

New! High Speed
CMOS Sensor

High Speed
CCD Sensor



New! High Speed
Kodak Sensor

Cube
CCD Sensor

Key Features

- Accurate Imager Alignment with Compact Precision Housing
- VGA ~ QSXGA Resolutions
- Color (RGB Bayer Filter) and Monochrome
- High Frame Rates (*Ideal for High Speed Image Capture*)
- Trigger Modes (*With Reset & Non-Reset*)
- Pulse Width and Edge Preset
- Multiple Trigger Channels (*CL Cable or Hirose Connector*)

Camera Link® Overview

Models	Sensor					Resolution					Frame Rate					
	1/3"	1/2"	1/1.8"	2/3"	1"	0.3 MP	0.8 MP	1.4 MP	2 MP	4 MP	5 MP	15, 19	16	30	60, 90	180+
CMOS																
STC-CMB\CMC2MCL																
STC-CMB\CMC4MCL																
CCD																
STC-CL\CLC33A																
STC-RCL\RCLC33A																
STC-CL\CLC83A																
STC-CL\CLC152A																
STC-CL\CLC202A																
STC-CL\CLC232A																
STC-CL\CLC500A																
Kodak CCD																
STC-CL\CLC338A																

Accessories

Cables (*Standard to Mini*)

CAB-CL2M-MINI
CAB-CL3M-MINI
CAB-CL5M-MINI
CAB-CL7M-MINI
CAB-CL10M-MINI

Cables (*Mini to Mini*)

CAB-CL2M-M2M
CAB-CL3M-M2M
CAB-CL5M-M2M
CAB-CL10M-M2M

Tripod Mount

TP-HCA

Lenses

Various C-Mount Lenses
Various Megapixel Lenses
Various Telecentric Lenses

Remote Head Lenses

LEN-RCL33A-L3
LEN-RCL33A-L6
LEN-RCL33A-L16
LEN-RCL33A-L30

Camera Link® Series

High Speed CMOS Sensor

High Speed Kodak Sensor



CMOS Sensor Models

Kodak CCD Models

New!

High speed CMOS Camera Link® Cameras.

- Global Shutter
- Wide Dynamic Range



180fps 4 MEGAPIXEL

STC-CMB4MCL B/W
STC-CMC4MCL Color

340fps 2 MEGAPIXEL

STC-CMB2MCL B/W
STC-CMC2MCL Color

0.3 MEGAPIXEL **240fps**

B/W STC-CL338A
Color STC-CLC338A

New!

High speed Kodak **VGA** Camera Link® Cameras.



Specifications

CMOS Sensor

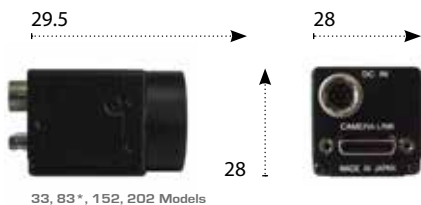
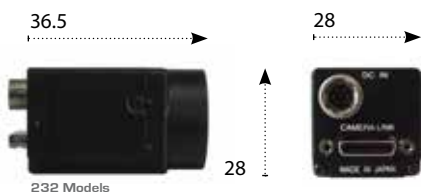
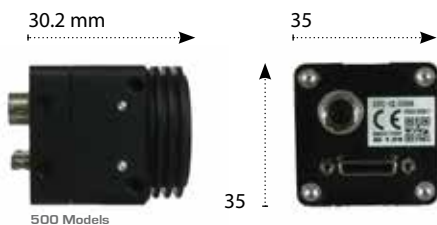
Monochrome Color	STC-CMB2MCL STC-CMC2MCL	STC-CMB4MCL STC-CMC4MCL
Resolution:	2 Megapixel	4 Megapixel
Image Sensor:	2/3" CMOS (CMOSIS: CMV2000)	1" CMOS (CMOSIS: CMV4000)
Signal Format:	Progressive	
Frame Rate:	340fps	180fps
Active Picture Element:	2048 (H) x 1088 (V)	2048 (H) x 2048 (V)
Chip Size (mm):	11.264 (H) x 5.984 (V)	
Cell Size (µm):	5.5 (H) x 5.5 (V)	
Vertical Frequency:	8-bit 10TAP: 340Hz 10-bit MEDIUM: 150Hz	
Horizontal Frequency:	8-bit 10TAP: 372 kHz / 10-bit MEDIUM: 164 kHz	
Pixel Clock Frequency:	8-bit 10TAP: 48 MHz / 10-bit MEDIUM: 21.25 MHz	
Scanning Method:	Full Scan / Partial (1/2, 1/4, Variable), Binning w/ monochrome models	
Sync System:	Internal	
Communication:	RS232 via Camera Link® connector	
Trigger Mode:	Edge preset trigger (V-reset, Non-reset) Pulse width trigger (V-reset, Non-reset)	
Shutter Speed:	OFF, 45 seconds to 1/372,093 seconds (Variable at line)	
Minimum Illumination:	Quantum Efficiency: 62% at 500 nm.	
Gain:	1x to 4x	
S/N Ratio:	≤ 3 Digit (Gain 0dB)	
Gamma:	1.0	
Lens Mount:	C-Mount	
Video Output:	Digital 8 or 10 bit Camera Link® (Base Configuration)	
Optical Filter:	No IR Cut Filter	
Optical Center Accuracy:	Positional accuracy of H and V directions: +/- 0.31mm Rotational accuracy of H and V: +/- 2.1 deg.	
Shock:	70G (3 directions, 3 times each)	
Vibration:	10G (20 to 200Hz)	
Input Voltage:	12Vdc ± 10%	
Power Consumption:	< 4.5W, 375mA	
Operating Temperature:	-5° ~ 40°C (23° ~ 104°F)	
Storage Temperature:	-30° ~ 65°C (-22° ~ 140°F)	
Dimensions (mm):	50 (W) x 50 (H) x 40.5 (D) (1.96" x 1.96" x 1.59")	
Weight:	140g (4.93 oz)	

Kodak Sensor

STC-CL338A STC-CLC338A
VGA (0.3 Megapixel)
1/3" CCD (KAI-0340S (Kodak)) 1/3" CCD (KAI-0340DCM (Kodak))
Progressive: Monochrome or Color
240fps
644 (H) x 484 (V)
5.87 (H) x 4.71 (V)
7.4 (H) x 7.4 (V)
240.9 Hz
119.1 kHz
48 MHz
Full Scan / Partial (1/2, 1/4, Variable), Binning w/ monochrome models
Internal
RS232 via Camera Link® connector
Pulse Width Trigger (V Reset, Non Reset) Edge Preset Trigger (V Reset, Non Reset)
OFF, 1/8 ~ 1/60,000
3.5 Lux @ F1.2, 50 IRE 4.0 Lux @ F1.2, 50 IRE
Fixed Gain: Adjustable (0 ~ 27 dB)
8 bit ≤ 4 Digit (Gain 0dB) 10 bit ≤ 15 Digit (Gain 0dB) 12 bit ≤ 60 Digit (Gain 0dB)
1.0
C-Mount
Digital 8/10/12 bit Camera Link®, 2 taps
No IR Cut Filter
Positional accuracy of H and V directions: +/- 0.31mm Rotational accuracy of H and V: +/- 2.1 deg.
70G (3 directions, 3 times each)
10G (20 to 200Hz)
12Vdc +/- 10%
< 3.6 W, 300mA
-5° ~ 40°C (23° ~ 104°F)
-30° ~ 65°C (-22° ~ 140°F)
35 (W) x 35 (H) x 48.2 (D) (1.37" x 1.37" x 1.89")
104g (3.66 oz)

Camera Link® Series

Standard



* Also available at 44fps. For more information inquire about the STC-CL/CLC83A-44.

Standard Models

QSXGA 5 MEGAPIXEL

STC-CL500A B/W
STC-CLC500A Color

UXGA 2 MEGAPIXEL

STC-CL232A B/W
STC-CLC232A Color

UXGA 2 MEGAPIXEL

STC-CL202A B/W
STC-CLC202A Color

SXGA 1.4 MEGAPIXEL

STC-CL152A B/W
STC-CLC152A Color

XGA 0.8 MEGAPIXEL

STC-CL83A B/W
STC-CLC83A Color

VGA 0.3 MEGAPIXEL

STC-CL33A B/W
STC-CLC33A Color

Remote Head and PoCL



Remote Head Models

0.3 MEGAPIXEL VGA

B/W STC-RCL33A
Color STC-RCLC33A



Rectangular (R3) Head
12 (W) x 12 (H) x 44 (D) mm



Cube (C3) Head
17 (W) x 17 (H) x 10.5 (D) mm

PoCL Models

All Standard models are also available in Power Over Camera Link® format. Except for the power delivery methods, the mechanical features and physical back panels of the PoCL cameras are the same as the standard models.



Specifications

Camera Link® Models

Monochrome Color	STC-CL33A STC-CLC33A	STC-CL83A STC-CLC83A
Resolution:	VGA (0.3 Megapixel)	XGA (0.8 Megapixel)
Image Sensor:	1/3" CCD (ICX424AL) 1/3" CCD (ICX424AQ)	1/3" CCD (ICX204AL) 1/3" CCD (ICX204AK)
Signal Format:	Progressive: Monochrome or Color	
Frame Rate:	30, 60, 90fps	30fps
Active Picture Element:	648 (H) x 494 (V)	1024 (H) x 768 (V)
Chip Size (mm):	5.79 (H) x 4.89 (V)	5.80 (H) x 4.92 (V)
Cell Size (μm):	7.4 (H) x 7.4 (V)	4.65 (H) x 4.65 (V)
Vertical Frequency:	31.47 / 62.94 / 94.78 Hz	29.59 Hz
Horizontal Frequency:	47.20 kHz	23.23 kHz
Pixel Clock Frequency:	36.82 MHz	29.5 MHz
Scanning Method:	Full Scan / Partial (1/2, 1/4, Variable), Binning w/ monochrome models	
Sync System:	Internal / External (HD / VD)	
Communication:	RS232 via Camera Link connector	
Trigger Mode:	Pulse Width Trigger (V Reset, Non Reset) Edge Preset Trigger (V Reset, Non Reset)	
Shutter Speed:	OFF, 1/3 to 1/40,000 (30fps) OFF, 1/7 to 1/80,000 (60fps) OFF, 1/11 to 1/120,000 (94fps)	OFF, 1/5 to 1/96,000
Minimum Illumination:	0.12 Lux @ F1.2, 50 IRE 0.13 Lux @ F1.2, 50 IRE	0.14 Lux @ F1.2, 50 IRE 0.14 Lux @ F1.2, 50 IRE
Gain:	Fixed Gain: Adjustable (0 ~ 27 dB)	
S/N Ratio:	8 bit ≤ 3 Digit (Gain 0dB) 10 bit ≤ 10 Digit (Gain 0dB)	
Gamma:	1.0	
Lens Mount:	C-Mount	
Video Output:	Digital 8 or 10 bit Camera Link (Base Configuration)	
Optical Filter:	No IR Cut Filter	
Optical Center Accuracy:	Positional accuracy of H and V directions: +/- 0.31mm Rotational accuracy of H and V: +/- 2.1 deg.	
Shock:	70G (3 directions, 3 times each)	
Vibration:	10G (20 to 200Hz)	
Input Voltage:	12Vdc +/- 10%	
Power Consumption:	< 1.8W, 150mA	
Operating Temperature:	-5° ~ 50°C (23° ~ 122°F)	
Storage Temperature:	-30° ~ 65 °C (-22° ~ 140°F)	
Dimensions (mm):	28 (W) x 28 (H) x 29.5 (D) (1.10" x 1.10" x 1.16")	
Weight:	43g (1.51 oz)	

STC-CL152A STC-CLC152A	STC-CL202A STC-CLC202A	STC-CL232A STC-CLC232A	STC-CL500A STC-CLC500A
SXGA (1.4 Megapixel)	UXGA (2 Megapixel)		QSXGA (5 Megapixel)
1/2" CCD (ICX205AL) 1/2" CCD (ICX205AK)	1/1.8" CCD (ICX274AL) 1/1.8" CCD (ICX274AQ)		2/3" CCD (ICX625AL) 2/3" CCD (ICX625AQ)
Progressive: Monochrome or Color			
15, 19fps	16fps	30fps	16fps
1360 (H) x 1024 (V)	1620 (H) x 1220 (V)		2448 (H) x 2058 (V)
7.60 (H) x 6.20 (V)	8.50 (H) x 6.80 (V)		9.93 (H) x 8.70 (V)
4.65 (H) x 4.65 (V)	4.4 (H) x 4.4 (V)		3.45 (H) x 3.45 (V)
19.3 Hz	15.32 Hz	30.85 Hz	16 Hz
20.57 kHz	19.18 kHz	38.35 kHz	33.26 kHz
36.82 MHz	36.82 MHz	73.64 MHz	64 MHz
Full Scan / Partial (1/2, 1/4, Variable), Binning w/ monochrome models			
Internal / External (HD / VD)		Internal	
RS232 via Camera Link connector			
	Pulse Width Trigger (V Reset, Non Reset) Edge Preset Trigger (V Reset, Non Reset)		
OFF, 1/3 ~ 1/93,000 (15fps) OFF, 1/5 ~ 1/120,000 (19fps)	OFF, 1/4 ~ 1/120,000	OFF, 1/9 ~ 1/240,000	OFF, 1/8 ~ 1/209,000
0.12 Lux @ F1.2, 50 IRE 0.13 Lux @ F1.2, 50 IRE	0.06 Lux @ F1.2, 50 IRE 0.08 Lux @ F1.2, 50 IRE	0.7 Lux @ F1.2, 50 IRE 0.92 Lux @ F1.2, 50 IRE	0.24 Lux @ F1.2, 50 IRE 0.32 Lux @ F1.2, 50 IRE
Fixed Gain: Adjustable (0 ~ 27 dB)		Fixed Gain: Adjustable (0 ~ 25dB)	Fixed Gain: Adjustable (0 ~ 18.309dB)
8 bit ≤ 3 Digit (Gain 0dB) 10 bit ≤ 10 Digit (Gain 0dB)		8 bit ≤ 4 Digit (Gain 0dB) 10 bit ≤ 15 Digit (Gain 0dB)	8 bit ≤ 4 Digit (Gain 0dB) 10 bit ≤ 15 Digit (Gain 0dB) 12 bit ≤ 60 Digit (Gain 0dB)
1.0			
C-Mount			
Digital 8 or 10 bit Camera Link (Base Configuration)			Digital 8/10/12 bit Camera Link (Base Config.)
No IR Cut Filter			
Positional accuracy of H and V directions: +/- 0.31mm Rotational accuracy of H and V: +/- 2.1 deg.			Positional: +/- 0.26mm Rotational: +/- 1.7 deg.
70G (3 directions, 3 times each)			
10G (20 to 200Hz)			
12Vdc +/- 10%			
< 2.5W, 208mA	< 3.0W, 250mA	< 4.0W, 333mA	
-5° ~ 45°C (23° ~ 113°F)	-5° ~ 45°C (23° ~ 113°F)	-5° ~ 40°C (23° ~ 104°F)	
-30° ~ 65 °C (-22° ~ 140°F)			
28 (W) x 28 (H) x 29.5 (D) (1.10" x 1.10" x 1.16")		28 (W) x 28 (H) x 36.5 (D) (1.10" x 1.10" x 1.43")	35 (W) x 35 (H) x 30.2 (D) (1.37" x 1.37" x 1.18")
43g (1.51 oz)		65.5g (2.31oz)	80g (2.82oz)