

Omron Sentech 5M CMOS CoaXPress

(STC-STC-MBS510CXP6 [Monochrome] / STC-MCS510CXP6 [Color] Models)

98 fps Global Shutter
 SONY CMOS 5MP CoaXPress
 Max 98fps(@ CXP-6, 1lane)
 Compact size and easy-to-attach design
 Long cable lengths

CoaXPress

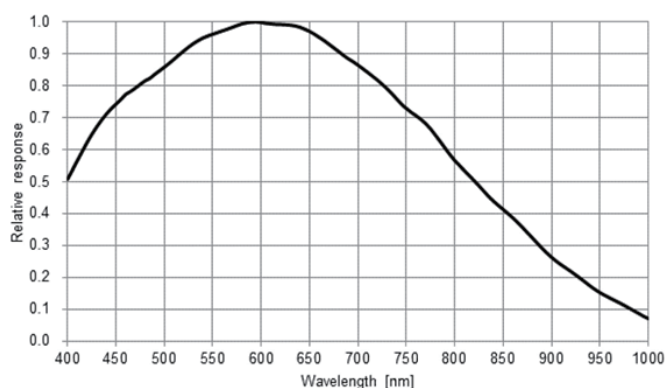


Features

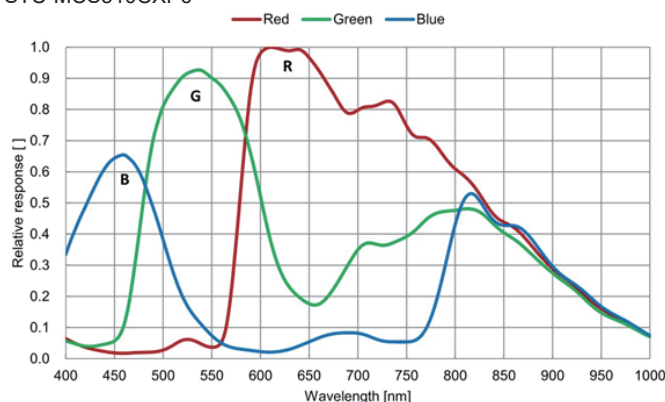
- 2448 (H) x 2048 (V)
- 3.45μm x 3.45μm
- 98 fps
- 2/3"
- Global Shutter
- Lens Mount:C
- Support for PoCXP
- 28 x 28 x 40 mm (connector excluded)

Spectral Sensitivity

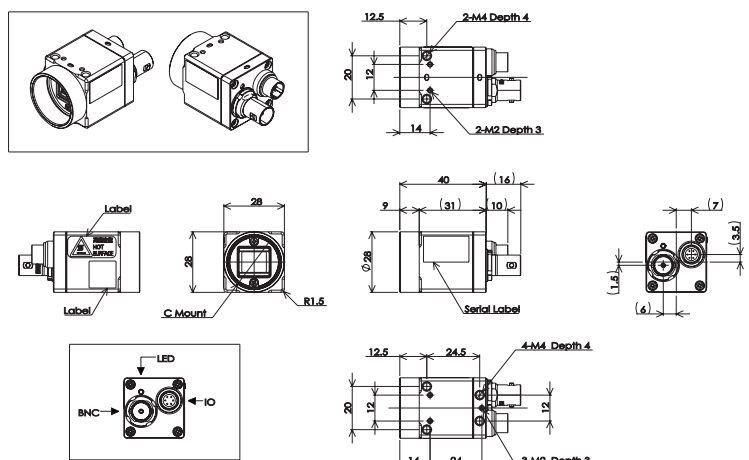
STC-MBS510CXP6



STC-MCS510CXP6



Drawing Dimension



Product Line-Up

Model Numbers	STC-MBS510CXP6 (Monochrome)
	STC-MCS510CXP6 (Color)
Image Sensor	2/3" 5M CMOS (SONY : IMX250)
Shutter type	Global
Effective Pixels	2448 (H) x 2048 (V)
Cell Size	3.45 (H) x 3.45 (V) μm
Scanning method	Full scanning ROI
Maximum Frame Rate	CXP-6 8bits : 98fps / 10bits : 80fps / 12bits : 68fps CXP-3 8bits : 57fps / 10bits : 45fps / 12bits : 38fps
ADC bits width	12bits
Image Format	Mono8 / Mono10 Packed Msb / Mono12 Packed Msb BayerRG8 / BayerRG10 Packed Msb / BayerRG12 Packed Msb
Noise Level	Less than 6 digits (Gain 0 dB , 8bits) Less than 12 digits (Gain 0 dB , 10bits Packed) Less than 48 digits (Gain 0 dB , 12bits Packed)
Sensitivity	Monochrome 110 Lux (8bits) , 440 Lux (10bits Packed , 12bits Packed) Color 210 Lux (8bits) , 820 Lux (10bits Packed , 12bits Packed)
Exposure time	1 μ seconds to 16.777 seconds
Analog Gain	0 to 18 dB
Digital Gain	x1 to x7
Black Level	0 to 31 gidits (8bits) 0 to 127 gidits (10bits Packed) 0 to 511 gidits (12bits Packed)
ROI(AOI)	Horizontal : 256 to 2448 / Vertical : 4 to 2048 Adjustable steps for size 8 pixels in horizontal direction / 2 lines in vertical direction Adjustable steps for offset 2 pixels in horizontal direction / 2 lines in vertical direction
Multi ROI	Eight Regions (Horizontal 1 x Vertical 8 regions)
Gamma	N/A
Binning	2 x 2, Off *Monochrome model only
Decimation	1/2 x 1/2, Off
Image Flip	Horizontal / Vertical / Horizontal and Vertical / Off
Defective Pixel Correction	Up to 512 points
Auto Exposure	N/A
Auto Gain	N/A
Auto White Balance	Off / Once / Continuous / Disable *Color model only
Operational Mode	Edge preset trigger / Pulse width trigger / CXP trigger packet / Free run
Protocol	CoaXPress Standard Version 1.1.1 and GenICam SFNC 2.4 compliant
Input / Out put	Four GPIO
Input Voltage	PoCXP (+18.5 to +26 Vdc)
Consumption	Maximum: 3.6 W, Typcal: 3.1 W
Dimensions	28 (W) x 28 (H) x 40 (D) mm (excluding the connectors)

*CoaXPress is trademarks of JIIA (Japan Industrial Imaging.)



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Switches & Relays

- Limit Switches • Pushbutton Switches • Electromechanical Relays
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Software

- Programming & Configuration • Runtime

Omron Sentech 2M CMOS CoaXPress

(STC-MBS212CXP6 [Monochrome] / MCS212CXP6 [Color] Models)

239 fps Global Shutter
 SONY CMOS 2MP CoaXPress
 Max 239fps(@ CXP-6, 1lane)
 Compact size and easy-to-attach design
 Long cable lengths

Features

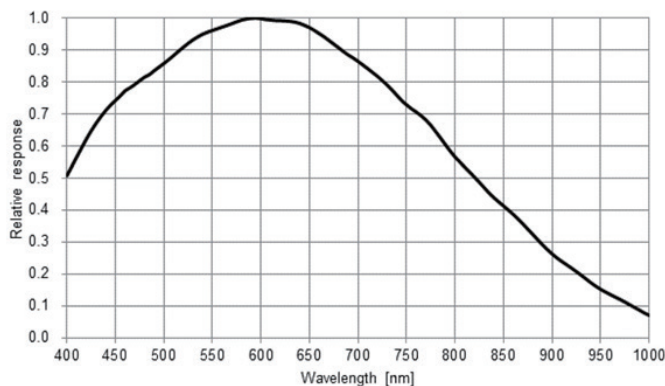
- 1632 (H) x 1240 (V)
- 4.5 μm x 4.5 μm
- 239 fps
- 1/1.7"
- Global Shutter
- Lens Mount: C
- Support for PoCXP
- 28 x 28 x 40 mm (connector excluded)

CoaXPress

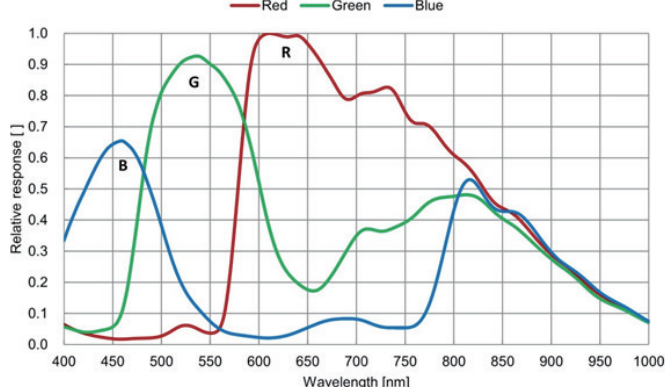


Spectral Sensitivity

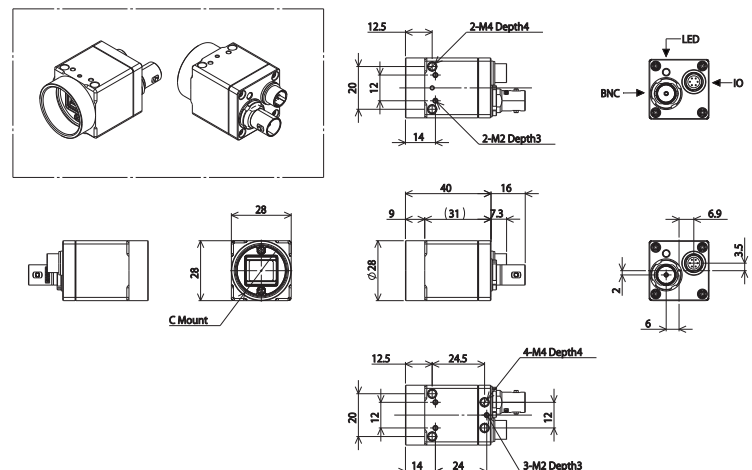
STC-MBS212CXP6



STC-MCS212CXP6



Drawing Dimension



Product Line-Up

Model Numbers	STC-MBS212CXP6 (Monochrome)
	STC-MCS212CXP6 (Color)
Image Sensor	1/1.7" 2M CMOS (SONY : IMX422)
Shutter type	Global
Effective Pixels	1632 (H) x 1240 (V)
Cell Size	4.5 (H) x 4.5 (V) μm
Scanning method	Full scanning ROI
Maximum Frame Rate	CXP-6 8bits : 239fps / 10bits : 194fps / 12bits : 165fps
	CXP-3 8bits : 136fps / 10bits : 108fps / 12bits : 90fps
ADC bits width	12bits
Image Format	Mono8 / Mono10 Packed Msb / Mono12 Packed Msb
	BayerRG8 / BayerRG10 Packed Msb / BayerRG12 Packed Msb
Noise Level	Less than 4 digits (Gain 0 dB , 8bits)
	Less than 8 digits (Gain 0 dB , 10bits Packed)
	Less than 32 digits (Gain 0 dB , 12bits Packed)
Sensitivity	Monochrome 110 Lux (8bits) , 440 Lux (10bits Packed , 12bits Packed)
	Color 210 Lux (8bits) , 820 Lux (10bits Packed , 12bits Packed)
Exposure time	1 μ seconds to 16.777 seconds
Analog Gain	0 to 18 dB
Digital Gain	x1 to x7
Black Level	0 to 31 gidits (8bits)
	0 to 127 gidits (10bits Packed)
	0 to 511 gidits (12bits Packed)
ROI(AOI)	Horizontal : 256 to 1632 / Vertical : 4 to 1240
	Adjustable steps for size
	8 pixels in horizontal direction / 2 lines in vertical direction
	Adjustable steps for offset
Multi ROI	2 pixels in horizontal direction / 2 lines in vertical direction
	Eight Regions (Horizontal 1 x Vertical 8 regions)
Gamma	N/A
Binning	2 x 2, Off *Monochrome model only
Decimation	1/2 x 1/2, Off
Image Flip	Horizontal / Vertical / Horizontal and Vertical / Off
Defective Pixel Correction	Up to 512 points
Auto Exposure	N/A
Auto Gain	N/A
Auto White Balance	Off / Once / Continuous / Disable *Color model only
Operational Mode	Edge preset trigger / Pulse width trigger /
	CXP trigger packet / Free run
Protocol	CoaXPress Standard Version 1.1.1 and GenICam SFNC 2.4 compliant
Input / Out put	Four GPIO
Input Voltage	PoCXP (+18.5 to +26 Vdc)
Consumption	Maximum: 4.0 W, Typcal: 3.5 W
Dimensions	28 (W) x 28 (H) x 40 (D) mm (excluding the connectors)
Optical Filter	No Optical Filter
Lens Mount	CMount
Interface Connectors	CXP Connector :BNC, 75 Ω ohm IO Connector : HR10A-7R-6PB (Hirose) or equivalent
Weight	Approximately 52 g

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Software

- Programming & Configuration • Runtime

Omron Sentech CoaxPress

High Speed CMOS CoaxPress Camera

Features

- 4M, 12M
- High speed (186fps at 12M pixel)
- Top angle type also available



Product Line-Up

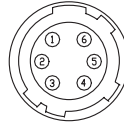
Model	Monochrome	STC-CMB401CXP	STC-CMB120ACXP	STC-CMB120ACXP-T	STC-CMB120ACXP-F	STC-CMB120ACXP-T-F
	Color	STC-CMC401CXP	STC-CMC120ACXP	STC-CMC120ACXP-T	STC-CMC120ACXP-F	STC-CMC120ACXP-T-F
Resolution		4M	12M	12M	12M	12M
Frame Rate		142.5fps	186fps	186fps	186fps	186fps
Effective Pixels		2048 × 2048	4096 × 3072	4096 × 3072	4096 × 3072	4096 × 3072
Sensor Size		1	1.76	1.76	1.76	1.76
Cell Size (HxV, μm)		5.5 × 5.5	5.5 × 5.5	5.5 × 5.5	5.5 × 5.5	5.5 × 5.5
Sensor		CMV4000	CMV12000	CMV12000	CMV12000	CMV12000
Lens Mount		C	M42 P=1 FB=10mm	M42 P=1 FB=10mm	F	F
General Specifications		PoCXP Copatibility, 1Lane	PoCXP Copatibility, 4Lane, Connector from rear	PoCXP Copatibility, 4Lane, Connector from Upperside	PoCXP Copatibility, 4Lane, Connector from rear	PoCXP Copatibility, 4Lane, Connector from upperside

Accessories

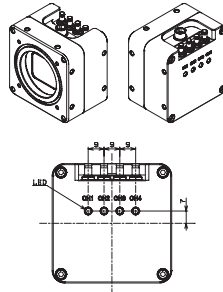
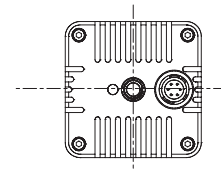
Mount Conversion Adapter		
Model	Supported Models	General Specifications
M42-F-R	12M Model	M42 P=1 FB=10mm → Fmount Conversion Adapter

The connector for the trigger signal output. (Not for the power supply of the camera)
Trigger input available by changing camera setting
Please use the HR10A-7P-6S (Hirose) or equivalent for the cable

Pin No.	Signal Name	I/O
1	IO_GND	-
2	GPIO2	IN/OUT
3	GPIO1	IN/OUT
4	GPIO0	IN/OUT
5	N.C.	-
6	N.C.	-



Drawing Dimension

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