

Omron Sentech CameraLink CMOS

High Speed CMOS Camera Link Series

Features

- Sony CMOS [Pregius] are also available
- High resolution and high FPS implemented simultaneously by high performance CMOS sensor



Product Line-Up

Model	Monochrome	STC-CMB33PCL	STC-SPB43PCL	STC-SPB163PCL	STC-CMB200PCL	STC-SPB312PCL	STC-SPB322PCL
	Color	STC-CMC33PCL	STC-SPC43PCL	STC-SPC163PCL	STC-CMC200PCL	STC-SPC312PCL	STC-SPC322PCL
	NIR				STC-CMB200PCL-NIR		
Resolution		VGA	0.4M	1.6M	2M	3.2M	3.2M
Frame Rate		432fps	523.5fps	152.4fps	333fps	57.1fps	216.2fps
Effective Pixels		642 × 484	720 × 540	1440 × 1080	2048 × 1088	2048 × 1536	2048 × 1536
Sensor Size		1/3	1/2.9	1/2.9	2/3	1/1.8	1/1.8
Cell Size (HxV, μm)		7.4 × 7.4	6.9 × 6.9	3.45 × 3.45	5.5 × 5.5	3.45 × 3.45	3.45 × 3.45
Sensor		CMV300	IMX287	IMX273	CMV2000	IMX265	IMX252
Lens Mount		C	C	C	C	C	C
General Specifications		PoCL, automatically switched, SDR connector×2	PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×2	PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×2

Model	Monochrome	STC-CMB401PCL	STC-APB503PCL	STC-SPB500PCL	STC-SPB510PCL	STC-SPB881PCL	STC-SPB891PCL
	Color	STC-CMC401PCL	STC-APC503PCL	STC-SPC500PCL	STC-SPC510PCL	STC-SPC881PCL	STC-SPC891PCL
	NIR	STC-CMB401PCL-NIR					
Resolution		4M	5M	5M	5M	8.9M	8.9M
Frame Rate		180fps	14fps	35.7fps	163.4fps	20.6fps	91.3fps
Effective Pixels		2048 × 2048	2592 × 1944	2448 × 2048	2448 × 2048	4096 × 2160	4096 × 2160
Sensor Size		1	1/2.5	2/3	2/3	1	1
Cell Size (HxV, μm)		5.5 × 5.5	2.2 × 2.2	3.45 × 3.45	3.45 × 3.45	3.45 × 3.45	3.45 × 3.45
Sensor		CMV4000	MT9P031	IMX264	IMX250	IMX267	IMX255
Lens Mount		C	C	C	C	C	C
General Specifications		PoCL, automatically switched, SDR connector×2	PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×2	PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×2

Model	Monochrome	STC-SPB122BPCL	STC-SPB123BPCL	STC-CMB120APCL	STC-CMB120APCL-F
	Color	STC-SPC122BPCL	STC-SPC123BPCL	STC-CMC120APCL	STC-CMC120APCL-F
	NIR	STC-CMB401PCL-NIR			
Resolution		12M	12M	12M	12M
Frame Rate		15fps	66.9fps	62.3fps	62.3fps
Effective Pixels		4096 × 3000	4096 × 3000	4096 × 3072	4096 × 3072
Sensor Size		1.1	1.1	1.76	1.76
Cell Size(HxV, μm)		3.45 × 3.45	3.45 × 3.45	5.5 × 5.5	5.5 × 5.5
Sensor		IMX304	IMX253	CMV12000	CMV12000
Lens Mount		C	C	M42 P=1 FB=10mm	F
General Specifications		PoCL, automatically switched, SDR connector×1	PoCL, automatically switched, SDR connector×2	PoCL, automatically switched, SDR connector×2	PoCL, automatically switched, SDR connector×2

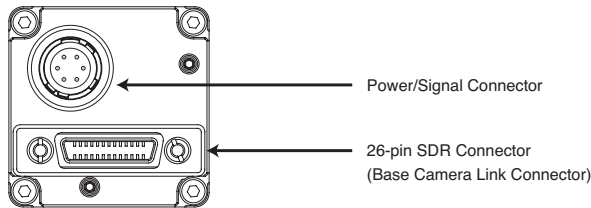
Accessories

AC Adapter		
Model	Supported Models	General Specifications
UN310-1210	All Camera Link models	DC jack type, Input: 100-240 Vac, Output: 12V1A

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

External Connector Specification

External Link Connectors	Camera Link connector: miniature connector (SDR) x 1, power supply I/O: HR10A-7R-6PB (Hirose) or equivalent
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When used with the base configuration, connect the Camera Link cable to the Base connector for use.
PoCL Available
*When used with Medium/Full/10tab configuration, please see the specification for applicable model

Pin Assignment

Base Camera Link Connector

Pin No.	Signal Name	Pin No.	Signal Name
1	+12V	14	GND
2	X0-	15	X0+
3	X1-	16	X1+
4	X2-	17	X2+
5	Xclk-	18	Xclk+
6	X3-	19	X3+
7	SerTC+	20	SerTC-
8	SerTFG-	21	SerTFG+
9	CC1- (TRG)	22	CC1+ (TRG)
10	CC2+	23	CC2-
11	CC3-	24	CC3+
12	CC4+	25	CC4-
13	GND	26	+12V

Pin Assignment

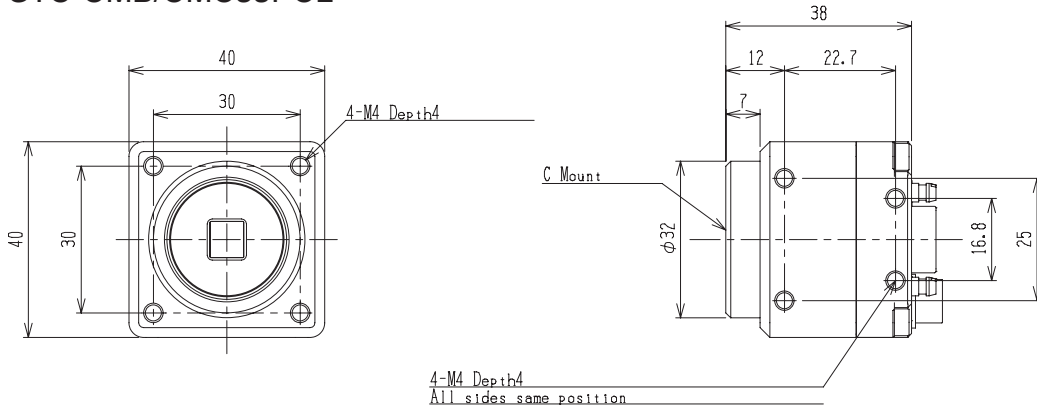
Pin No.	Signal Name	IN/OUT	Signal Voltage	
			Low Voltage	High Voltage
1	GND	IN	0V	
2	SP-4	IN/OUT	IN 0→+0.99V	+2.3→+5.0V
		OUT	0V	+3.3V
3	SP-3	IN/OUT	IN 0→+0.99V	+2.3→+5.0V
		OUT	0V	+3.3V
4	SP-2	IN/OUT	IN 0→+0.99V	+2.3→+5.0V
		OUT	0V	+3.3V
5	SP-1	IN/OUT	IN 0→+0.99V	+2.3→+5.0V
		OUT	0V	+3.3V
6	+12Vdc	IN	+12Vdc	



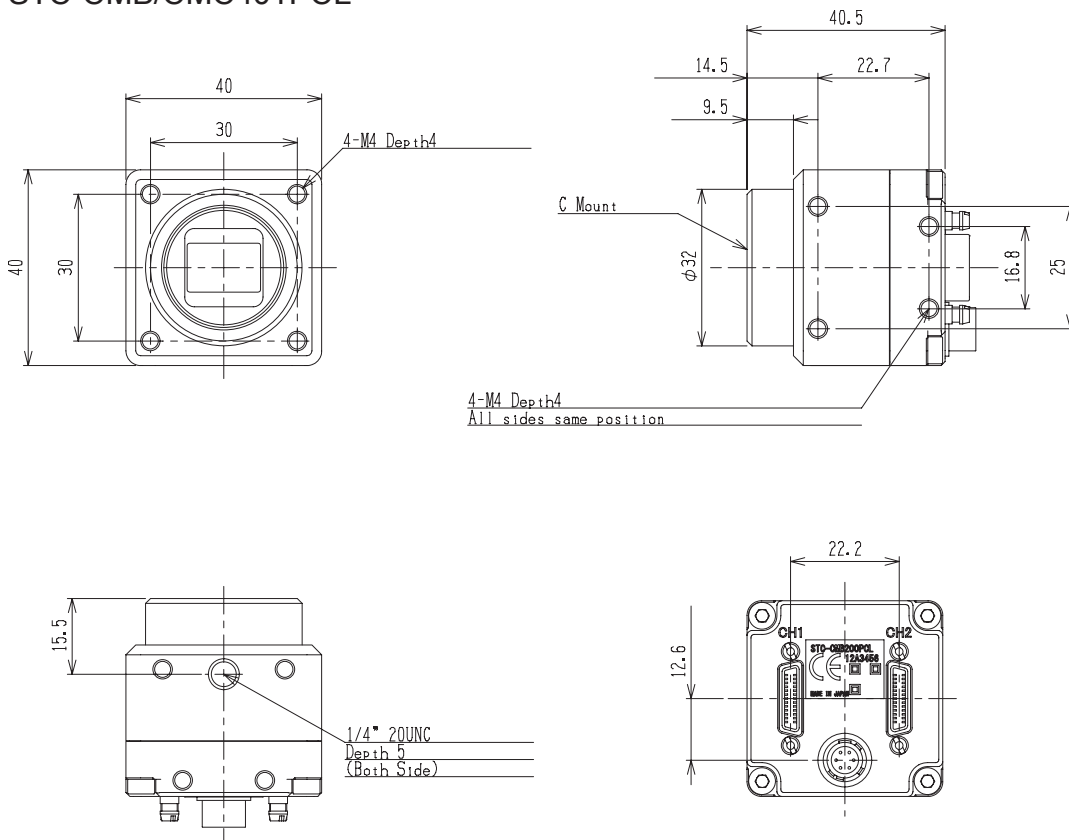
The trigger signal can be input from either one of the connectors listed below by the setting of the camera using communication
Camera Link connector (CC1) or power supply/I/O connector (No. 2)
*Please use HR10A-7P-6S (Hirose) or equivalent for the cable

Drawing Dimension

STC-CMB/CMC33PCL

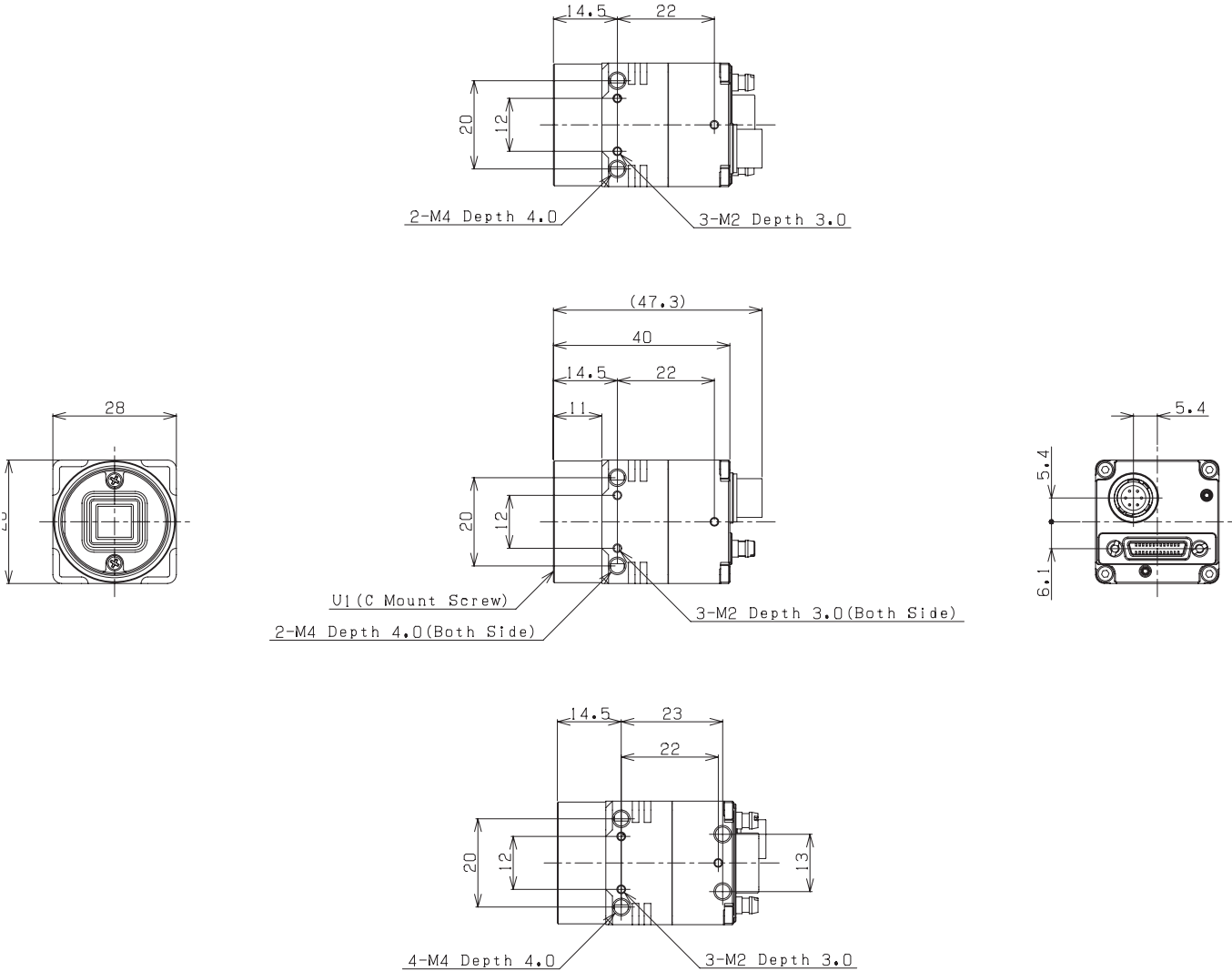


STC-CMB/CMC200PCL STC-CMB/CMC401PCL

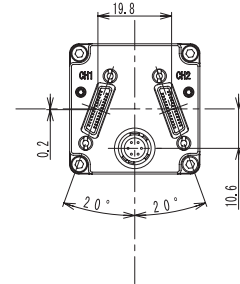
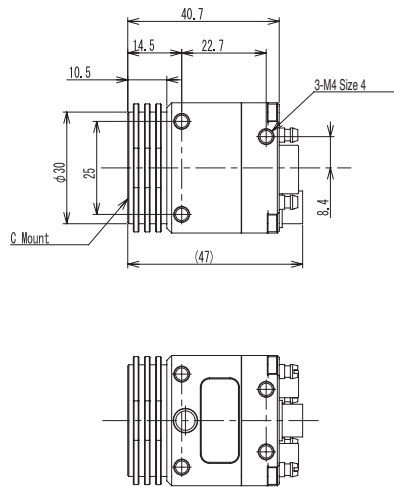
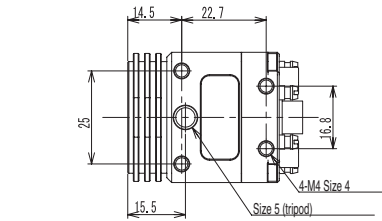
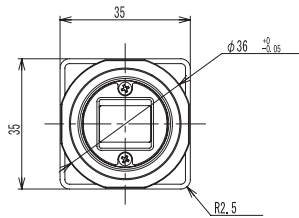
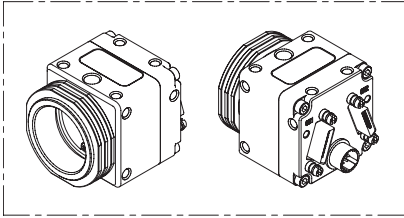


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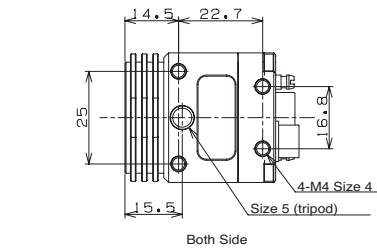
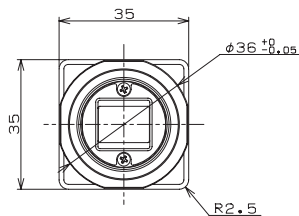
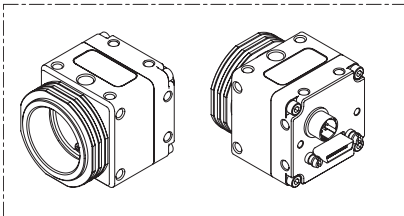
STC-APB/APC503PCL



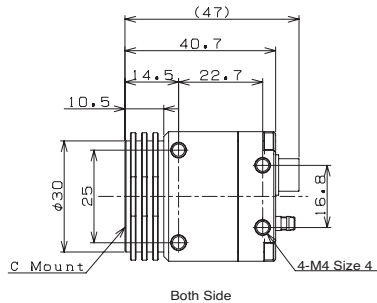
STC-SPB/SPC322PCL
STC-SPB/SPC510PCL
STC-SPB/SPC891PCL
STC-SPB/SPC123BPCL



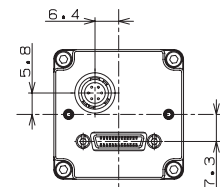
STC-SPB/SPC500PCL
STC-SPB/SPC881PCL
STC-SPB/SPC122BPCL



Both Side



Both Side



STC-CMB/CMC120APCL



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