m
FJ-VSG 5M	5 m
FJ-VSG 10M	10 m
FJ-VSG 20M	20 m
FJ-VSG 40M	40 m

Drawing dimension

STC-B*S43POE-BC/GE-BC
STC-B*S163POE-BC/GE-BC
STC-B*S202POE-BC/GE-BC
STC-B*S312POE-BC/GE-BC

STC-B*S500POE-BC/GE-BC
STC-B*S213POE-BC/GE-BC
STC-B*S1242POE-BC/GE-BC
STC-B*S2041POE-BC/GE-BC

STC-B*S43POE-BL/GE-BL
STC-B*S163POE-BL/GE-BL
STC-B*S202POE-BL/GE-BL
STC-B*S312POE-BL/GE-BL

STC-B*S500POE-BL/GE-BL
STC-B*S213POE-BL/GE-BL
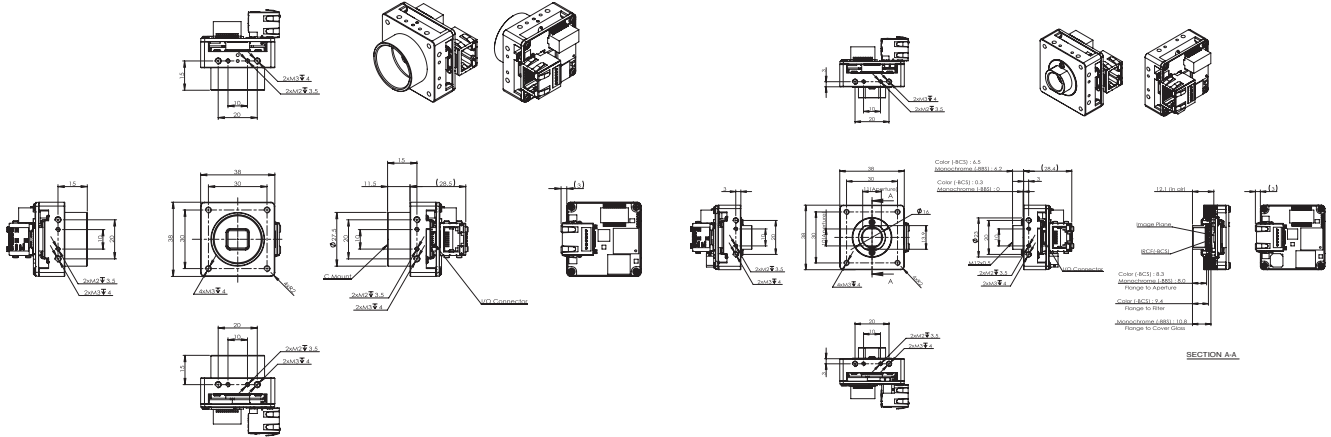
Note. For details on dimensions, refer to product specification documents, available for download on our website (https://sentech.co.jp/en/).

GigE Vision CMOS Line Sensor Camera

Description

PoE-compatible GigE Vision line sensor camera

Features

Offered in 2K, 4K, or 8K

Equipped with PoE support, FFC capabilities (to compensate for pixel-to-pixel sensitivity variations), and compact casing designed for easy mounting

Product Line-up

Model	Monochrome/Color	Resolution	Line Rate	Pixel size	Sensor	Sensor Type	Lens Mount
FS-B2KU7GES-C	Monochrome	2048 × 1	51 kHz	7 um	DR-2K-7	Single	C
FS-B2KU7GES-F							F
FS-B2KU7GES-M42							M42
FS-B4KU7GES-F		4096 × 1	26 kHz	7 um	DR-4K-7	Single	F
FS-B4KU7GES-M42							M42
FS-B4KU35GES-C		4096 × 1	26 kHz	3.5 um	DR-4K-3.5	Single	C
FS-B4KU35GES-F							F
FS-B4KU35GES-M42							M42
FS-B8KU35GES-F		8192 × 1	13 kHz	3.5 um	DR-8K-3.5	Single	F
FS-B8KU35GES-M42							M42
FS-B2KU7DGES-C		2048 × 2	26 kHz	7 um	DR-2 × 2K-7-inver	Dual	C
FS-B2KU7DGES-F							F
FS-B2KU7DGES-M42							M42
FS-B4KU7DGES-F		4096 × 2	13 kHz	7 um	DR-2 × 4K-7-inver	Dual	F
FS-B4KU7DGES-M42							M42
FS-C2KU7DGES-C	Color	2048 × 2	26 kHz	7 um	DR-2 × 2K-7-inver-RGB	Dual	C
FS-C2KU7DGES-F							F
FS-C2KU7DGES-M42							M42
FS-C4KU7DGES-F		4096 × 2	13 kHz	7 um	DR-2 × 4K-7-inver-RGB	Dual	F
FS-C4KU7DGES-M42							M42

Note. Supply power via PoE or power supply cable.
　　　PoE NIC or Ethernet switch separately needed to supply power via PoE.

Accessories

Screw-Fastened GigE Cables

Model	Length
FJ-VSG 3M	3 m
FJ-VSG 5M	5 m
FJ-VSG 10M	10 m
FJ-VSG 20M	20 m
FJ-VSG 40M	40 m

Power Supply Cables

Mode	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. When wiring a camera, be sure to refer to its specification document to check its external connector specifications. Incorrect wiring can lead to failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.

I/O Cables

Mode	Length
CAB-IOH12-02	2 m

Note. When wiring a camera, be sure to refer to its specification document to check its external connector specifications. Incorrect wiring can lead to failure.
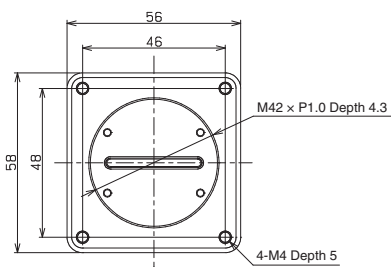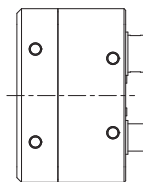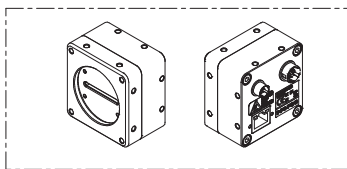
Drawing dimension

C Mount

56
46
58
48
φ52
4-M4 Depth 5

44.6
35.1
C Mount
6
25
φ52
30
24
4-M4 Depth 4 (all sides)

HOT SURFACE
19-67-11-17-3D-1B

F Mount

56
46
58
48
φ56.4
4-M4 Depth 5

73.6
35.1
F Mount
6
25
φ52
30
24
4-M4 Depth 4 (all sides)

HOT SURFACE
19-67-11-17-3D-1B

M42 Mount

56
46
58
48
M42 × P1.0 Depth 4.3
4-M4 Depth 5

35.1
6
25
30
24
4-M4 Depth 4 (all sides)

From front end of camera to image
sensor surface 8.0 (in air)

HOT SURFACE
19-67-11-17-3D-1B
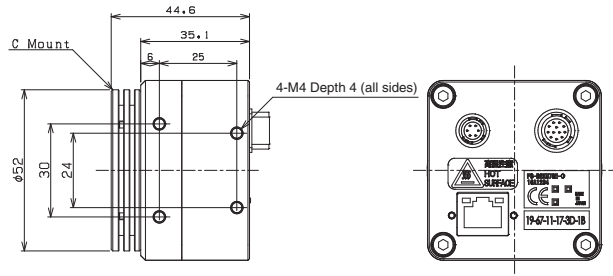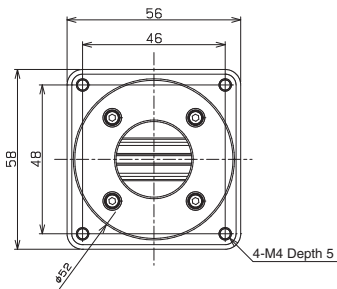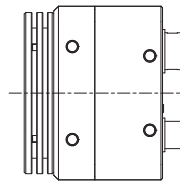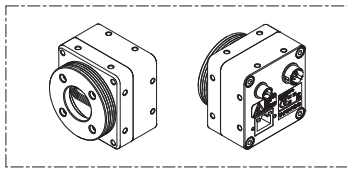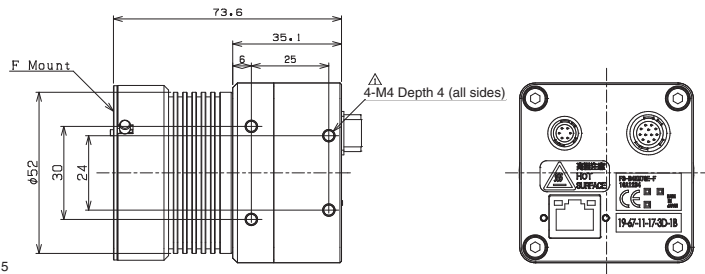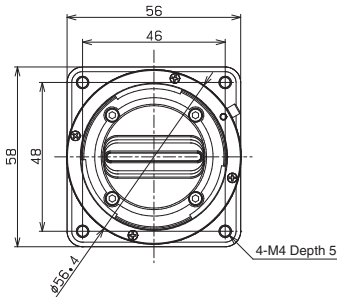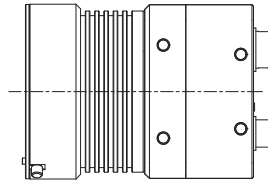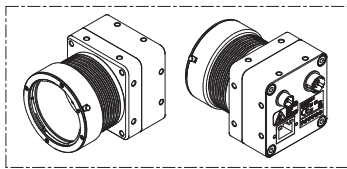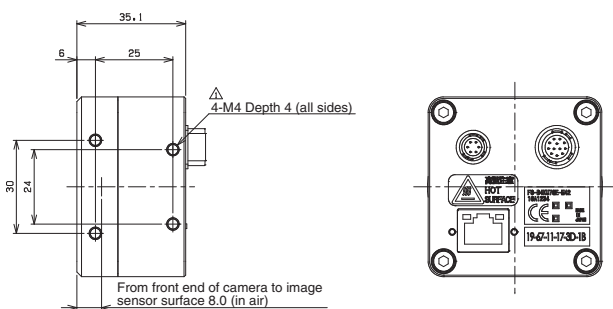
USB3.0 Series

Description

USB3.0 Compact CMOS Camera

Features

Offered in resolutions ranging from 0.4M to 20M

Compact and multi-sided mounting possible

Product Line-up

Global shutter models								
Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-MBS43U3V	Monochrome	0.4M	527.1 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	C
STC-MCS43U3V	Color							
STC-MBE132U3V	Monochrome	1.3M	60 fps	1280 × 1024	1/1.8	5.3 × 5.3	EV76C560	CS
STC-MCE132U3V	Color							
STC-MBS163U3V	Monochrome	1.6M	238 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	C
STC-MCS163U3V	Color							
STC-MBS231U3V	Monochrome	2.3M	41.6 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX249	C
STC-MCS231U3V	Color							
STC-MBS241U3V	Monochrome	2.3M	163 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX174	C
STC-MCS241U3V	Color							
STC-MBS312U3V	Monochrome	3.2M	56 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX265	C
STC-MCS312U3V	Color							
STC-MBS312U3V-SE	Monochrome							
STC-MCS312U3V-SE	Color							
STC-MBS322U3V	Monochrome	3.2M	121 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX252	C
STC-MCS322U3V	Color							
STC-MBS322U3V-SE	Monochrome							
STC-MCS322U3V-SE	Color							
STC-MBCM401U3V	Monochrome	4M	89 fps	2048 × 2048	1	5.5 × 5.5	CMV4000	C
STC-MCCM401U3V	Color							
STC-MBCM401U3V-NIR	Monochrome NIR							
STC-MBS500U3V	Monochrome	5M	35.8 fps	2448 × 2048	2/3	3.45 × 3.45	IMX264	C
STC-MCS500U3V	Color							
STC-MBS500U3V-SE	Monochrome							
STC-MCS500U3V-SE	Color							
STC-MBS510U3V	Monochrome	5M	75.7 fps	2448 × 2048	2/3	3.45 × 3.45	IMX250	C
STC-MCS510U3V	Color							
STC-MBS510U3V-SE	Monochrome							
STC-MCS510U3V-SE	Color							
STC-MBS70BU3V	Monochrome	7.1M	51.2 fps	3216 × 2208	1.1	4.5 × 4.5	IMX428	C
STC-MCS70BU3V	Color							
STC-MBS881U3V	Monochrome	8.9M	32.5 fps	4096 × 2160	1	3.45 × 3.45	IMX267	C
STC-MCS881U3V	Color							

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-MBS891U3V	Monochrome	8.9M	41.9 fps	4096 × 2160	1	3.45 × 3.45	IMX255	C
STC-MCS891U3V	Color							
STC-MBS122BU3V	Monochrome	12.3M	23.5 fps	4096 × 3000	1.1	3.45 × 3.45	IMX304	C
STC-MCS122BU3V	Color							
STC-MBS123BU3V	Monochrome	12.3M	30.4 fps	4096 × 3000	1.1	3.45 × 3.45	IMX253	C
STC-MCS123BU3V	Color							

Note. We recommend that you use an external power supply for 7.1M, 8.9M and 12M cameras, for depending on PC performance, power supplied via USB bus connection alone may not be sufficient for these cameras. For these cameras, we recommend that you use I/O cables and supply power separately from external sources.
Note. Models with "-SE" have been additionally equipped with the Short Exposure Mode feature. Choose these models to use the Short Exposure feature with 3.2M or 5M resolution.

Rolling shutter models

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-MBS1242U3V	Monochrome	12M	31.2 fps	4000 × 3000	1/1.7	1.85 × 1.85	IMX226	C
STC-MCS1242U3V	Color							
STC-MBS2041U3V	Monochrome	20.4M	18.5 fps	5472 × 3648	1	2.4 × 2.4	IMX183	C
STC-MCS2041U3V	Color							

Note. Depending on PC performance, USB bus power supply alone may not be sufficient for 12 M / 20.4 M cameras. For these cameras, we recommend that you use I/O cables and supply power separately from external sources.

Non-USB3 Vision Compliant Models (with Rolling Shutters)

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-MBA5MUSB3	Monochrome	5M	14 fps	2592 × 1944	1/2.5	2.2 × 2.2	MT9P031	CS
STC-MCA5MUSB3	Color							

Accessories

USB 3.0 Cables (USB 3.0 Micro-B, with Camera-Side Fastening Screws)

Model	Length	Cable Type
CAB-USB3-02	2 m	Normal
CAB-USB3-03	3.5 m	
CAB-USB3-05	5 m	
CAB-USB3-07	7 m	
CAB-USB3-10	10 m	Normal high-transmission cables
CAB-USB3-02-RB	2 m	Robot cables
CAB-USB3-03-RB	3.5 m	
CAB-USB3-05-RB	5 m	
CAB-USB3-07-RB	7 m	

Note. Please make sure in advance that USB 3.0 cables operate correctly under your environment.

Mount Conversion Adapter

Model	Applicable Model
CS-C-R	CS Mount Series

I/O Cables

Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.

Tripod Mount

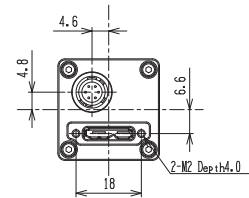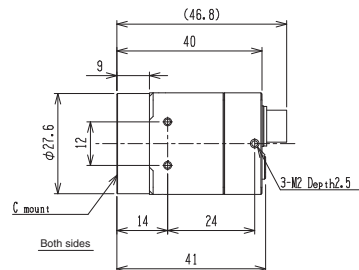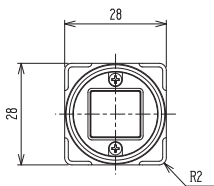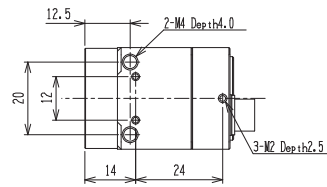| Model	Applicable Model
TP-HCA *	STC-MCE/MBE132U3V, STC-MCA/MBA5MUSB3
TP-JVA	0.4M, 1.6M, 2.3M, 3.2M, 4M, 5M (M*S500/510U3V)
TP-JQA	7.1M, 8.9M, 12M, 12.3M, 20.4M

* The tripod mount is screwed at two points on the lens side.

Drawing dimension

STC-MBE/MCE132U3V
STC-MBA/MCA5MUSB3

28

28

40.9
33.8
9.5   22
6
20   12
27.8
34.8

U1(CS Mount Screw)
3-M2 Depth 3.0(Both Side)
2-M4 Depth 4.0(Both Side)

9.5   22
20   12

3-M2 Depth 3.0
2-M4 Depth 4.0

5.4
5.4
6
18

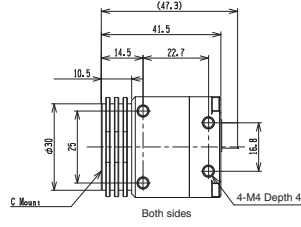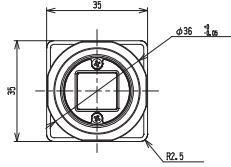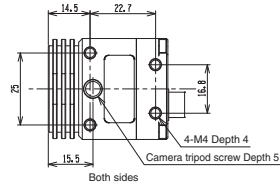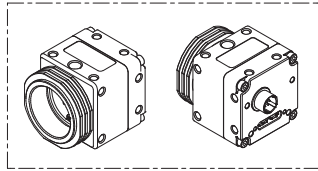2-M2(External thread less than 4mm)

9.5   22
21.5
20   13   12
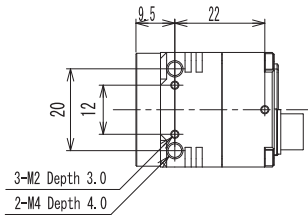
4-M2 Depth 3.0
4-M4 Depth 4.0
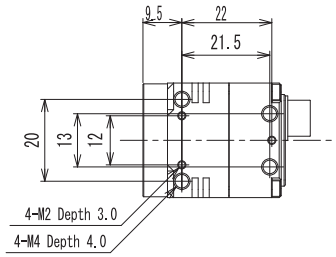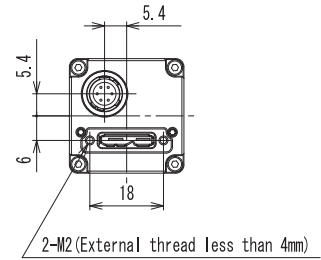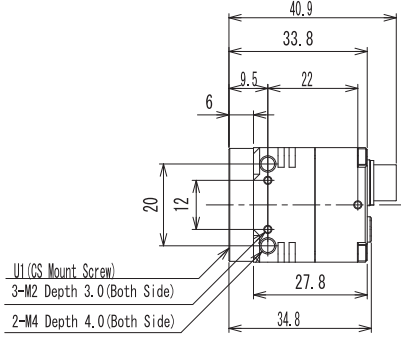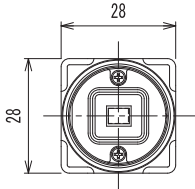
STC-MBS/MCS43U3V
STC-MBS/MCS163U3V
STC-MBCM/MCCM401U3V(-NIR)
STC-MBS/MCS241U3V
STC-MBS/MCS231U3V
STC-MBS/MCS312U3V(-SE)
STC-MBS/MCS322U3V(-SE)
STC-MBS/MCS500U3V(-SE)
STC-MBS/MCS510U3V(-SE)

12.5   2-M4 Depth4.0
20   12
14   24
3-M2 Depth2.5

(46.8)
40
9
ϕ27.6   12
C mount
Both sides
14   24
41
3-M2 Depth2.5

4.6
4.8   6.6
18
2-M2 Depth4.0

28
28
R2

12.5   24.5
4-M4 Depth4.0
20   12
13
14   24
3-M2 Depth2.5

15
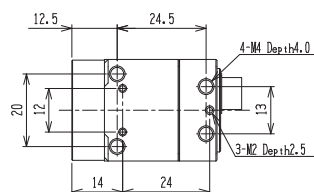
STC-MBS/MCS70BU3V
STC-MBS/MCS881U3V
STC-MBS/MCS891U3V
STC-MBS/MCS122BU3V
STC-MBS/MCS123BU3V
STC-MBS/MCS1242U3V
STC-MBS/MCS2041U3V

14.5 22.7
25
16.8
15.5
4-M4 Depth 4
Camera tripod screw Depth 5
Both sides

35
35
φ36
1
R2.5

(47.3)
41.5
10.5 14.5 22.7
φ30
25
16.8
4-M4 Depth 4
Both sides
C Mount

5.5
4
10
18
2-M2 Depth 4

16
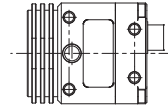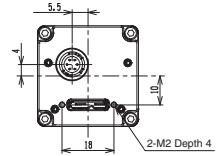
USB3.0 Remote Head Camera

Description

Ultra-compact USB3 Vision remote head camera

Features

Remote sensor unit allows for compact head that can be installed in small spaces where installation was previously difficult
More durable cables
1.6 M models are S-mount cameras with heads connected by either 1 m or 2.5 m cables

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	General Specifications
STC-RBS163U3V-UM121	Monochrome	1.6M	238 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	S	Cable from top, cable length: 1 m
STC-RCS163U3V-UM121	Color								
STC-RBS163U3V-SM121	Monochrome								Cable from rear, cable length: 1 m
STC-RCS163U3V-SM121	Color								
STC-RBS163U3V-UM12	Monochrome								Cable from top, cable length: 2.5 m
STC-RCS163U3V-UM12	Color								
STC-RBS163U3V-SM12	Monochrome								Cable from rear, cable length: 2.5 m
STC-RCS163U3V-SM12	Color								

Accessories

USB 3.0 Cables (USB 3.0 Micro-B, with Camera-Side Fastening Screws)

Model	Length	Cable Type
CAB-USB3-02	2 m	Normal
CAB-USB3-03	3.5 m	
CAB-USB3-05	5 m	
CAB-USB3-07	7 m	
CAB-USB3-10	10 m	Normal high-transmission cables
CAB-USB3-02-RB	2 m	Robot cables
CAB-USB3-03-RB	3.5 m	
CAB-USB3-05-RB	5 m	
CAB-USB3-07-RB	7 m	

Note. Please make sure in advance that USB 3.0 cables operate correctly under your environment.

S-Mount (M12 P0.5) Lens

| Model	Applicable Model	General Specifications
CV0205C	S-mount models	f = 2.5 mm, 1/3" , F2.0, 5 MP resolution
KVAB009		Lens fixing washer

I/O Cables	
Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.

Drawing dimension

STC-RBS/RCS163U3V-SM121(SM12)

STC-RBS163/RCS163U3V-UM121(UM12)

Top side identification
(ø0.75: indentation)

2-ø8 (Depth 4.4)

2-ø4.5 holes

4-C0.5

2-M4 through holes

2-M2 Depth 4

USB3.0 MicroB

Upward

Detail of head

Upward

2-ø8 (Depth 4.4)

2-ø4.5 holes

4-C0.5

2-M4 through holes

2-M2 Depth 4

USB3.0 MicroB

Upward

Detail of head

Upward

18

CoaXPress

Description

High Speed CMOS CoaXPress Camera

Features

Compact design with less depth allows for easy installation

Longer transmission distance than Camera Link cameras; supports PoCXP and therefore needs only one cable, reducing wiring

Good substitute for Camera Link

Expanded lineup of compact 0.4 MP-5 MP 28 mm square models

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-MBS43CXP3	Monochrome	0.4M	523 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	C	CXP3 × 1 Lane
STC-MCS43CXP3	Color								
STC-MBS163CXP6	Monochrome	1.6M	278 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	C	CXP6 × 1 Lane
STC-MCS163CXP6	Color								
STC-MBS212CXP6	Monochrome	2M	239 fps	1624 × 1440	1/1.7	4.5 × 4.5	IMX422	C	CXP6 × 1 Lane
STC-MCS212CXP6	Color								
STC-MBS322CXP6	Monochrome	3.2M	152 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX252	C	CXP6 × 1 Lane
STC-MCS322CXP6	Color								
STC-CMB401CXP	Monochrome	4M	142.5 fps	2048 × 2048	1	5.5 × 5.5	CMV4000	C	CXP6 × 1 Lane
STC-CMC401CXP	Color								
STC-MBS510CXP6	Monochrome	5M	98 fps	2448 × 2048	2/3	3.45 × 3.45	IMX252	C	CXP6 × 1 Lane
STC-MCS510CXP6	Color								
STC-SBS510CXP62	Monochrome	5M	162 fps	2448 × 2048	2/3	3.45 × 3.45	IMX250	C	CXP6 × 2 Lane
STC-SCS510CXP62	Color								
STC-CMB120ACXP	Monochrome	12M	186.9 fps	4096 × 3072	1.76	5.5 × 5.5	CMV12000	M42	CXP6 × 4 Lane Cable from rear
STC-CMC120ACXP	Color								
STC-CMB120ACXP-T	Monochrome								CXP6 × 4 Lane Cable from top
STC-CMC120ACXP-T	Color								
STC-CMB120ACXP-F	Monochrome							F	CXP6 × 4 Lane Cable from rear
STC-CMC120ACXP-F	Color								
STC-CMB120ACXP-T-F	Monochrome								CXP6 × 4 Lane Cable from top
STC-CMC120ACXP-T-F	Color								
STC-SBS123BCXP62	Monochrome	12M	67 fps	4096 × 3000	1.1	3.45 × 3.45	IMX253	C	CXP6 × 2 Lane
STC-SCS123BCXP62	Color								

Note. STC-M☐S43CXP3/-M☐S163CXP6/-M☐S212CXP6/-M☐S322CXP6/-CM☐401CXP/-M☐S510CXP6 support only PoCXP. Power cannot be supplied to these products from external power sources.

Accessories

Mount Conversion Adapter

| Model	Applicable Model	General Specifications
M42-F-R	12M M42 Model	M42 P=1 FB=10 mm → F mount Conversion Adapter

I/O Cables

Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.
Note. STC-S☐S510CXP62/-CM☐120ACXP/-S☐S123BCXP62 support both PoCXP and power supply from external power sources using I/O cables.

Drawing dimension

STC-CMB/CMC120ACXP-T
STC-CMB/CMC120ACXP-T-F
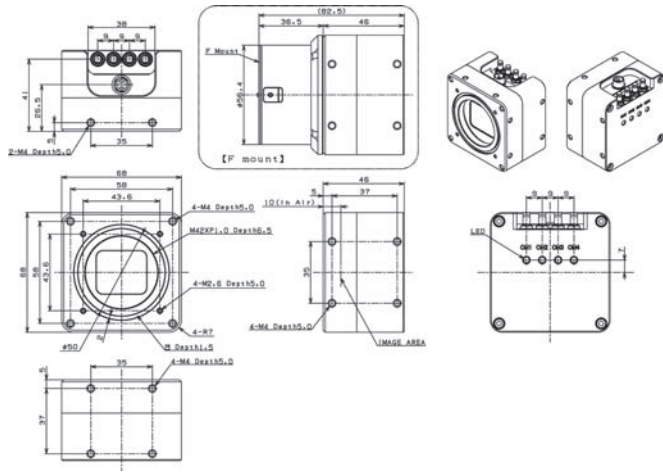
STC-CMB/CMC120ACXP
STC-CMB120ACXP-F/CMC120ACXP-F
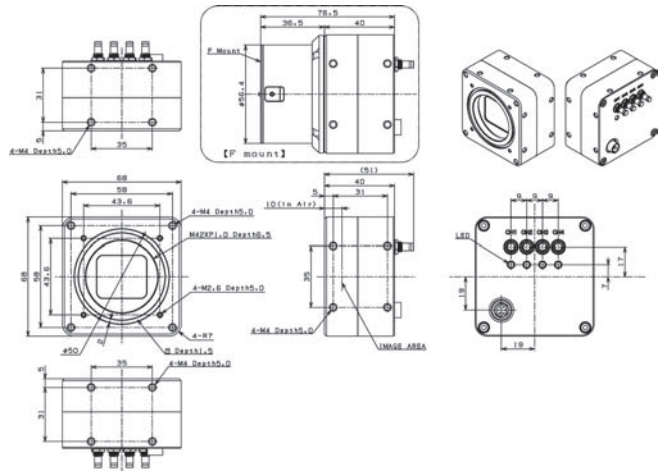
STC-CMB/CMC401CXP
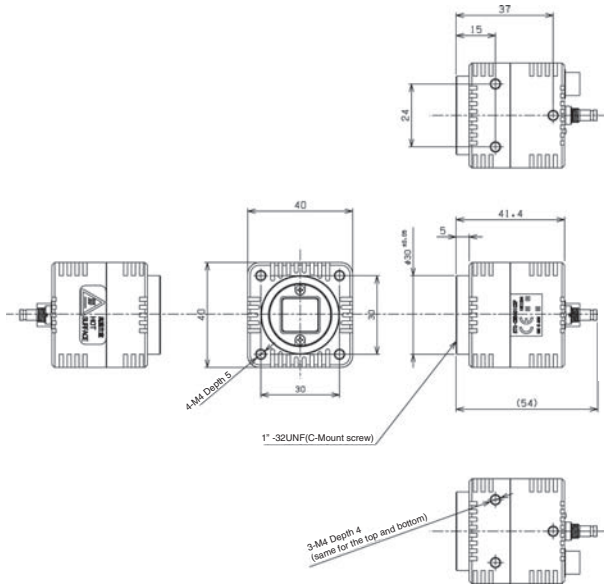
STC-MBS/MCS43CXP3
STC-MBS/MCS163CXP6
STC-MBS/MCS212CXP6
STC-MBS/MCS322CXP6
STC-MBS/MCS510CXP6
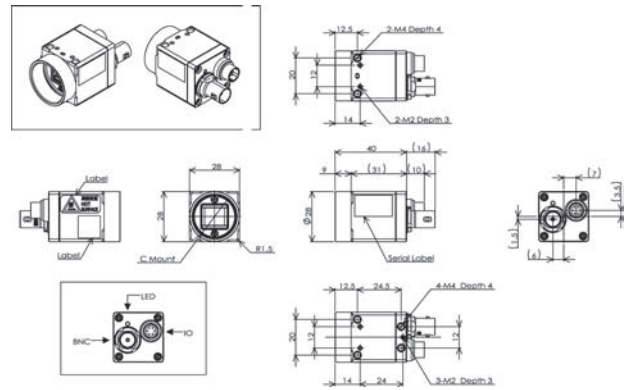
STC-SBS/SCS510CXP62
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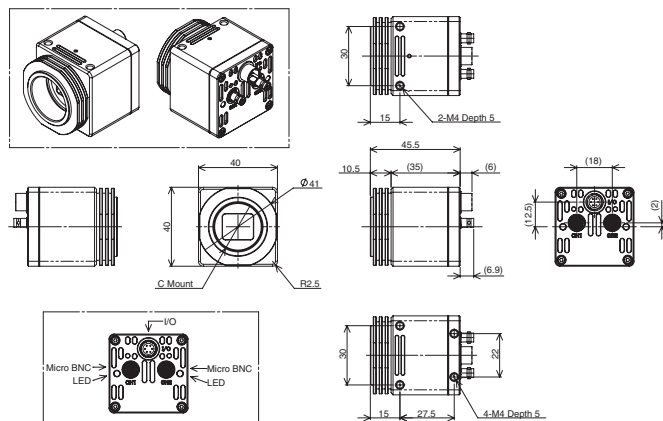
Opt-C:Link

Description

High Speed Opt-C: Link

Features

Video capture resolution of 12MP@279 fps (40 Gbps models)
Fiber-optic cable allows for noise resistance and longer
cable distance

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-CMB120AOPT-F	Monochrome	12M	93.4 fps	4096 × 3072	1.76	5.5 × 5.5	CMV12000	F	External power supply, SFP+optical connector × 2
STC-CMC120AOPT-F	Color								
STC-CMB120AOPQ	Monochrome		279 fps					M42	External power supply, QSFP+optical connector × 1 40 Gbps
STC-CMC120AOPQ	Color								
STC-CMB120AOPQ-F	Monochrome							F	External power supply, QSFP+optical connector × 1 40 Gbps
STC-CMC120AOPQ-F	Color								

Note. Supply power via power supply and I/O cable.

Accessories

Mount Conversion Adapter

Model	Applicable Model	General Specifications
M42-F-R	12M M42 Model	M42 P=1 FB=10 mm → F mount Conversion Adapter

| Power Supply and I/O Cables	
Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.
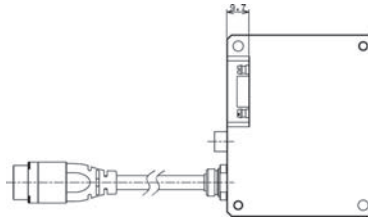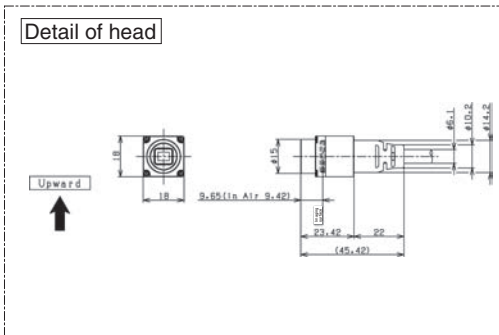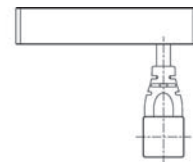
Drawing dimension

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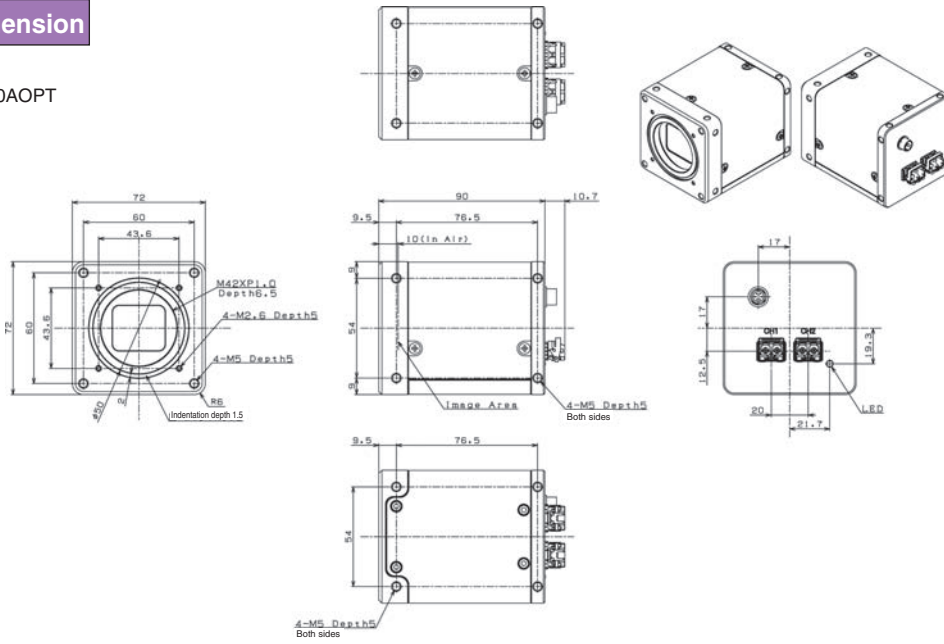
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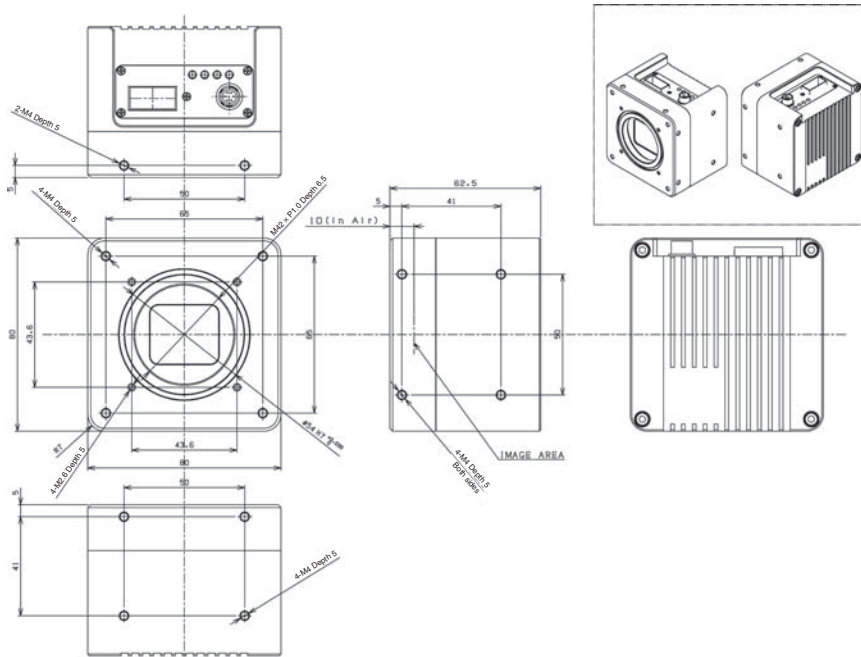
Camera Link CMOS

Description

High Speed CMOS Camera Link Series

Features

Extensive lineup of 0.4-25 MP products

New 25 MP C-mount model with 35 mm square casing added to lineup

Compact high-resolution cameras that can be installed in small spaces

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-SPB43PCL	Monochrome	0.4M	523.6 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	C	PoCL, automatically switched, SDR connector × 1
STC-SPC43PCL	Color								
STC-SPB52PCL	Monochrome	0.5M	166.5 fps	810 × 620	1/1.7	9 × 9	IMX433	C	PoCL, automatically switched, SDR connector × 2
STC-SPC52PCL	Color								
STC-SPB163PCL	Monochrome	1.6M	155 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	C	PoCL, automatically switched, SDR connector × 1
STC-SPC163PCL	Color								
STC-SPB202PCL	Monochrome	2M	89.1 fps	1620 × 1240	1/1.7	4.5 × 4.5	IMX430	C	PoCL, automatically switched, SDR connector × 2
STC-SPC202PCL	Color								
STC-CMB200PCL	Monochrome	2M	333.3 fps	2048 × 1088	2/3	5.5 × 5.5	CMV2000	C	PoCL, automatically switched, SDR connector × 2
STC-CMC200PCL	Color								
STC-CMB200PCL-NIR	Monochrome NIR								
STC-SPB312PCL	Monochrome	3.2M	55.4 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX265	C	PoCL, automatically switched, SDR connector × 1
STC-SPC312PCL	Color								
STC-SPB322PCL	Monochrome	3.2M	216.2 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX252	C	PoCL, automatically switched, SDR connector × 2
STC-SPC322PCL	Color								
STC-CMB401PCL	Monochrome	4M	179.2 fps	2048 × 2048	1	5.5 × 5.5	CMV4000	C	PoCL, automatically switched, SDR connector × 2
STC-CMC401PCL	Color								
STC-CMB401PCL-NIR	Monochrome NIR								
STC-APB503PCL	Monochrome	5M	14 fps	2592 × 1944	1/2.5	2.2 × 2.2	MT9P031	C	PoCL, automatically switched, SDR connector × 1
STC-APC503PCL	Color								
STC-SPB500PCL	Monochrome	5M	35.7 fps	2448 × 2048	2/3	3.45 × 3.45	IMX264	C	PoCL, automatically switched, SDR connector × 1
STC-SPC500PCL	Color								
STC-SPB510PCL	Monochrome	5M	163.4 fps	2448 × 2048	2/3	3.45 × 3.45	IMX250	C	PoCL, automatically switched, SDR connector × 2
STC-SPC510PCL	Color								
STC-SPB881PCL	Monochrome	8.9M	20.6 fps	4096 × 2160	1	3.45 × 3.45	IMX267	C	PoCL, automatically switched, SDR connector × 1
STC-SPC881PCL	Color								
STC-SPB891PCL	Monochrome	8.9M	91.9 fps	4096 × 2160	1	3.45 × 3.45	IMX255	C	PoCL, automatically switched, SDR connector × 2
STC-SPC891PCL	Color								
STC-SPB122BPCL	Monochrome	12.3M	15 fps	4096 × 3000	1.1	3.45 × 3.45	IMX304	C	PoCL, automatically switched, SDR connector × 1
STC-SPC122BPCL	Color								
STC-SPB123BPCL	Monochrome	12.3M	66.9 fps	4096 × 3000	1.1	3.45 × 3.45	IMX253	C	PoCL, automatically switched, SDR connector × 2
STC-SPC123BPCL	Color								
STC-CMB120APCL	Monochrome	12M	62.3 fps	4096 × 3072	1.76	5.5 × 5.5	CMV12000	M42	PoCL, automatically switched, SDR connector × 2
STC-CMC120APCL	Color								
STC-CMB120APCL-F	Monochrome							F	PoCL, automatically switched, SDR connector × 2
STC-CMC120APCL-F	Color								

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H x V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-OSB250CL	Monochrome	25M	31.8 fps	5120 × 5120	APS-H (32.6 mm diagonal)	4.5 × 4.5	PYTHON 25K	M42	PoCL not supported SDR connector × 2
STC-OSC250CL	Color								
STC-OSB250CL-F	Monochrome							F	PoCL not supported SDR connector × 2
STC-OSC250CL-F	Color								
STC-GPB250BPCL	Monochrome	25M	30.72 fps	5120 × 5120	1.1	2.5 × 2.5	GMAX5050	C	PoCL, automatically switched, SDR connector × 2
STC-GPC250BPCL	Color								

Note. Supply power via PoCL or power supply and I/O cable.

Accessories

Mount Conversion Adapter

Model	Applicable Model	General Specifications
M42-F-R	12M, 25M M42 Model	M42 P=1 FB=10 mm → F mount Conversion Adapter

Tripod Mount

Model	Applicable Model
TP-JQA	2M (CM*200PCL), 3.2M, 4M, 5M (SP*500/510PCL), 8.9M, 12.3M, 25M (GP*250BPCL)
TP-HCA	SPB/SPC43, 52, 163, 202PCL

Power Supply and I/O Cables

Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.

CameraLink

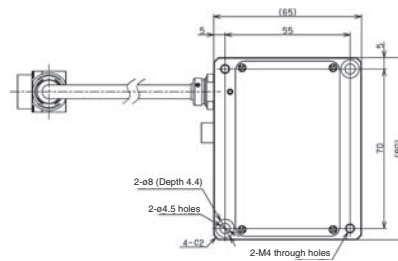STC-CMB/CMC200PCL
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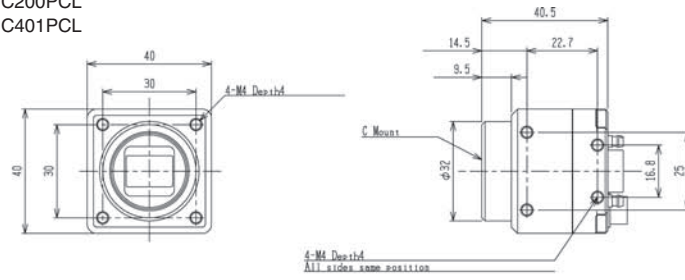
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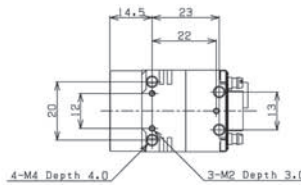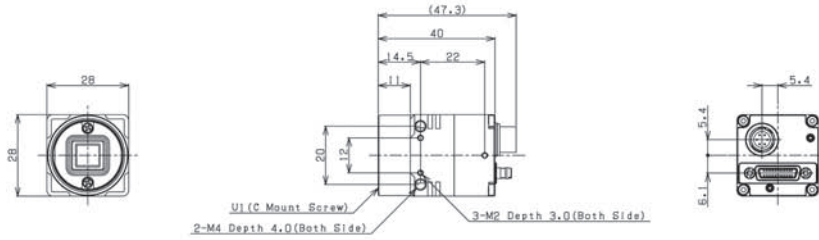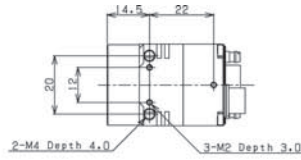
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STC-SPB/SPC322PCL
STC-SPB/SPC510PCL
STC-SPB/SPC891PCL
STC-SPB/SPC123BPCL
STC-GPB/GPC250BPCL

STC-SPB/SPC312PCL
STC-SPB/SPC500PCL
STC-SPB/SPC881PCL
STC-SPB/SPC122BPCL

STC-CMB/CMC120APCL

STC-CMB/CMC120APCL-F

STC-OSB/OSC250CL

STC-OSB/OSC250CL-F
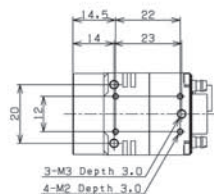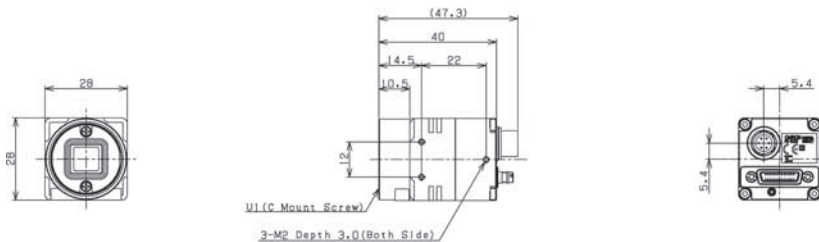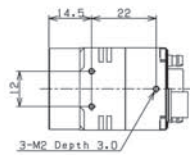
CameraLink

Camera Link Remote Head Camera

Description

Ultra-compact remote head Camera Link camera

Features

Remote sensor unit allows for compact head that can be installed in small spaces where installation was previously difficult

More durable cables

S-mount model with remote head connected by 2.5 m cable

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	General Specifications
STC-RBS43PCL-SM12	Monochrome	0.4M	523.6 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	S	PoCL,automatically switched, SDR connector × 1 Cable from rear, cable length: 2.5 m
STC-RCS43PCL-SM12	Color								
STC-RBS43PCL-UM12	Monochrome								PoCL,automatically switched, SDR connector × 1 Cable from top, cable length: 2.5 m
STC-RCS43PCL-UM12	Color								
STC-RBS163PCL-SM12	Monochrome	1.6M	236.3 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	S	PoCL,automatically switched, SDR connector × 1 Cable from rear, cable length: 2.5 m
STC-RCS163PCL-SM12	Color								
STC-RBS163PCL-UM12	Monochrome								PoCL,automatically switched, SDR connector × 1 Cable from top, cable length: 2.5 m
STC-RCS163PCL-UM12	Color								

Note. Supply power via PoCL or power supply and I/O cable.

S-Mount (M12 P0.5) Lens

Model	Applicable Model	General Specifications
CV0205C	S-mount models	f = 2.5 mm, 1/3", F2.0, 5 MP resolution
KVAB009		Lens fixing washer

Accessories

Power Supply and I/O Cables	
Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
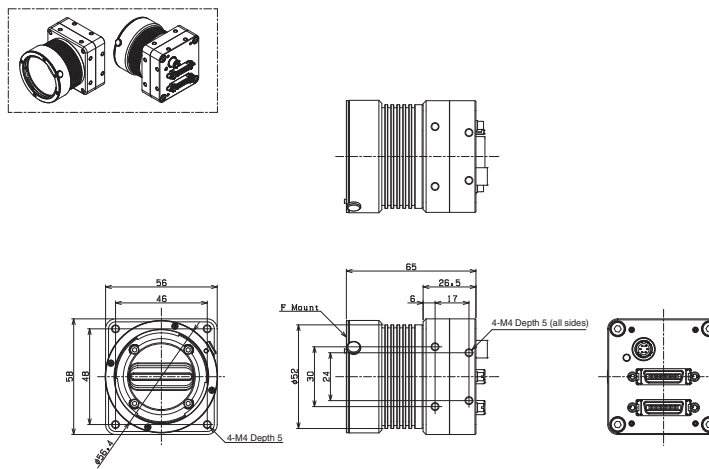Note. Do not connect the shell, for doing so can cause failure or malfunction.
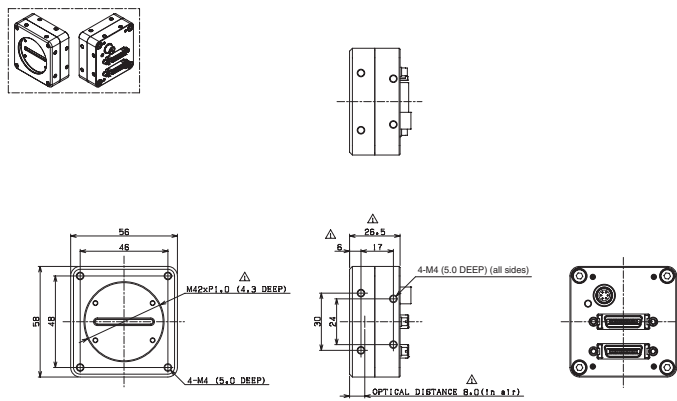
Drawing dimension

STC-RBS/RCS43PCL-SM12
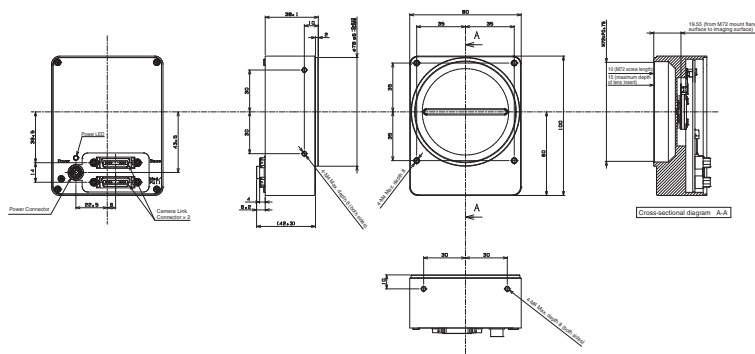STC-RBS/RCS163PCL-SM12

Top side identification
(ø0.75: indentation)

2-ø8 (Depth 4.4)
2-ø4.5 holes
4-C2
2-M4 through holes

Upward

Detail of head

Upward

9.65(in Air 9.42)
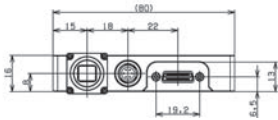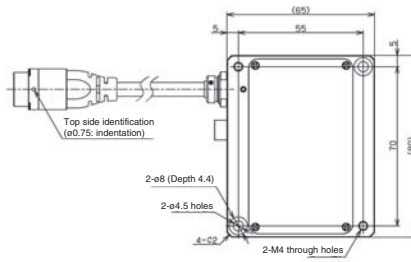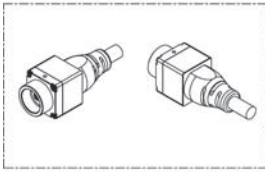
STC-RBS/RCS43PCL-UM12
STC-RBS/RCS163PCL-UM12

2-ø8 (Depth 4.4)
2-ø4.5 holes
4-C2
2-M4 through holes

Upward

Detail of head

Upward

9.65(in Air 9.42)

28
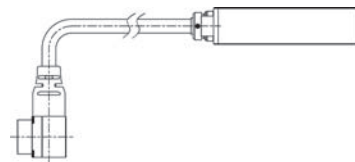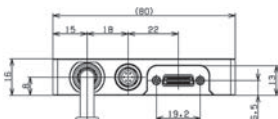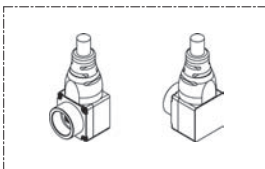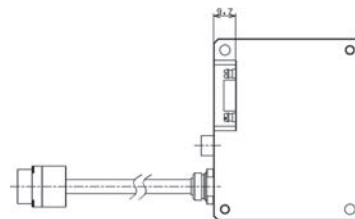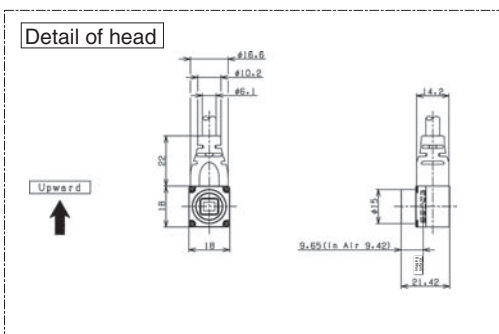
Camera Link Line Scanning Camera

Description

Camera Link Line Scanning Camera

Features

2K-16K models with high-speed CMOS sensor

A rich assortment of features including FFC and ROI; compact case designed for easy installation

Equipped with MDR Camera Link connector

Product Line-up

Model	Monochrome/Color	Resolution	Line Rate	Pixel size	Sensor	Sensor Type	Lens Mount
FS-B2KU7CLU-C	Monochrome	2048 × 1	80 kHz	7 µm	DR-2K-7	Single	C
FS-B2KU7CLU-F							F
FS-B2KU7CLU-M42							M42
FS-B4KU7CLU-F		4096 × 1		7 µm	DR-4K-7	Single	F
FS-B4KU7CLU-M42							M42
FS-B4KU35CLU-C		4096 × 1		3.5 µm	DR-4K-3.5	Single	C
FS-B4KU35CLU-F							F
FS-B4KU35CLU-M42							M42
FS-B8KU7CLU-M72		8192 × 1		7 µm	DR-8K-7	Single	M72
FS-B8KU35CLU-F		8192 × 1		3.5 µm	DR-8K-3.5	Single	F
FS-B8KU35CLU-M42							M42
FS-B16KU35CLU-M72		16384 × 1	40 kHz	3.5 µm	DR-16K-3.5	Single	M72
FS-B2KU7DCLU-C		2048 × 2	160 kHz/ 80 kHz	7 µm	DR-2 × 2K-7-inver	Dual	C
FS-B2KU7DCLU-F							F
FS-B2KU7DCLU-M42							M42
FS-B4KU7DCLU-F		4096 × 2	160 kHz	7 µm	DR-2 × 4K-7-inver	Dual	F
FS-B4KU7DCLU-M42							M42
FS-B8KU7DCLU-M72		8192 × 2		7 µm	DR-2 × 8K-7	Dual	M72
FS-C2KU7DCLU-C	Color	2048 × 2	26 kHz	7 µm	DR-2 × 2K-7-inver-RGB	Dual	C
FS-C2KU7DCLU-F							F
FS-C2KU7DCLU-M42							M42
FS-C4KU7DCLU-F		4096 × 2	13 kHz	7 µm	DR-2 × 4K-7-inver-RGB	Dual	F
FS-C4KU7DCLU-M42							M42
FS-C8KU7DCLU-M72		8192 × 2	40 kHz	7 µm	DR-2 × 8K-7-RGB	Dual	M72

Note. Supply power via power supply and I/O cable (PoCL not supported).

Accessories

Power Supply and I/O Cables	
Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.
Note. Do not connect the shell, for doing so can cause failure or malfunction.

C Mount (2K/4K)

56 · 46 · 58 · 48 · 4-M4 Depth 5

36 · 26.5 · C Mount · 6 · 17 · 4-M4 Depth 5 (all sides) · φ52 · 30 · 24

F Mount (2K/4K/8K)

56 · 46 · 58 · 48 · φ56.4 · 4-M4 Depth 5

65 · 26.5 · F Mount · 6 · 17 · 4-M4 Depth 5 (all sides) · φ52 · 30 · 24

M42 Mount (2K/4K/8K)

56 · 46 · 58 · 48 · M42xP1.0 (4.3 DEEP) · 4-M4 (5.0 DEEP)

26.5 · 6 · 17 · 4-M4 (5.0 DEEP) (all sides) · 30 · 24 · OPTICAL DISTANCE 8.0(in air)

M72 Mount (8K/16K)

Power LED · Power Connector · Camera Link Connector x 2

19.55 (from M72 mount flange surface to imaging surface) · 10 (M72 screw length) · 15 (maximum depth of lens insert) · Cross-sectional diagram A-A
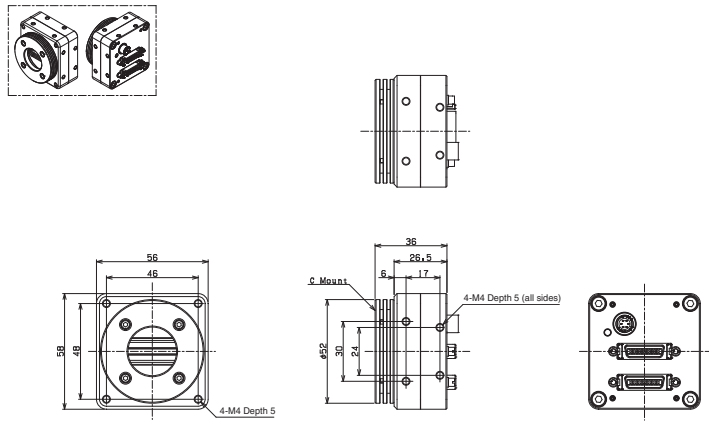
4K HDMI Camera

Description

HDMI Output 4K Color Camera

Features

4K video output; 120 fps output available in Full HD mode
(1080P 120 fps monitor)
Can be used without a PC, allowing users to affordably
build observation systems, etc.

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-HD853HDMI	Color	2160P	60 fps	3840 × 2160	1/2.5	1.62 × 1.62	IMX274	C

Accessories

Remote Control Unit		
Model	Applicable Model	General Specifications
RC-HD133	HDMI/DVI/SDI	ø3.5 stereo pin jack

STC-HD853HDMI

Camera tripod screw Depth 6
(same for the top and bottom)

4-M4 Depth 5.0
(same for the top and bottom)

15.5

30

8

38

40

ϕ70

60

45

4-M4 Depth 5.0

2

50.5

40

45

4-M4 Depth 5.0
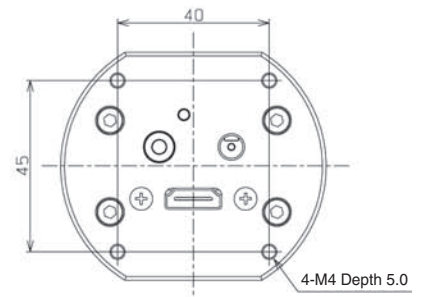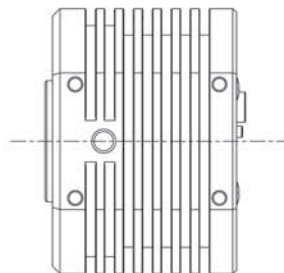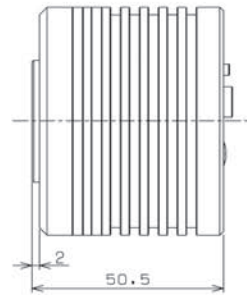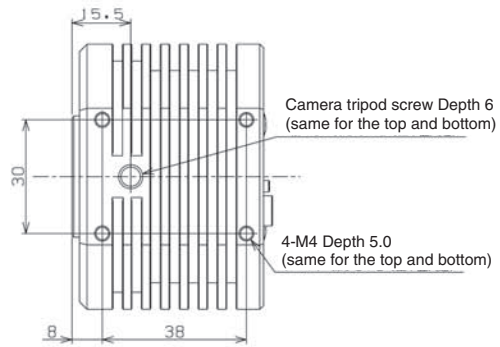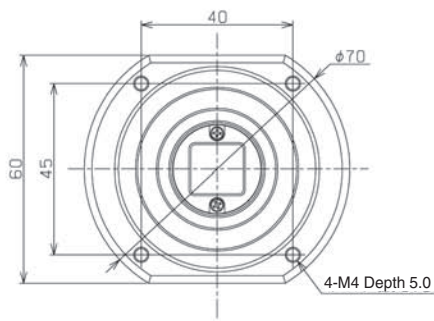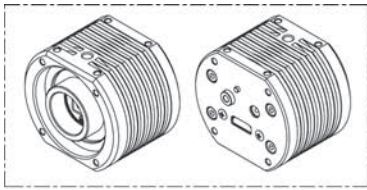
HD High-Definition Camera

Description

DVI Output Color Camera

Features

Connect directly to monitor with HDMI connector to build observing system without PC
Use of optional remote unit enables crosshair and shadow masks to be displayed on screen
Power input socket equipped with connector lock mechanism to keep power cable firmly in place (supported connector required)
Two types of models available: standard models with memory and models without memory

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-HD213DV	Color	1080P/1080i	60 fps	1920 × 1080	1/2.9	2.9 × 2.9	IMX291	C	With memory
STC-HD213DV-CS								CS	
STC-HD213DVN	Color	1080P/1080i	60 fps	1920 × 1080	1/2.9	2.9 × 2.9	IMX291	C	No memory
STC-HD213DVN-B								C	
STC-HD213DVN-CS								CS	

Accessories

Mount Conversion Adapter		
Model	Applicable Model	General Specifications
CS-C-R	CS Mount Series	

Remote Control Unit		
Model	Applicable Model	General Specifications
RC-HD133	HDMI/DVI/SDI	ø3.5 stereo pin jack

STC-HD213DV
STC-HD213DVN

16
12.5   33.1
Tripod depth 5 (Top and bottom)
(Both sides)
4-M4 depth 5 (Top and bottom)
(Both sides)
28
14

40
4-R4
40

(53.36)
48.9
Ø30
1"-32UNF
C mount

12   8
6.5
8.5
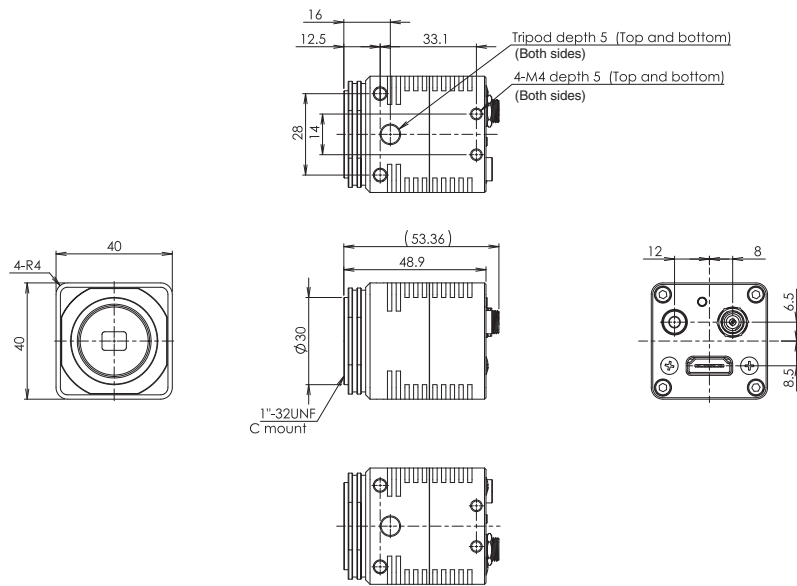
STC-HD213DV-CS
STC-HD213DVN-CS

7.5   33.1
11
Tripod depth 5 (Top and bottom)
(Both sides)
4-M4 depth 5 (Top and bottom)
(Both sides)
28
14

40
4-R4
40

(48.36)
43.9
Ø30
1"-32UNF
CS mount

12   8
6.5
8.5

STC-HD213DVN-B

35
21
2-Ø2.3
8-R2
4-R2.5
35
30

(53.06)
(50.8)
34.2
26.2
19.2
12.5
Ø33
Ø30
1"-32UNF(C mount)
(47.1)

12   8
2.5
13.5
6.5
8.5

34
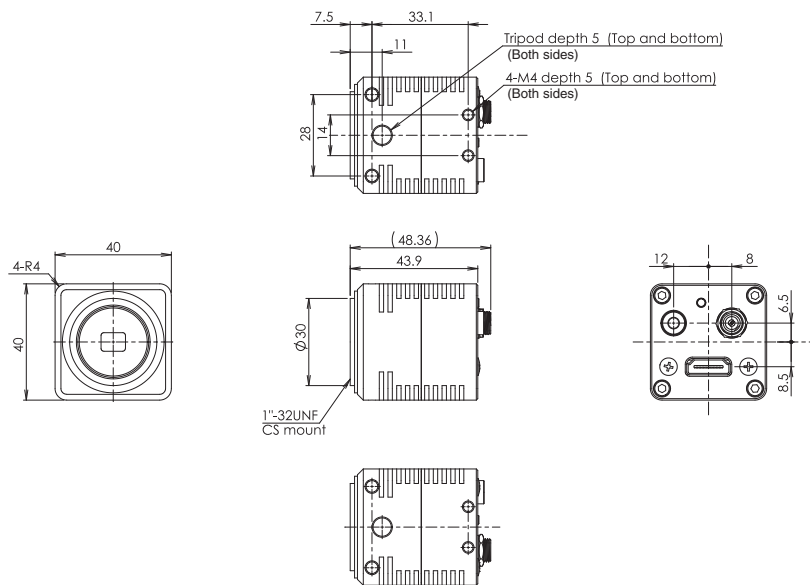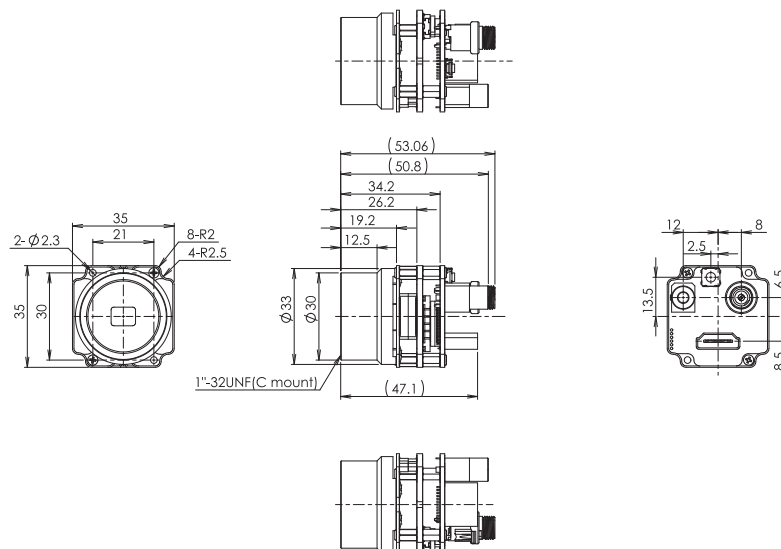
HD-SDI HD Camera

Description

HD-SDI Output Color Camera

Features

Connect directly to monitor with versatile BNC connector
Suitable for long distance image transmission
Use of optional remote unit enables crosshair and shadow masks to be displayed on screen
Power input socket equipped with connector lock mechanism to keep power cable firmly in place (supported connector required)
Two types of models available: standard models with memory and models without memory

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-HD213SDI	Color	1080P/1080i	60 fps	1920 × 1080	1/2.9	2.9 × 2.9	IMX291	C	With memory
STC-HD213SDI-CS								CS	
STC-HD213SDIN	Color	1080P/1080i	60 fps	1920 × 1080	1/2.9	2.9 × 2.9	IMX291	C	No memory
STC-HD213SDIN-B								C	
STC-HD213SDIN-CS								CS	

Accessories

Mount Conversion Adapter		
Model	Applicable Model	General Specifications
CS-C-R	CS Mount Series	

Remote Control Unit		
Model	Applicable Model	General Specifications
RC-HD133	HDMI/DVI/SDI	ø3.5 stereo pin jack

35

Drawing dimension

STC-HD213SDI
STC-HD213SDIN
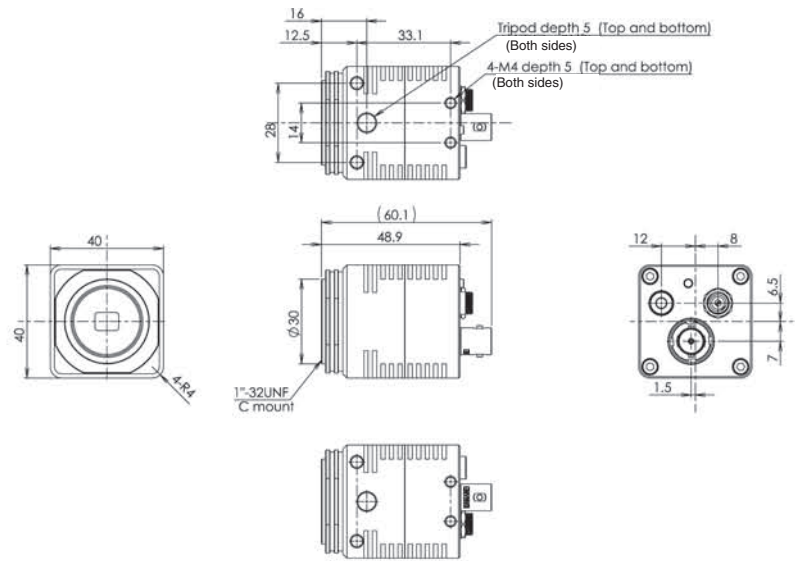
STC-HD213SDI-CS
STC-HD213SDIN-CS
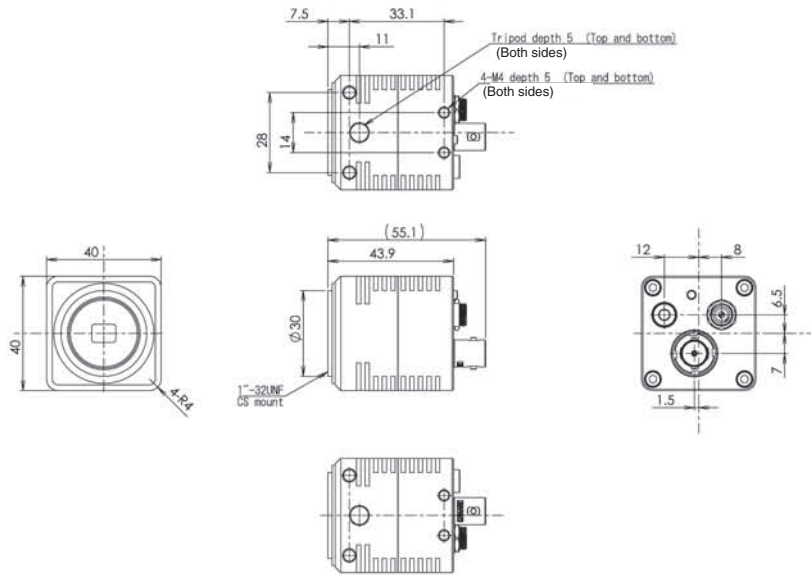
STC-HD213SDIN-B
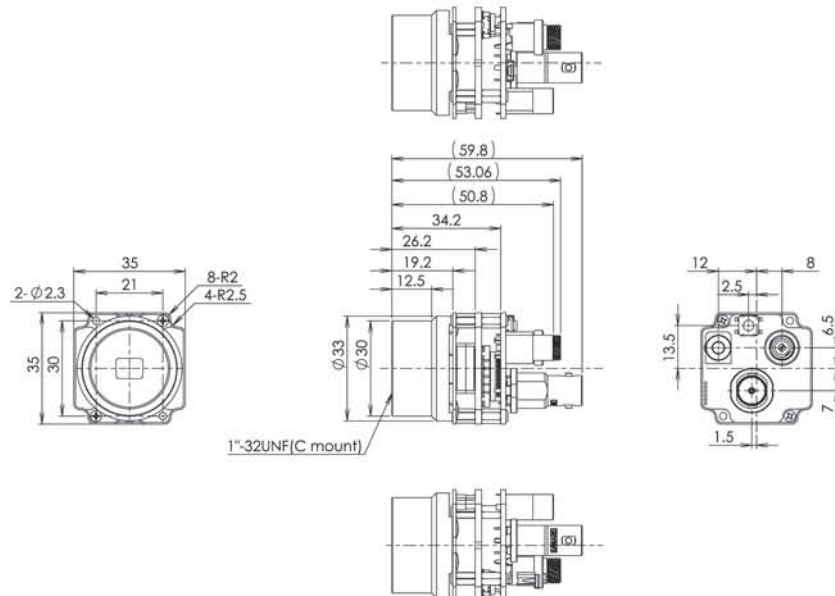
Analog Progressive Camera

Progressive Scan Monochrome CCD Camera

Compact monochrome progressive scan camera
with SHARP CCD sensor

Product Line-up

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-MB33SS	Monochrome	VGA	60 fps	648 × 494	1/3	7.4 × 7.4	RJ33B4AA0DT	C

Drawing dimension

STC-MB33SS

14.5

12

2-M2 Depth3.0

29

29

(48.3)

41

12

U1(C Mount Screw)

5.3

3.7

16.5   22

15   23.7

20

12

3-M3 Depth3.0
4-M2 Depth3.0
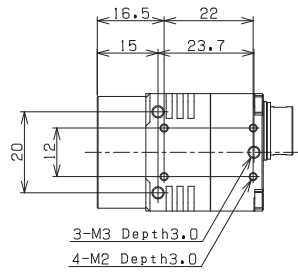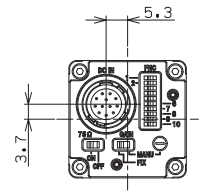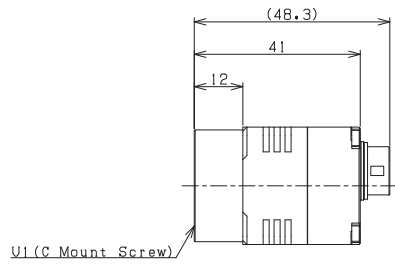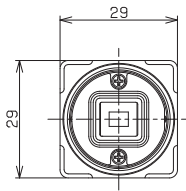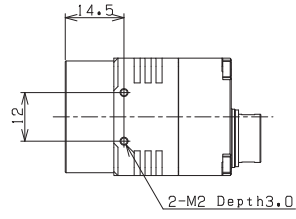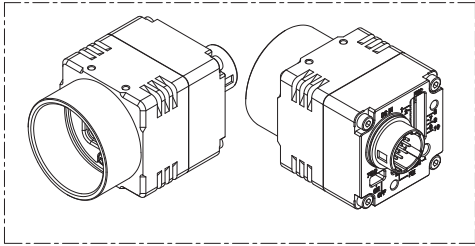
TV Format Color Camera S133N-B Series

1/3.2" 0.65 Mpix TV format color CMOS camera

Features

DC jack type and terminal block type for power input
Equipped with gain, shutter, color adjustment and many other features, whose settings can be adjusted on-screen using the OSCD (On Screen Character Display) function

Product Line-up

Model	Monochrome/Color	Resolution	Video Format	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount
STC-S133N-B*	Color	0.65M	NTSC	1280 × 486	1/3.2	3.5 × 3.5	ISX017	CS
STC-S133P-B*			PAL	1211 × 576				

* Select a model from the Line-up list below when ordering.

Accessories

Mount Conversion Adapter

Model	Applicable Model	General Specifications
CS-C-R	CS Mount Series	CS mount → C mount conversion adapter

Remote Control Unit

Model	Applicable Model	General Specifications
RC-S133B	S133N-B Series	

Line-up

Model	Monochrome/Color	Sensor Size	Lens Mount	Video Format	General Specifications
STC-S133N-BJ	Color	1/3.2	CS	NTSC	Case, output: BNC
STC-S133P-BJ				PAL	
STC-S133N-BT				NTSC	
STC-S133P-BT				PAL	

TV Format

39

[External Connector Specification]

1. 12 V input

2. VIDEO output (female)

3. Terminal for remote control unit

BJ type

1. 12 V input

2. VIDEO output (female)

3. Terminal for remote control unit
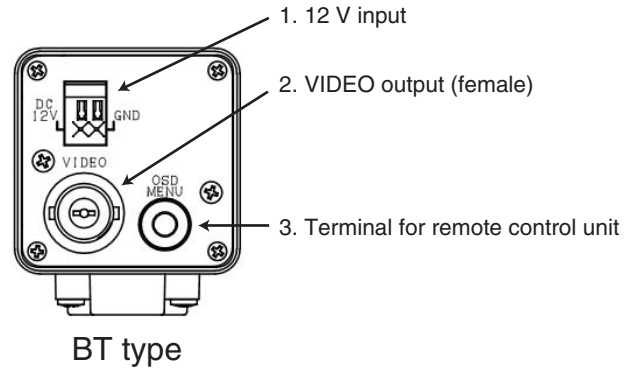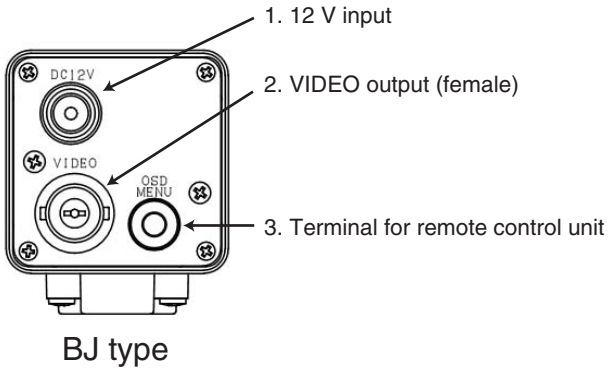
BT type

[Drawing dimension]

BJ type

4-M3 Depth5
36
29
36
29
6.5

CS Mount Screw
7   30
18
4-M2 Depth 2
12.5 10.5
(37)

DC12V
VIDEO
OSD MENU

1/4" 20UNC(Screw for Tripod)
M5(P=0.8) Depth 6.5
16   14

BT type

4-M3 Depth5
36
29
36
29
6.5

CS Mount Screw
7   30
18
4-M2 Depth 2
Screw (four sides)
12.5 10.5
(37)

DC12V
GND
VIDEO
OSD MENU

1/4" 20UNC(Screw for Tripod)
M5(P=0.8) Depth 6.5
16   14
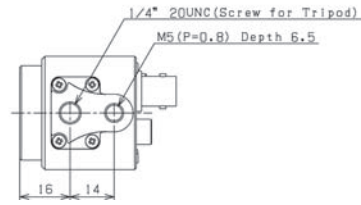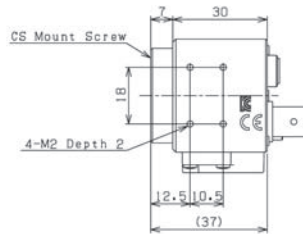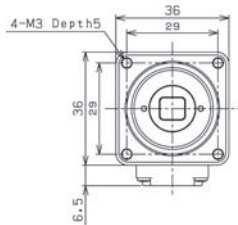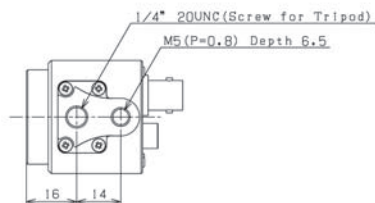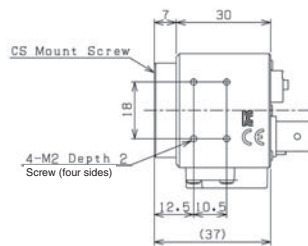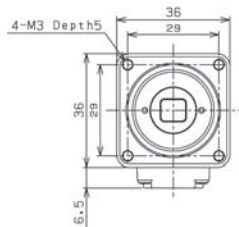
Small Board Camera STC-S133 Series

Description

Small Board Camera

Features

Compact and lightweight camera for integration into machines

Equipped with high-sensitivity sensors

Users can select TV format, UVC (USB 3.0), or

MIPI according to their operating environment

Product Line-up

Model	Monochrome/Color	Resolution	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Interface
STC-S133N-**	Color	0.65M	1280 × 486	1/3.2	3.5 × 3.5	ISX017	TV Format
STC-S133P-**			1211 × 576				
STC-S133UVC-**		1.3M	1280 × 960				USB3.0 (UVC)
STC-S133MIP-**							MIPI

* Select a model from the Line-up list below when ordering.

Line-up

TV Format (NTSC/PAL)

Model	Monochrome/Color	Frame Rate	Sensor Size	Lens Mount	General Specifications
STC-S133N	Color	30 fps	1/3.2	---	DPF, Board, Base (without lens mount)
STC-S133P		25 fps		---	DPF, Board, Base (without lens mount)
STC-S133N-NF		30 fps		---	Board, Base (without lens mount), No filter
STC-S133P-NF		25 fps		---	Board, Base (without lens mount), No filter
STC-S133N-L		30 fps		S	DPF, Board, S Mount
STC-S133N-LS		30 fps		S	DPF, Board, S Mount, Lens fixing washer
STC-S133P-L		25 fps		S	DPF, Board, S Mount
STC-S133N-CS		30 fps		CS	DPF, Board, CS Mount
STC-S133P-CS		25 fps		CS	DPF, Board, CS Mount
STC-S133N-I		30 fps		---	IRCF, Board, Base (without lens mount)
STC-S133P-I		25 fps		---	IRCF, Board, Base (without lens mount)
STC-S133N-IL		30 fps		S	IRCF, Board, S Mount
STC-S133P-IL		25 fps		S	IRCF, Board, S Mount
STC-S133N-ICS		30 fps		CS	IRCF, Board, CS Mount
STC-S133P-ICS		25 fps		CS	IRCF, Board, CS Mount
STC-S133N-ILS		30 fps		S	IRCF, Board, S Mount, Lens fixing washer
STC-S133N-AL		30 fps		S	DPF, Case, S Mount
STC-S133P-AL		25 fps		S	DPF, Case, S Mount
STC-S133N-ACS		30 fps		CS	DPF, Case, CS Mount
STC-S133P-ACS		25 fps		CS	DPF, Case, CS Mount
STC-S133N-IAL		30 fps		S	IRCF, Case, S Mount
STC-S133P-IAL		25 fps		S	IRCF, Case, S Mount
STC-S133N-IACS		30 fps		CS	IRCF, Case, CS Mount
STC-S133P-IACS		25 fps		CS	IRCF, Case, CS Mount

Note. DPF: Dual Pass Filter, IRCF: IR Cut Filter

USB3.0 (UVC)					
Model	Monochrome/Color	Frame Rate	Sensor Size	Lens Mount	General Specifications
STC-S133UVC-BL	Color	60 fps	1/3.2	---	IRCF, Board, Base (without lens mount), Connector from bottom
STC-S133UVC-BLL				S	IRCF, Board, S Mount, Connector from bottom
STC-S133UVC-BLCS				CS	IRCF, Board, CS Mount, Connector from bottom
STC-S133UVC-DBL				---	DPF, Board, Base (without lens mount), Connector from bottom
STC-S133UVC-DBLL				S	DPF, Board, S Mount, Connector from bottom
STC-S133UVC-DBLCS				CS	DPF, Board, CS Mount, Connector from bottom
STC-S133UVC-ALL				S	IRCF, Case, S Mount, Connector from bottom
STC-S133UVC-ALCS				CS	IRCF, Case, CS Mount, Connector from bottom
STC-S133UVC-DALL				S	DPF, Case, S Mount, Connector from bottom
STC-S133UVC-DALCS				CS	DPF, Case, CS Mount, Connector from bottom
STC-S133UVC-BS				---	IRCF, Board, Base (without lens mount), Connector from rear
STC-S133UVC-BSL				S	IRCF, Board, S Mount, Connector from rear
STC-S133UVC-BSCS				CS	IRCF, Board, CS Mount, Connector from rear
STC-S133UVC-DBS				---	DPF, Board, Base (without lens mount), Connector from rear
STC-S133UVC-DBSL				S	DPF, Board, S Mount, Connector from rear
STC-S133UVC-DBSCS				CS	DPF, Board, CS Mount, Connector from rear

Note. DPF: Dual Pass Filter, IRCF: IR Cut Filter

MIPI					
Model	Monochrome/Color	Frame Rate	Sensor Size	Lens Mount	General Specifications
STC-S133MIP	Color	60 fps	1/3.2	---	IRCF, Board, Base (without lens mount)
STC-S133MIP-CS				CS	IRCF, Board, CS Mount
STC-S133MIP-L				S	IRCF, Board, S Mount
STC-S133MIP-NF				---	Board, No filter
STC-S133MIP-D				---	DPF, Board, Base (without lens mount)
STC-S133MIP-DCS				CS	DPF, Board, CS Mount
STC-S133MIP-DL				S	DPF, Board, S Mount
STC-S133MIP-ALL				S	IRCF, Case, S Mount
STC-S133MIP-ALCS				CS	IRCF, Case, CS Mount
STC-S133MIP-DALL				S	DPF, Case, S Mount
STC-S133MIP-DALCS				CS	DPF, Case, CS Mount

Note. DPF: Dual Pass Filter, IRCF: IR Cut Filter
Harness is included.

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Accessories

Remote Control Unit	
Model	Applicable Model
RC-S133	S133N(P) Series

Mount Conversion Adapter	
Model	Applicable Model
CS-C-R	CS-Mount Models of all S133 Series

Harness for Power Supply/Signal Output		
Model	Applicable Model	General Specifications
KSAF005	For S133N/P	8-pin connector to power pin jack and BNC connector
KSAF006	For S133N/P	8-pin connector to power pin jack and RCA connector

Drawing dimension
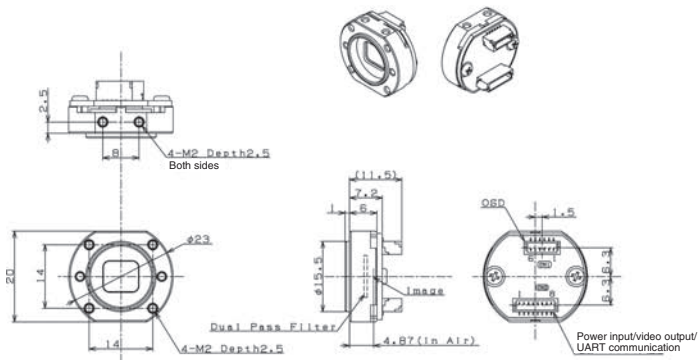
STC-S133N(P)/I   STC-S133N(P)/ICS

STC-S133N(P)-L/LS/IL/ILS

2-M3 Depth3.0
Both sides

(13.5)
8.4 · 9.2
8
1.2
M12×P0.5

φ25
22 · 15
16
4-M2 Depth3.0
Dual Pass Filter

φ16.5 · φ15

OSD · 1.5
Power input/video output/
UART communication

STC-S133N(P)-NF

18
16
19 · 16.5
4-R1.5
2-R2.3
φ22.4
2-φ2.3NTH
Part without GND resist (2 parts)
Center of 1SX017 imaging area corresponds to PCB center
2-R1.7
: Part without pattern (2 parts)

(5.5)
1.2
2-R2.25 without GND resist

OSD · 1.5
Power input/video output/
UART communication

STC-S133N(P)-AL/IAL

14.4
2.7
10.4
3.2
1.2
M12×P0.5
25
14
R4
25
16.5 · 15
15.27(InAir)
Image
Optical Filter
Both sides
12
(2.7)
M2.5 Depth3
Screw (four sides)

1.5
OSD
6.3
6.3
Power input/
video output/
UART communication

STC-S133N(P)-ACS/IACS

22
10.3
7.6 · 14.4
CS Mount
25
R4
25
φ28
Optical Filter
Both sides
12
(10.3)
2.7
M2.5 Depth3
Screw (four sides)

1.5
OSD
6.3
6.3
Power input/video output/
UART communication

44

STC-S133MIP(D)

4-M2 Depth2.5
Both sides

φ23
4-M2 Depth2.5
Dual Pass Filter
4.87(In Air)
(12.3)
Image
Conductor FFC
Reinforcing plate

STC-S133MIP-L(DL)

2-M3 Depth3.0
Both sides

φ25
M12XP0.5
4-M2 Depth3.0
Dual Pass Filter
15.27(In Air)
(14.3)
Image
Conductor FFC
Reinforcing plate

STC-S133MIP-CS(DCS)

2-M2 Depth2.5
Both sides

CS Mount
φ28
Dual Pass Filter
(19.9)
14.8
φ23
Conductor FFC
Reinforcing plate

STC-S133MIP-NF

0.72
(including mounting float 0.1)
φ22.4
2-φ2.3NTH
4-R1.5
2-R2.3
2-R1.7
Center of 1SX017 imaging area corresponds to PCB center
: Part without GND resist (2 parts)
: Part without pattern (2 parts)
Image
Conductor FFC
Reinforcing plate
2-R2.25 without GND resist

45

STC-S133MIP-ALL/DALL

STC-S133MIP-ALCS/DALCS
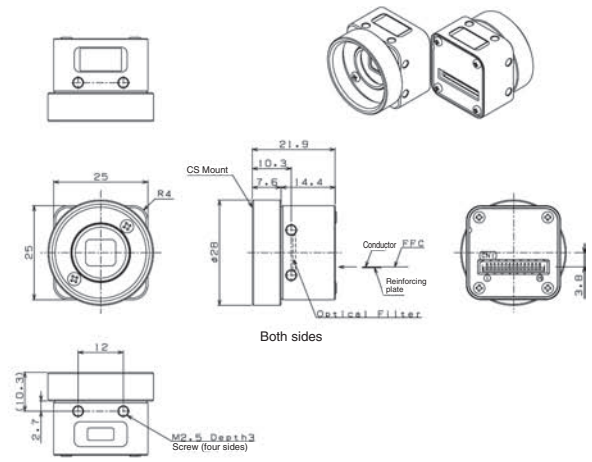
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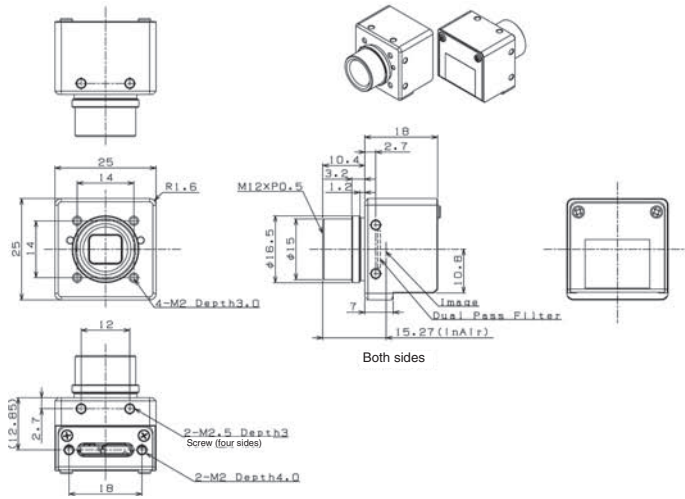
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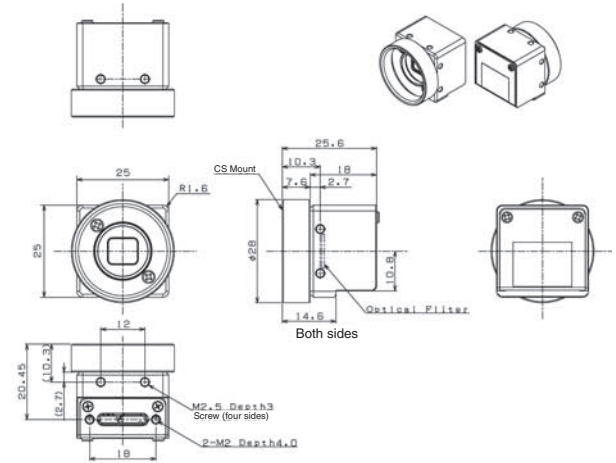
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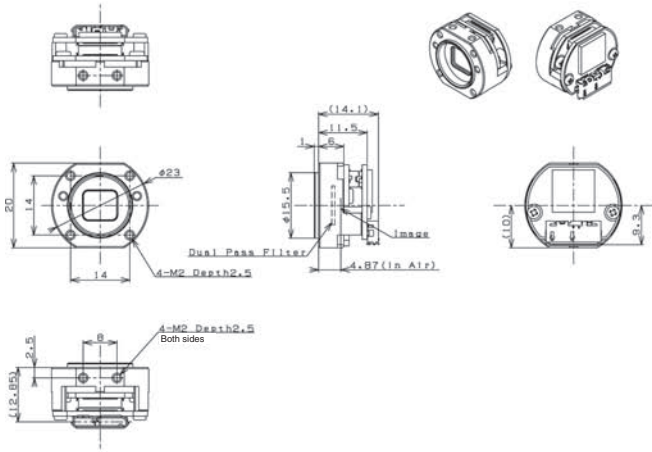
STC-S133UVC-BLL(DBLL)
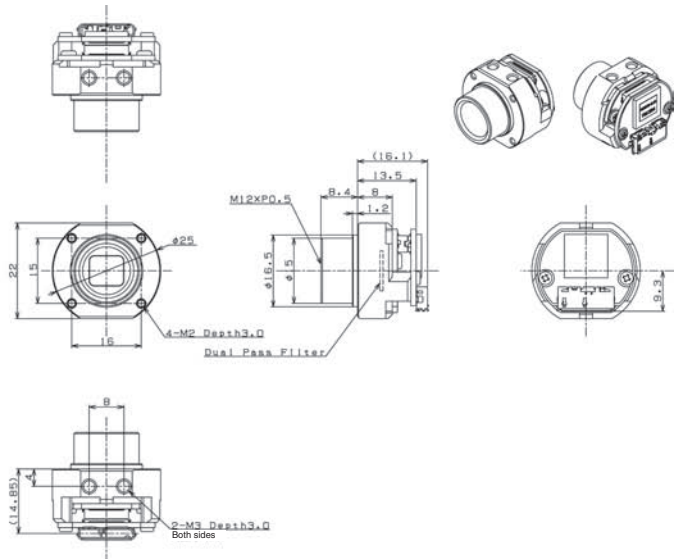
STC-S133UVC-BLCS(DBLCS)
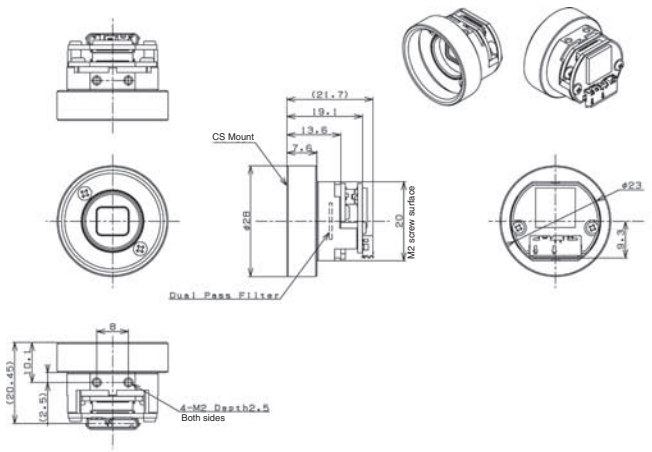
STC-S133UVC-BS(DBS)
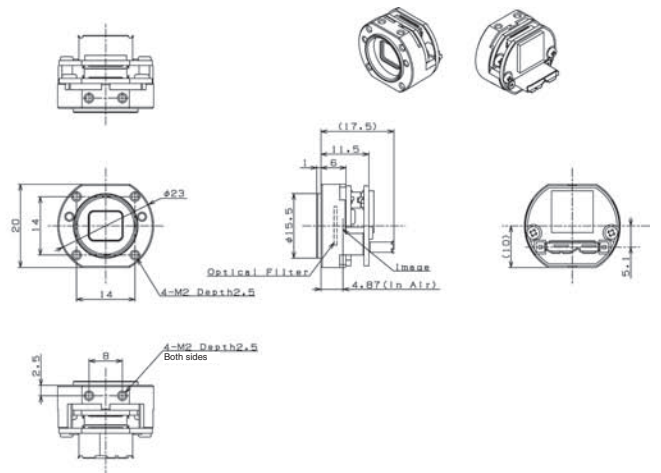
STC-S133UVC-BSL(DBSL)
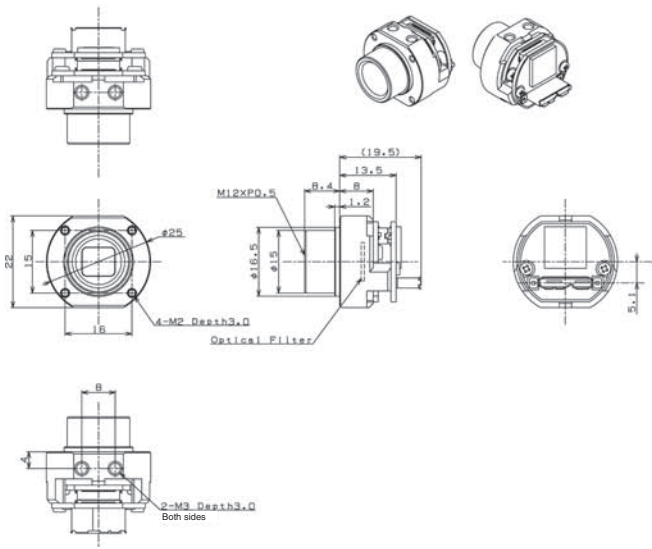
STC-S133UVC-BSCS(DBSCS)
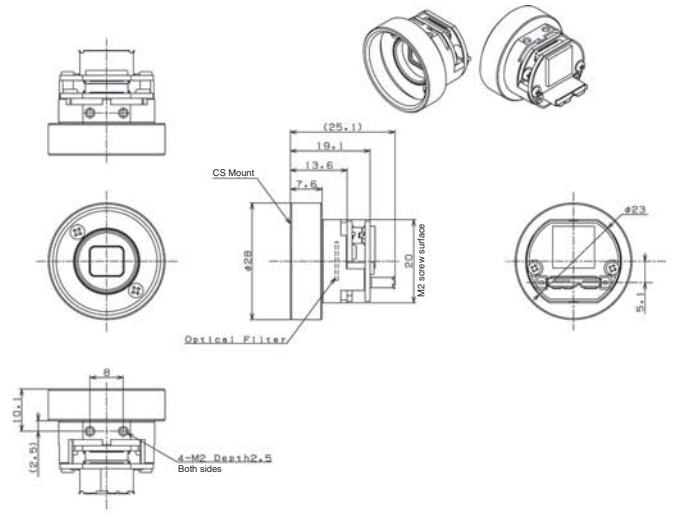
Accessory, Cable, others

Description

Optional items for using cameras

Screw-fastened GigE Cable

OMRON has made available a line of optional screw-fastened cables, responding to many requests for such cables when using GigE cameras in the FA applications.

Screw-Fastened GigE Cables	
Model	Length
FJ-VSG 3M	3 m
FJ-VSG 5M	5 m
FJ-VSG 10M	10 m
FJ-VSG 20M	20 m
FJ-VSG 40M	40 m

Power Supply and I/O Cables

Power Supply and I/O Cables	
Model	Length
FJ-VSP2 3M	3 m
FJ-VSP2 5M	5 m
FJ-VSP2 10M	10 m

Note. When wiring a camera, be sure to refer to its specification document to check its external connector specifications. Incorrect wiring can lead to failure.

Screw-fastened USB3.0 Cable

USB 3.0 Cables (USB 3.0 Micro-B, with Camera-Side Fastening Screws)

Model	Length	Cable Type
CAB-USB3-02	2 m	Normal
CAB-USB3-03	3.5 m	
CAB-USB3-05	5 m	
CAB-USB3-07	7 m	
CAB-USB3-10	10 m	Normal high-transmission cables
CAB-USB3-02-RB	2 m	Robot cables
CAB-USB3-03-RB	3.5 m	
CAB-USB3-05-RB	5 m	
CAB-USB3-07-RB	7 m	

Note. Please make sure in advance that USB 3.0 cables operate correctly under your environment.

HDMI Cable

HDMI Cable

Model	Applicable Model	Length
CAB-HDMI-015	4K HD high vision (DVI) cameras	1.5 m
CAB-HDMI-02	4K HD high vision (DVI) cameras	2 m
CAB-HDMI-03	4K HD high vision (DVI) cameras	3 m
CAB-HDMI-05	4K HD high vision (DVI) cameras	5 m

Note. Please make sure in advance that HDMI cables operate correctly under your environment, including power supply capability.

HDMI Fiber-Optic Cables

Model	Applicable Model	Length
CAB-HDMI-10-OPT	4K HD high vision (DVI) cameras	10 m Provides power supply (with USB)
CAB-HDMI-20-OPT	4K HD high vision (DVI) cameras	20 m Provides power supply (with USB)
CAB-HDMI-30-OPT	4K HD high vision (DVI) cameras	30 m Provides power supply (with USB)
CAB-HDMI-50-OPT	4K HD high vision (DVI) cameras	50 m Provides power supply (with USB)
CAB-HDMI-70-OPT	4K HD high vision (DVI) cameras	70 m Provides power supply (with USB)
CAB-HDMI-100-OPT	4K HD high vision (DVI) cameras	100 m Provides power supply (with USB)

Note. Please make sure in advance that HDMI cables operate correctly under your environment, including power supply capability.

Coaxial Cable

BNC-BNC Cables

Model	Applicable Model	Connector Type	Length
BNC-BNC1	TV Format	BNC on both ends	1 m
BNC-BNC2			2 m
BNC-BNC3			3 m
BNC-BNC5			5 m
BNC-BNC10			10 m

BNC-RCA (Pin Jack) Cables

Model	Applicable Model	Connector Type	Length
BNC-RCA2	TV Format	BNC on one end and RCA on the other	2 m
BNC-RCA3			3 m
BNC-RCA5			5 m
BNC-RCA10			10 m

Harness for Power Supply/Signal Output

Harnesses for power supply and signal output for STC-S133N/P

Model	Applicable Model	General Specifications
KSAF005	For S133N/P	8-pin connector to power pin jack and BNC connector
KSAF006		8-pin connector to power pin jack and RCA connector

Mount Conversion Adapter

Adapter ring necessary when using C-mount lens with CS-mount camera

Adapter for converting M42 P=1 FB=10mm to F-mount when using 12M, 25M, or line sensor cameras
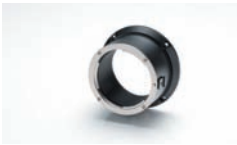
Model	Applicable Model	General Specifications
CS-C-R	CS Mount Series	CS mount → C mount conversion adapter
M42-F-R	12M, 25M, Line Scanning Camera	M42 P=1 FB=10 mm → F mount conversion adapter

Tripod Mount

Optional adapter for fastening the camera with tripod screws

Model	Applicable Model	General Specifications
TP-HCA	USB3.0: STC-MCE/MBE132U3V, STC-MCA/MBA5MUSB3 Camera Link: SPB/SPC43, 52, 163, 202PCL	
TP-JVA	USB3.0: 0.4M, 1.6M, 2.3M, 3.2M, 4M, 5M (M*S500/510U3V)	
TP-JQA	USB3.0: 7.1M, 8.9M, 12.3M, 12M, 20.4M Camera Link: 2M (CM*200PCL), 3.2M, 4M, 5M (SP*500/510PCL), 8.9M, 12.3M, 25M (GP*250BPCL)	
TP-KWA	GigE Vision M Series	
TP-KWA-IEA	GigE Vision M Series	Use to set M Series at same height as S Series sensor center.
TP-KWA2	STC-MBS/MCS881POE, STC-MBS/MCS122BPOE, STC-MBS/MCS2041POE	

Remote Control Unit

The unit is connected to the pin jack on the back of the camera allowing various settings to be made with an on-screen display. All DVI/SDI models are applicable.

Model	Applicable Model	General Specifications
RC-HD133	4K HDMI/DVI/SDI	ø3.5 stereo pin jack
RC-S133	S133N/P Series	
RC-S133B	S133N-B Series	ø3.5 stereo pin jack

Accessory Fixed Focus Lens

Description

Small-diameter fixed focus lens for small board cameras and remote head camera

S Mount (M12 P0.5) Lens

Model	Applicable Model	General Specifications
CV0205C	S Mount Series	f=2.5 mm, 1/3", F2.0, for 5M resolution
KVAB009		Lens fixing washer

USB 3.0 4ch Frame Grabber Board

Description

4ch Frame Grabber Board for USB 3.0 Camera

Features

The 4-channel Frame Grabber Board includes the
USB3.0 chips on each channel
Adopting PCI Express Gen 3 × 4 lane connections,
operation with greater stability than Gen 2 × 4 lane
models can be ensured when using multiple
high resolution, high-speed cameras

Product Line-up

Model	USB3-4ch
No. of ports	USB3.0 Standard A × 4 ports
Host I/F	PCI Express Gen3 × 4 lane
Operating power supply	On-board 5 VDC
Host controller	FL1100-1Q0-EX (FRESCO)
Supported OS	Windows7/8/10 and Linux
Motion camera	Omron Sentech USB3.0 Camera
Dimensions	167 (W) × 111.15 (H) mm (excluding protrusions)

Note. Confirm operation with your PC in advance.
Note. Use the latest USB driver version provided by FRESCO Logic.

Factory Drive Recorder

Description

Efficient identification of problem causes with a video recorder

Simple configuration facilitates installation

Industrial camera   Factory Drive Recorder software

Features

Automatic recording of events by trigger input

The camera records a video showing the machine state for five minutes before and after the problem by being triggered by external input from the sensor or PLC or by TCP command input. This allows you to quickly understand what happened by replaying the video.

Case — Recording triggered by particle volume abnormality

Particle volume

Abnormal

Normal

Particle sensor

Records 5 min before and after

▼
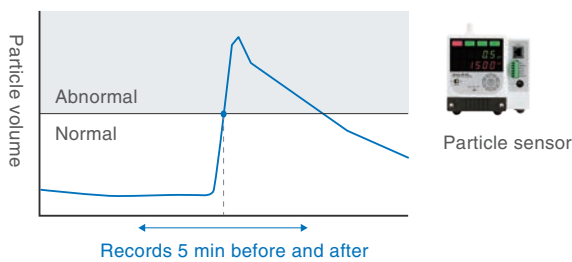
Shows that the operator opened the machine door

Case — Recording of work process triggered by inspection fail

Smart camera

Inspection result Pass → Inspection result Pass → Inspection result Fail

Records 5 min before

▼
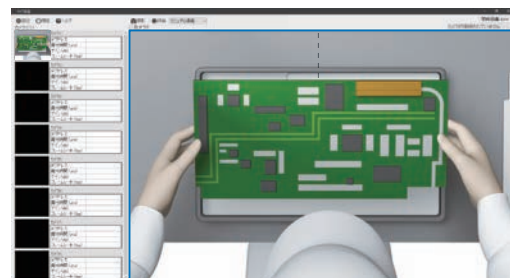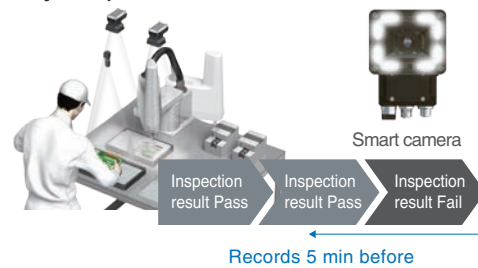
Shows that the operator made a mistake

Simultaneous recording of wide and narrow areas

Omron's broad portfolio of cameras, including a camera with a long cable required for wide-area recording to shoot the entire manufacturing site, can be freely combined with lenses for different fields of view. These combinations enable capturing wide and narrow areas at the same time, allowing you to accurately analyze problems by replaying the videos.

Records the entire area

Records the small area

Simultaneous recording of up to 8 cameras

Cable length up to 100 m

System configuration

Basic configuration

Factory Drive Recorder software

Industrial camera

PC/IPC
(NY5 Series)

External trigger input to camera
All cameras record simultaneously.

TCP command trigger input
All cameras record simultaneously
or only the specified camera records.

Examples of trigger input devices

| Particle sensor | Vision sensor | Safety light curtain |
| Flow sensor | Pressure sensor | Photoelectric sensor | Proximity sensor |

PLC

Note: Up to eight cameras can simultaneously record. A hub is required to connect cameras depending on the PC specifications and the number of connected cameras.

Product Line-up

Software

Item	Max. no. of connectable cameras	Model
Factory Drive Recorder	8 per PC	STC-FDR-SW01

Cameras

Item		Max. resolution	High-speed*1	Ultra-compact	Cable extension (100 m)	Model
GigE Vision Camera	STC-M Series	20.4 Mpix			✓	Refer to page 7
USB3 Vision Camera	STC-M Series	20.4 Mpix	✓			Refer to page 13
USB3 Vision Camera Compact Remote Head Model	STC-R Series	1.6 Mpix	✓	✓		Refer to page 17

*1. The maximum frame rate depends on your PC performance, the number of connected cameras, and the camera type. Test the products before actual use.

Recording methods

Recording method		Description	Recording time
Continuous Recording		Records as configured (days and time)	Up to 1 year (366 days)
Manual Recording		Starts and stops recording manually	Up to 60 minutes
Trigger Recording	Time Trigger	Records once a day at specified time	Up to 5 minutes before and after trigger
	Motion Detection	Records when the difference between an image and the preceding image exceeds the specified value	
	Master Image Comparison	Records when the difference between a predefined still image and a camera image exceeds the specified value	
	Trigger Signal (External trigger, I/O)	Records when a trigger signal is input to the camera	
	Trigger Signal (TCP command)	Records when a TCP command is input to the camera	

Factory Drive Recorder
STC-FDR-SW01
OMRON

Record the moment of an event

For details on the factory drive recorder, refer to its catalog.
(Cat. No. Q340)

Accessories

Spectral Characteristics Chart

This is the Spectral Characteristics Chart of the sensor (Area Sensor) published in this catalog.

	Model	Type	Page
1	IMX287	Monochrome	57
2	IMX433	Monochrome	57
3	IMX273	Monochrome	57
4	IMX174	Monochrome	58
5	IMX430	Monochrome	58
6	IMX249	Monochrome	58
7	IMX265	Monochrome	58
8	IMX252	Monochrome	58
9	IMX264	Monochrome	59
10	IMX250	Monochrome	59
11	IMX267	Monochrome	59
12	IMX255	Monochrome	59
13	IMX304	Monochrome	59
14	IMX253	Monochrome	59
15	IMX382-0ABR-C	Monochrome	60
16	IMX178	Monochrome	60
17	IMX428	Monochrome	60
18	IMX226	Monochrome	61
19	IMX183	Monochrome	61
20	CMV2000	Monochrome	62
21	CMV4000	Monochrome	62
22	CMV12000	Monochrome	63
23	MT9P031	Monochrome	64
24	MT9J003	Monochrome	64
25	EV76C560ACT	Monochrome	63
26	PYTHON 25K	Monochrome	63
27	GMAX0505	Monochrome	63
28	RJ33B4AA0DT	Monochrome	64
29	CMV2000	NIR	63
30	CMV4000	NIR	63

	Model	Type	Page
31	IMX287	Color	57
32	IMX433	Color	57
33	IMX273	Color	57
34	IMX174	Color	58
35	IMX430	Color	58
36	IMX249	Color	58
37	IMX265	Color	58
38	IMX252	Color	58
39	IMX264	Color	59
40	IMX250	Color	59
41	IMX267	Color	59
42	IMX255	Color	59
43	IMX304	Color	59
44	IMX253	Color	59
45	IMX382-0AQR-C	Color	60
46	IMX178	Color	60
47	IMX274	Color	61
48	IMX226	Color	61
49	IMX183	Color	61
50	ISX017	Color	62
51	IMX291	Color	62
52	CMV2000	Color	62
53	CMV4000	Color	62
54	CMV12000	Color	63
55	GMAX0505	Color	63
56	MT9P031	Color	64
57	EV76C560ACT	Color	63

This is the Spectral Characteristics Chart of the senor (Line Scanning Camera) published in this catalog.

	Model	Type	Page
1	DR-2K-7	Monochrome	65
2	DR-4K-7	Monochrome	65
3	DR-4K-3.5	Monochrome	65
4	DR-8K-7	Monochrome	65
5	DR-8K-3.5	Monochrome	65
6	DR-16K-3.5	Monochrome	65
7	DR-2X2K-7-inver	Monochrome	65
8	DR-2X4K-7-inver	Monochrome	65
9	DR-2X8K-7	Monochrome	65

	Model	Type	Page
1	DR-2X2K-7-inver-RGB	Color	65
2	DR-2X4K-7-inver-RGB	Color	65
3	DR-2X8K-7-RGB	Color	65

Area Sensor Spectral Characteristics Chart

IMX287

1/2.9" CMOS 0.4M Monochrome
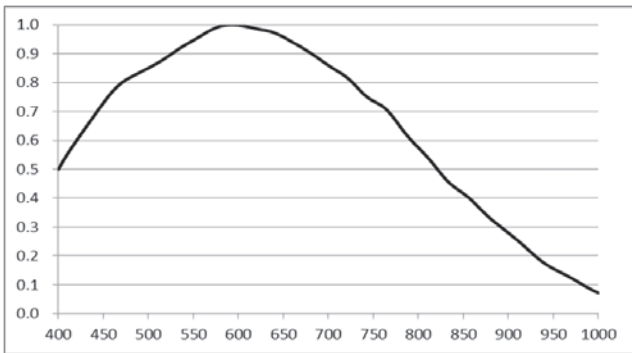
IMX287

1/2.9" CMOS 0.4M Color
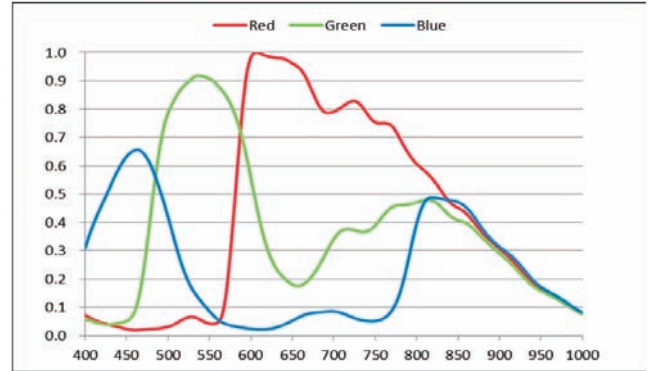
IMX433

1/1.7" CMOS 0.5M Monochrome
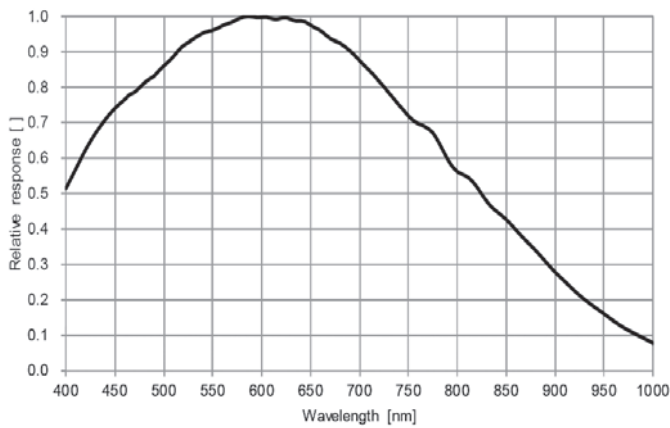
IMX433

1/1.7" CMOS 0.5M Color
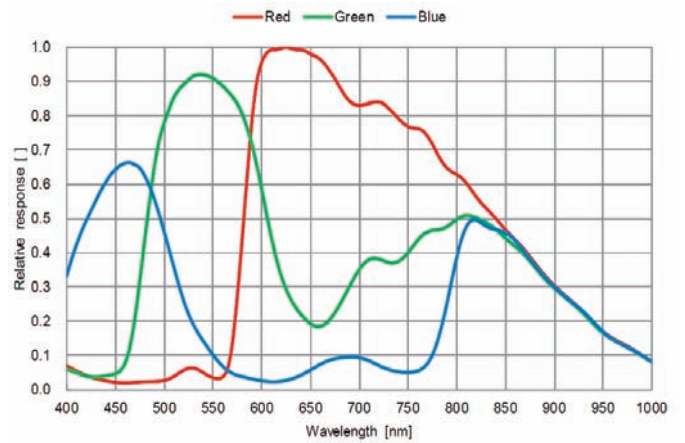
IMX273

1/2.9" CMOS 1.6M Monochrome
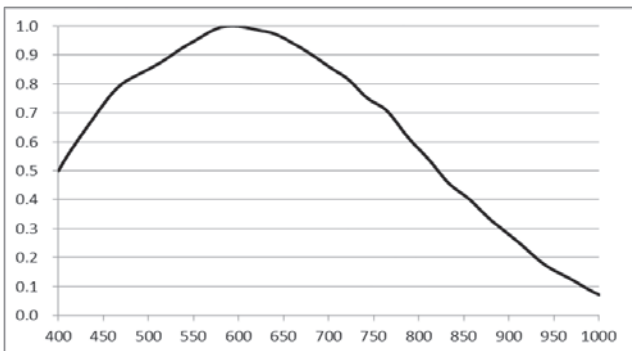
IMX273

1/2.9" CMOS 1.6M Color
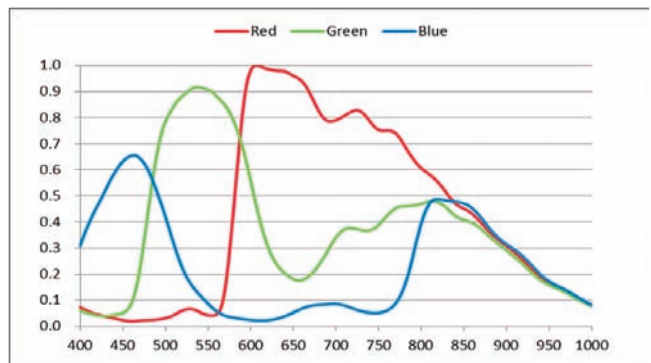
IMX174, IMX249

1/1.2" CMOS 2.3M Monochrome
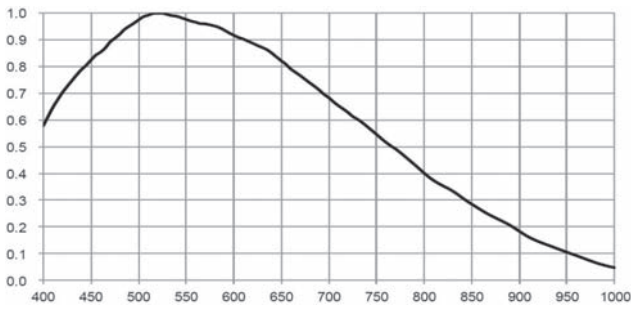
IMX174, IMX249

1/1.2" CMOS 2.3M Color
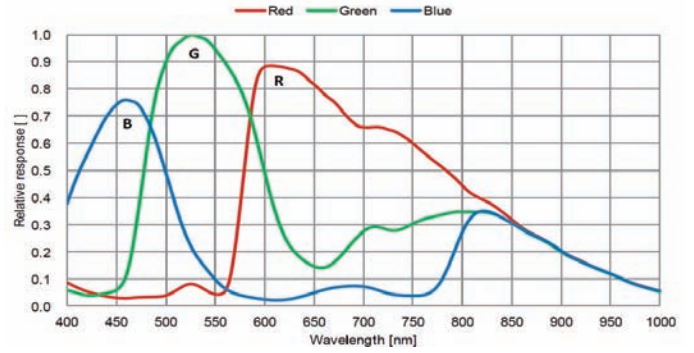
IMX430

1/1.7" CMOS 2M Monochrome
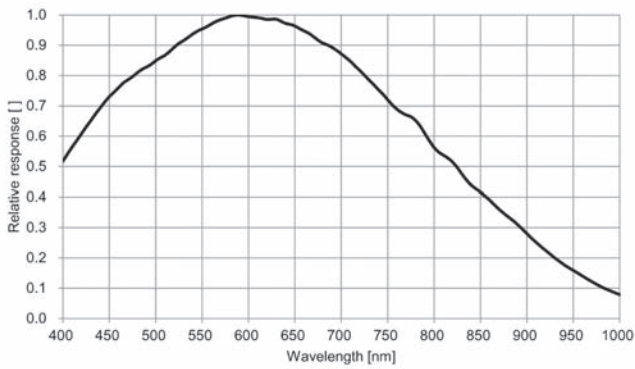
IMX430

1/1.7" CMOS 2M Color
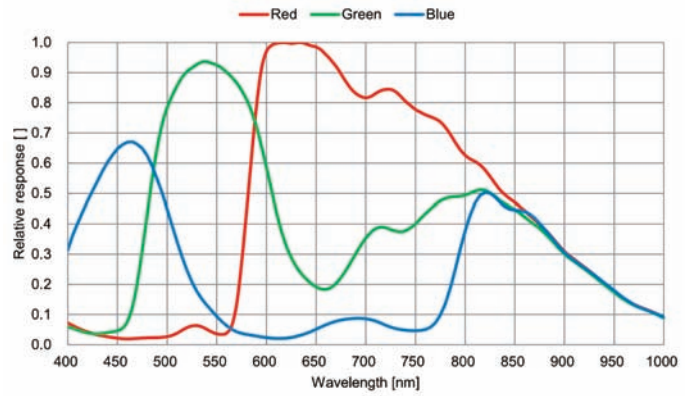
IMX265, IMX252

1/1.8" CMOS 3.2M Monochrome
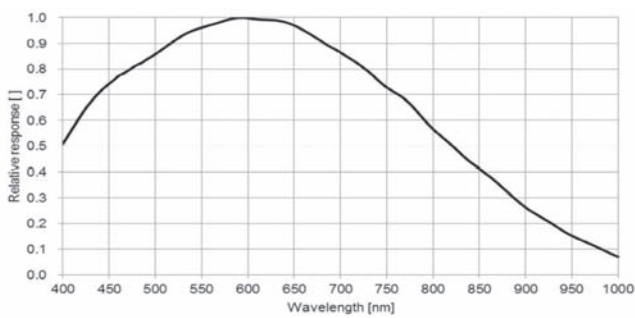
IMX265, IMX252

1/1.8" CMOS 3.2M Color
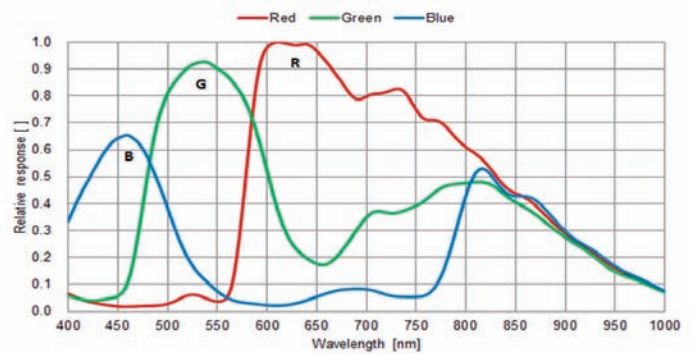
IMX264, IMX250

2/3" CMOS 5M Monochrome
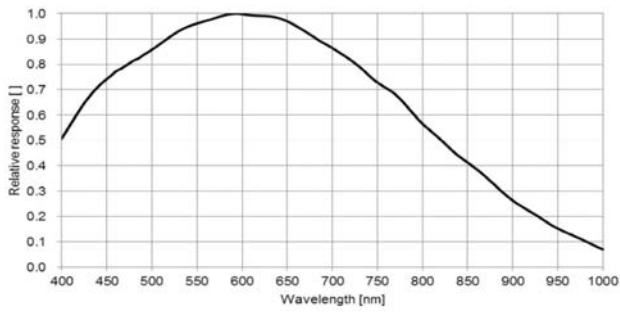
IMX264, IMX250

2/3" CMOS 5M Color
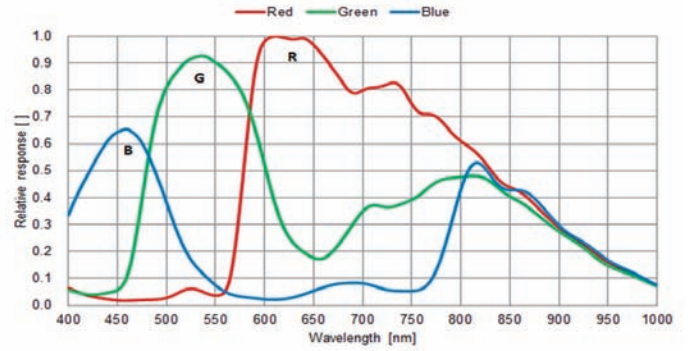
IMX267/IMX255

1" CMOS 8.9M Monochrome
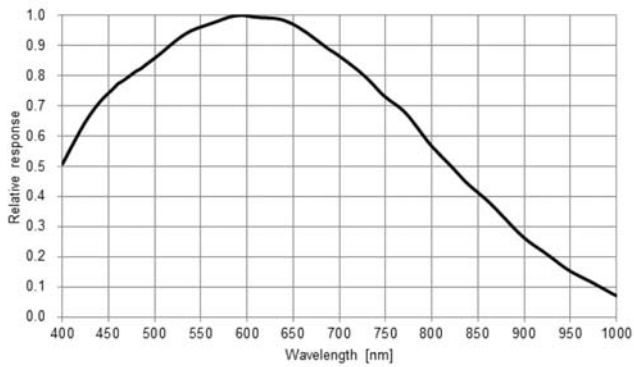
IMX267/IMX255

1" CMOS 8.9M Color
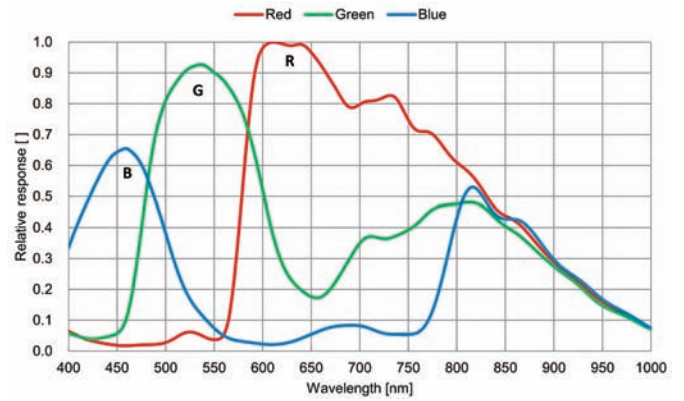
IMX304/IMX253

1.1" CMOS 12M Monochrome
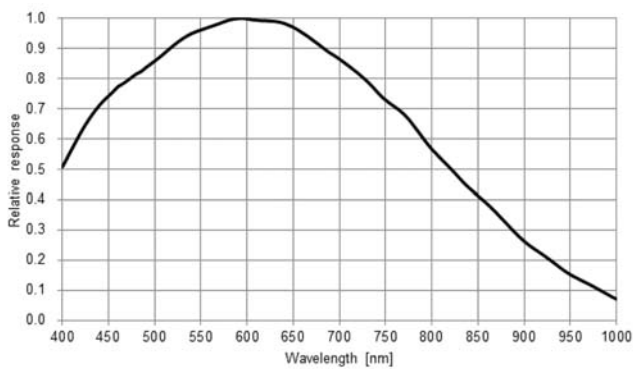
IMX304/IMX253

1.1" CMOS 12M Color

Accessories
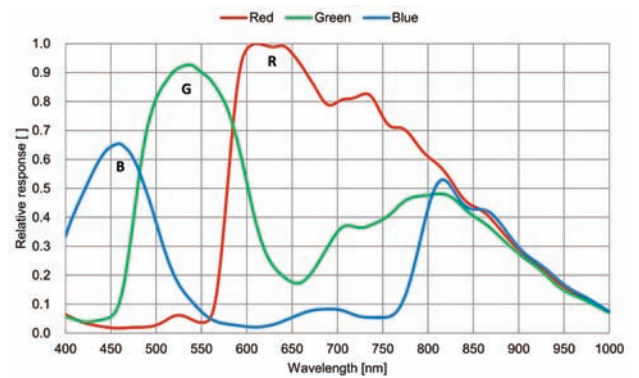
IMX382-0ABR-C

1/3.2" CMOS 1.3M Monochrome
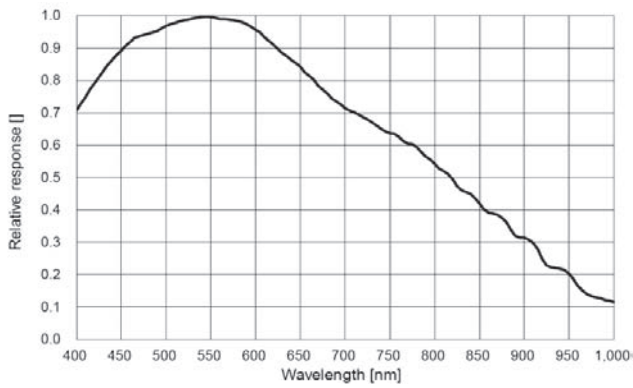
IMX382-0AQR-C

1/3.2" CMOS 1.3M Color
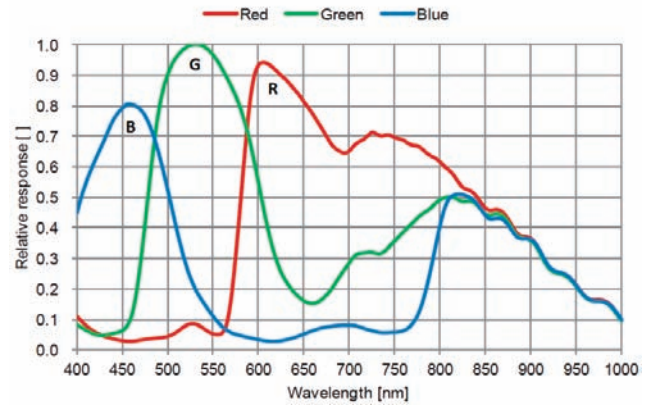
IMX178

1/1.8" CMOS 6.4M Monochrome
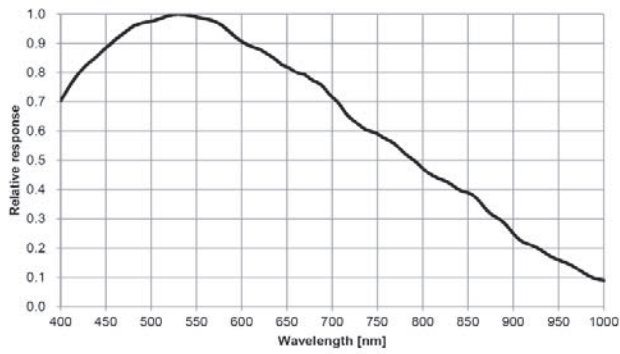
IMX178

1/1.8" CMOS 6.4M Color
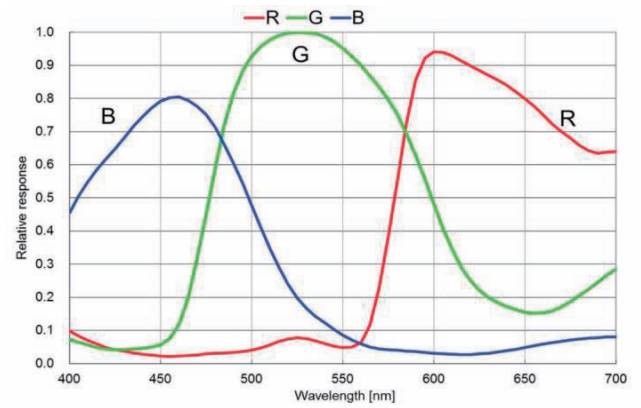
IMX428

1.1" CMOS 7.1M Monochrome

60
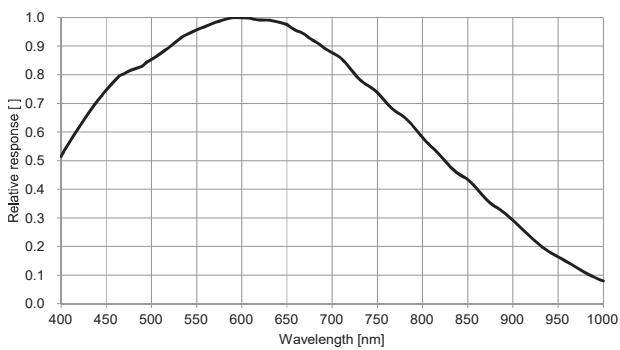
IMX274

1/2.5" CMOS 8.3M Color
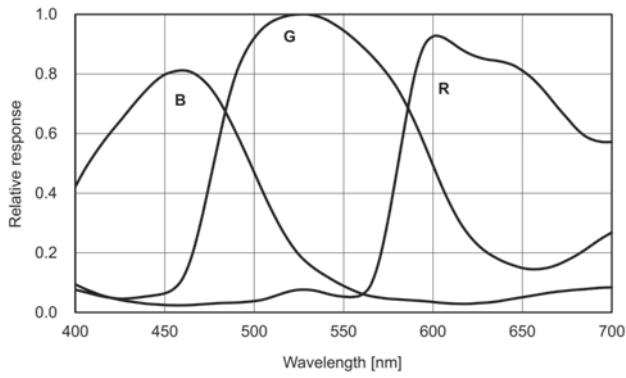
IMX226

1/1.7" CMOS 12M Monochrome
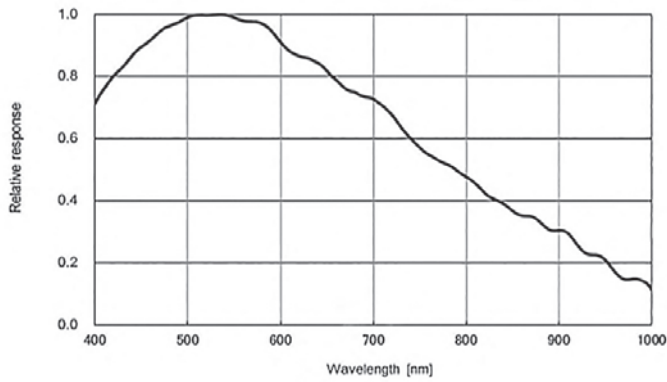
IMX226

1/1.7" CMOS 12M Color
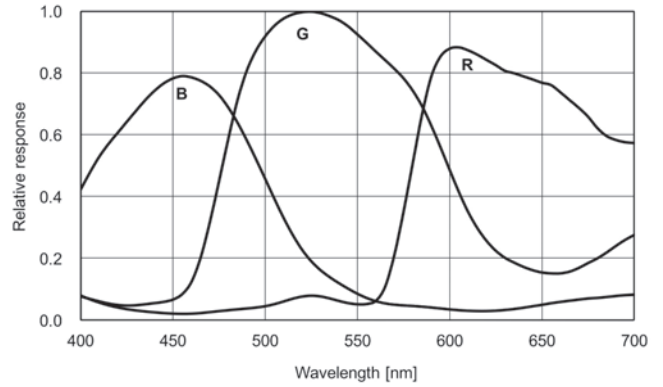
IMX183

1" CMOS 20M Monochrome
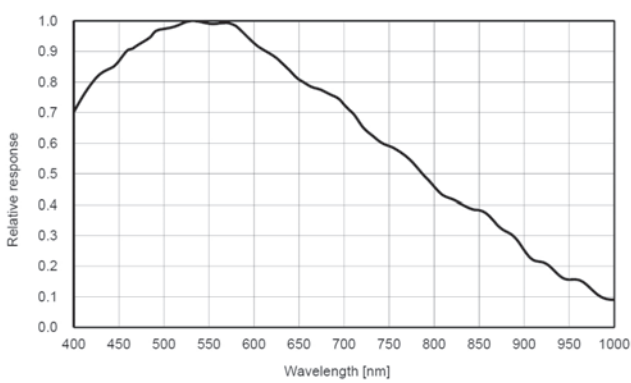
IMX183

1" CMOS 20M Color

Accessories

61
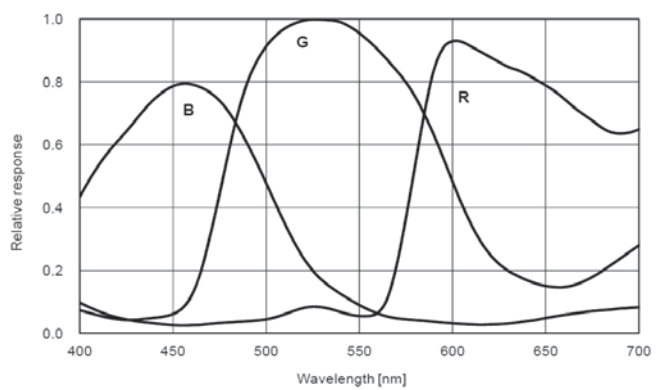
ISX017

1/3.2" CMOS 0.6M Color
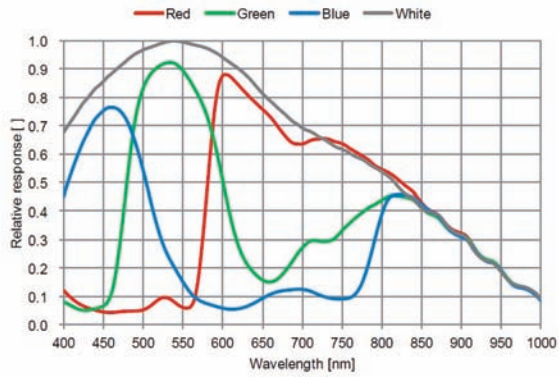
IMX291

1/2.9" CMOS 1080P FULL High-definition Color
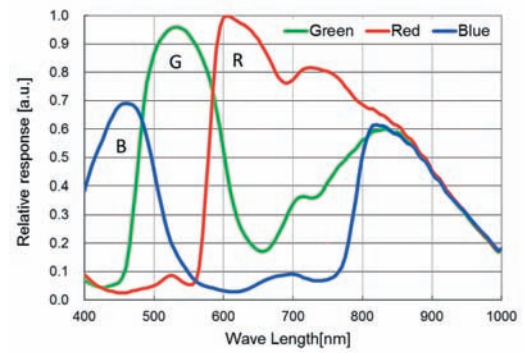
CMV2000/CMV4000

2/3" CMOS 2M Monochrome / 1" CMOS 4M Monochrome
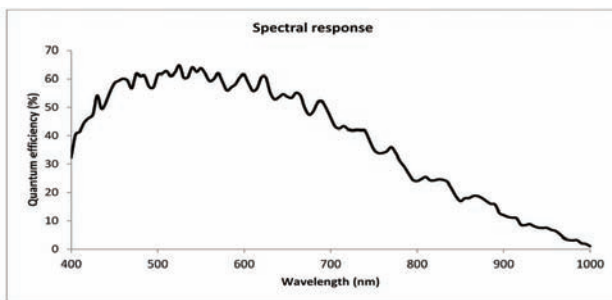
CMV2000/CMV4000

2/3" CMOS 2M Color / 1" CMOS 4M Color
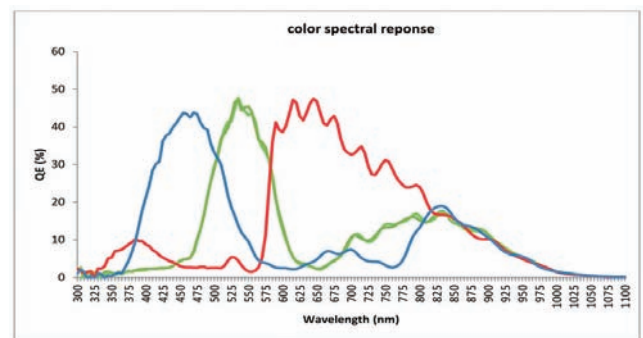
CMV2000/CMV4000

2/3" CMOS 2M NIR / 1" CMOS 4M NIR
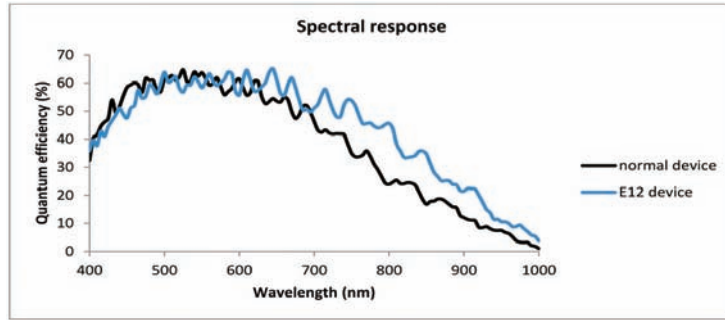
CMV12000 | CMV12000

1.76" CMOS 12M Monochrome, Color
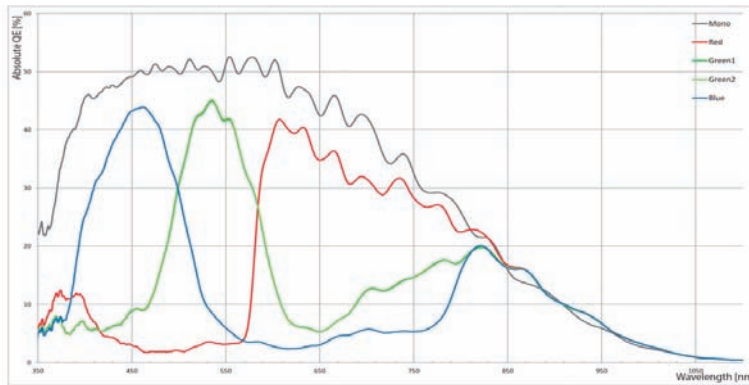
PYTHON 25K

APS-H CMOS 25M, Monochrome
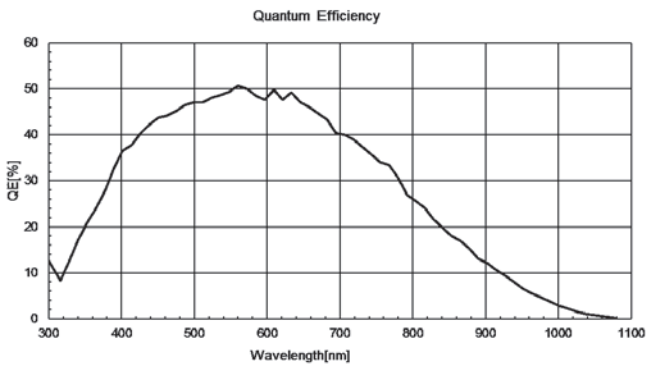
GMAX0505 | GMAX0505

1.1" CMOS 25M Monochrome, Color
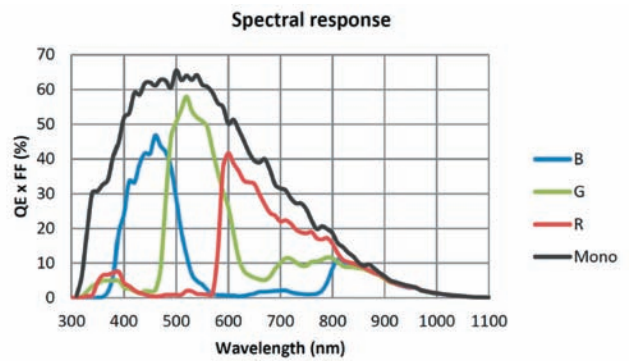
EV76C560ACT | EV76C560ACT

1/1.8" CMOS 1.3M Monochrome, Color

Accessories
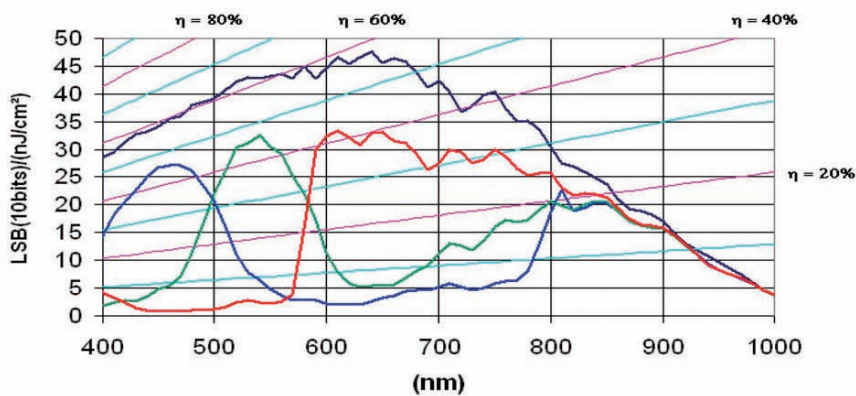
MT9P031

1/2.5" CMOS 5M Monochrome

MT9P031
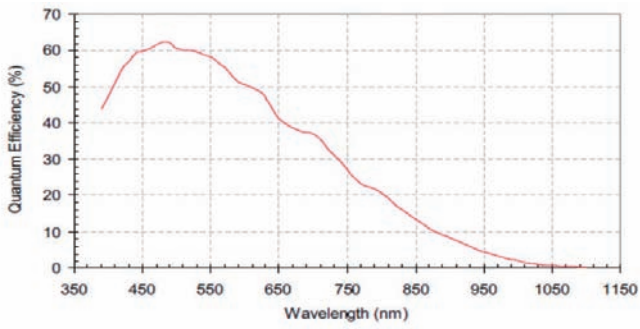
1/2.5" CMOS 5M Color

MT9J003

1/2.3" CMOS 10M Monochrome
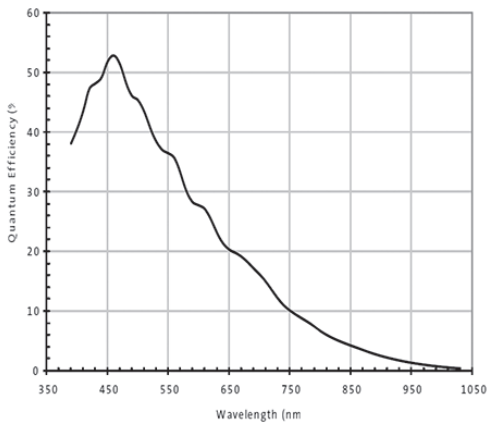
RJ33B4AA0DT

1/3 CCD VGA Monochrome

64
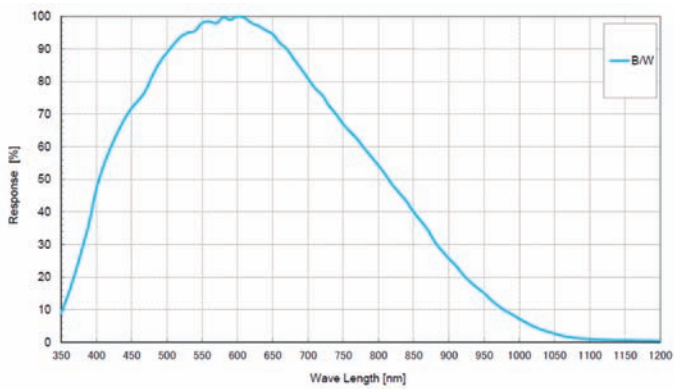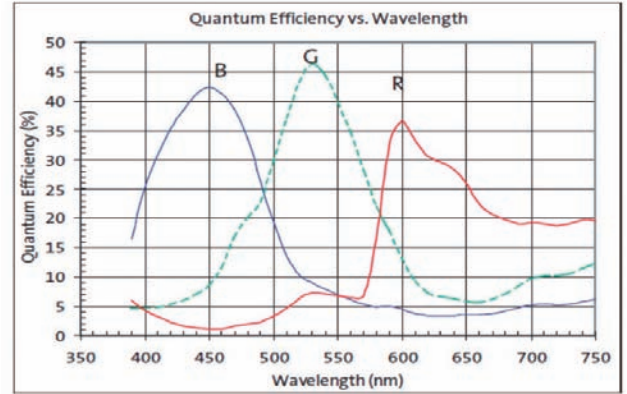
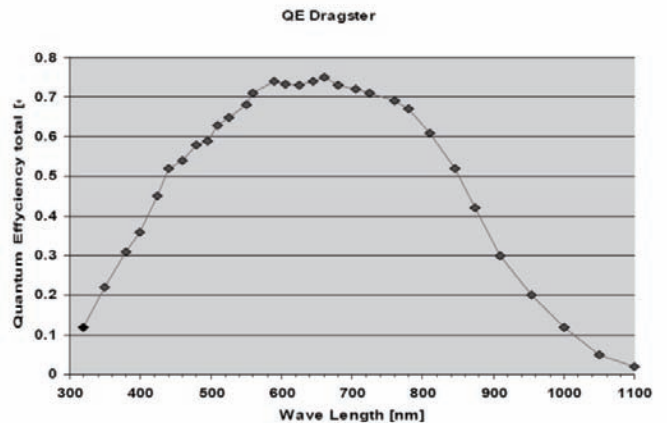# Line Scanning Camera Spectral Characteristics Chart

DR-2K-7, DR-4K-7, DR-4K-3.5

2K / 7 μm / single
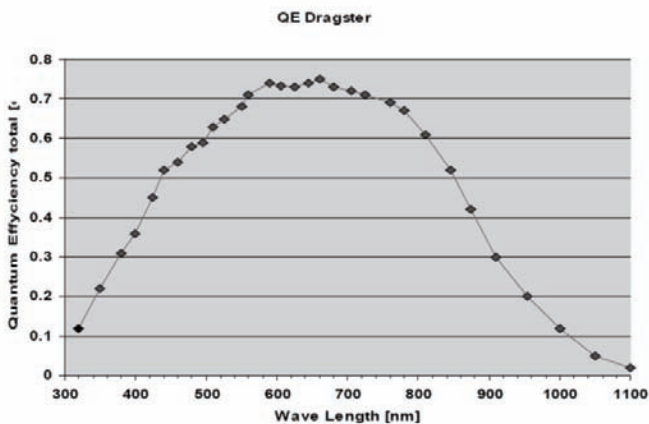4K / 7 μm / single
4K / 3.5 μm / single
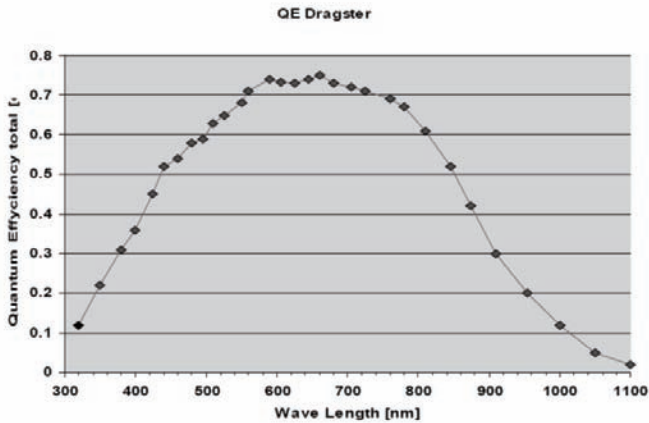
DR-8K-7, DR-8K-3.5, DR-16K-3.5

8K / 7 μm / single
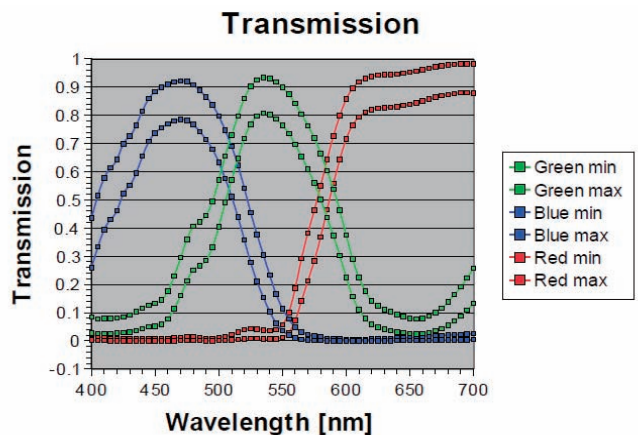8K / 3.5 μm / single
16K / 3.5μm / single

DR-2X2K-7-inver, DR-2X4K-7-inver, DR-2X8K-7

2K / 7 μm / dual
4K / 7 μm / dual
8K / 7 μm / dual

DR-2X2K-7-inver-RGB, DR-2X4K-7-inver-RGB, DR-2X8K-7-RGB

2K / 7 μm / dual
4K / 7 μm / dual
8K / 7 μm / dual

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