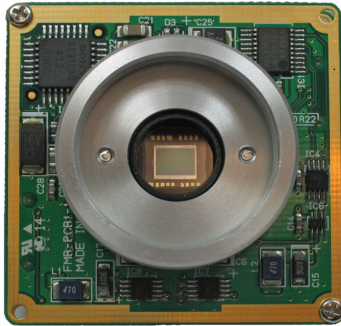
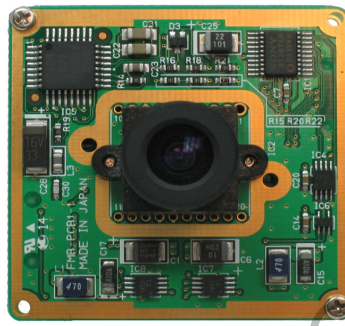


# STC-170

The STC-170 Series is a 1/3" Black & White high resolution machine vision board camera. Small in size, this camera series offers a integration HOLD feature for special applications. Also, the STC-170 offers both frame and field integration and **non-interlace synchronization** inputs. Like most SenTech cameras, the STC-170 series comes in both board level and cased versions.



**STC-170CS**



**STC-170L4**

Images shown not actual size

### Features

- 1/3" B/W IT CCD
- Machine Vision
- High Resolution
- EIA & CCIR Formats
- External Sync (HD/VD)
- Frame & Field Integration
- Integration HOLD Feature
- 7 Lens Options

### Specifications >>

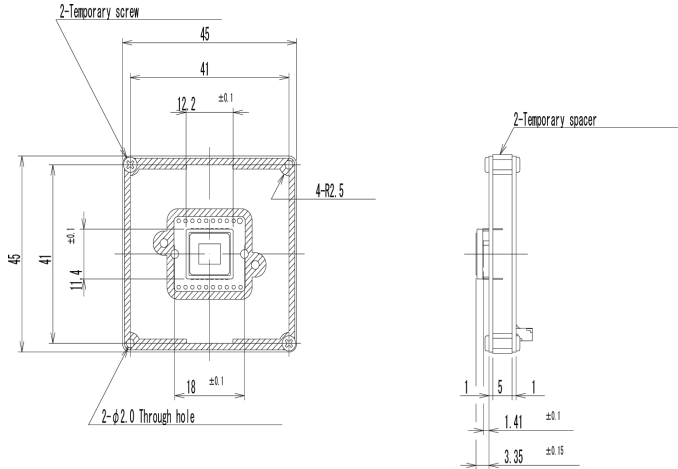
<b>Image Sensor:</b>	Black & White: 1/3" Interline CCD (ICX408AL)
<b>Effective Picture Element:</b>	768 (H) x 494 (V)
<b>Signal Format:</b>	EIA (Also Available in CCIR Format - STC-175)
<b>Scanning System:</b>	2:1 Interlace
<b>Horizontal Frequency:</b>	15.734 kHz
<b>Vertical Frequency:</b>	59.94 Hz
<b>Sync System:</b>	Internal or External (HD/VD Input) (Auto Switching by HD Input)
<b>Horizontal Resolution:</b>	570 TV Lines
<b>Vertical Resolution:</b>	Frame Accumulation: 485 TV Lines Field Accumulation: 350 TV Lines
<b>Minimum Illumination (Standard):</b>	0.17 Lux @ F1.2, (AGC ON) 50 IRE
<b>Minimum Illumination (H Version) :</b>	0.06 Lux @ F1.2, (AGC ON) 50 IRE
<b>S/N Ratio:</b>	> 56dB (AGC Off)
<b>Accumulation Mode:</b>	Frame / Field Switchable
<b>Gamma:</b>	1.0 / 0.45 Switchable
<b>Gain:</b>	AGC / Fixed Switchable
<b>Electronic Shutter:</b>	1/30, 1/60, 1/100, 1/250, 1/500 1/1,000, 1/2,000, 1/4,000, to 1/10,000 second Flickerless Shutter (1/100)
<b>Video Out:</b>	VS 1.0Vp-p 75 Ω
<b>Power Supply:</b>	12V DC
<b>Power Consumption:</b>	110mA
<b>Operating Temperature:</b>	-10°C ~ 45°C (14°F ~ 113°F)
<b>Storage Temperature:</b>	-30°C ~ 60°C (-22°F ~ 140°F)
<b>Dimensions:</b>	45 (W) x 45 (H) x 21.2 (D) mm (1.8" x 1.8" x .84")
<b>Weight:</b>	45g (1.58 oz.)

- Includes all wire harnesses

\* Cable harnesses for power and other input and output signals are provided with each Sentech board camera.

### >> STC-170

#### Mechanical Drawings



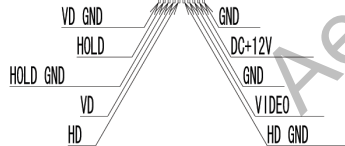
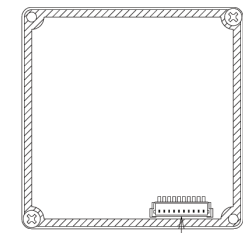
#### Lenses Available for Monochrome Board Cameras (Custom Lenses can also be built)

Model No.	Focal Length (F-Stop)
LEN-B2.5	2.5mm (F2.0)
LEN-B3.6	3.6mm (F5.0)
LEN-B6	6.0mm (F3.5)
LEN-B8	8.0mm (F3.5)
LEN-B16	16mm (F1.8)

#### Lens Mounts

The CS version of the camera is configured with a standard CS lens mount. By using a C-Mount adapter ring, the CS mount can be converted to a C-Mount. These configurations will allow most CS or C Mount lenses to be used with this camera.

#### 1. Connector and DIP Switch



#### Dip Switch



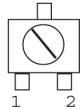
Switch Number	Function	Switch Position	
		ON	OFF
1	Shutter Speed Setting	See Table 2	
2			
3			
4	Accumulation Mode and Shutter Mode Setting	See Table 1	
5			
6	No Function	-	-

#### 1. Accumulation Mode and Shutter Mode Setting

Mode	Function	SW4	SW5
Field	Electronic Shutter as Defined in the Next Table	OFF	OFF
Field	Electronic Shutter OFF (1/60)	ON	OFF
Frame	Electronic Shutter as Defined in the Next Table	OFF	ON
Frame	Electronic Shutter OFF (1/30)	ON	ON

#### 2. Functional Explanation of DIP Switch and VR

PCB1 SW1



EPCB SW1: Fix Gain / AGC Change

On Board Marking "1" side: Fixed Gain

On Board Marking "2" side: AGC

EPCB VR1: When the PCB1 SW1 is set to "fixed gain", the fixed gain value can be adjusted by this VR (0dB ~ XXdB)

(Caution) Do not adjust any other adjustments except PCB1 - VR1 as they are critical factory default setup adjustment.

**Note:** (Dimensions are given in mm)

#### 2. Shutter Speed Setting

Shutter Speed	SW 1	SW 2	SW 3
1/60	OFF	OFF	OFF
1/100	ON	OFF	OFF
1/250	OFF	ON	OFF
1/500	ON	ON	OFF
1/1,000	OFF	OFF	ON
1/2,000	ON	OFF	ON
1/4,000	OFF	ON	ON
1/10,000	ON	ON	ON

This information is brought to you by:



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