

1.3MP USB3 Vision Camera 60fps Global Shutter

NEW

High Speed 1.3MP CMOS

STC-MBE132U3V 【Mono】 STC-MCE132U3V 【Color】

Sentech has launched a brand new line of USB 3.0 cameras that adhere to the USB3 Vision Standard. This camera features 60fps at 1.3MP resolution, along with full AOI capabilities. The STC-MC(B)E132U3V utilizes Global Shutter to allow moving objects to be shot without problem. All of the power and precision of machine vision combines with the simplicity of USB 3.0 interface to achieve industrial camera bliss.



Features

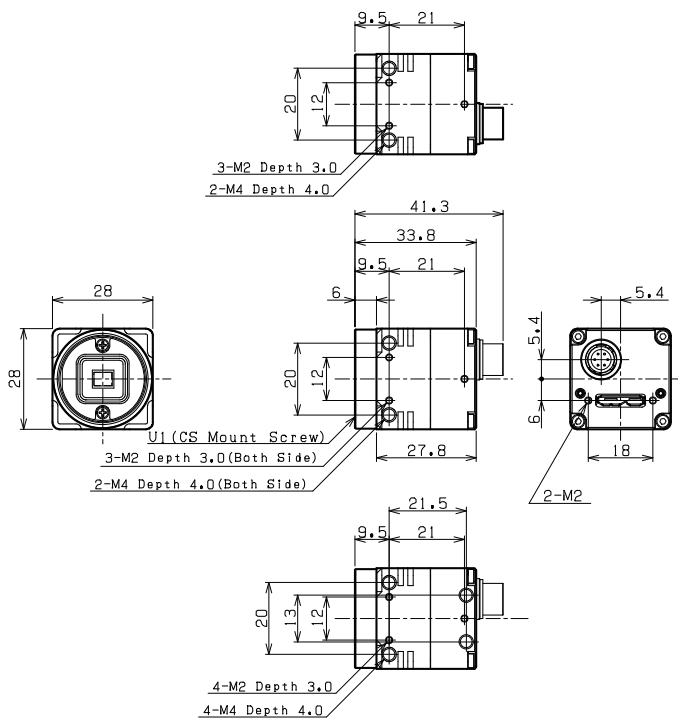
- 1280(H) x 1024(V)
- 5.3 μm x 5.3 μm
- 60FPS
- 1/1.8" e2v Sensor
- USB Vision
- Global Shutter
- USB3.0 MicroB Connector
- 28x28x33.8mm (excluding connector)

Specifications

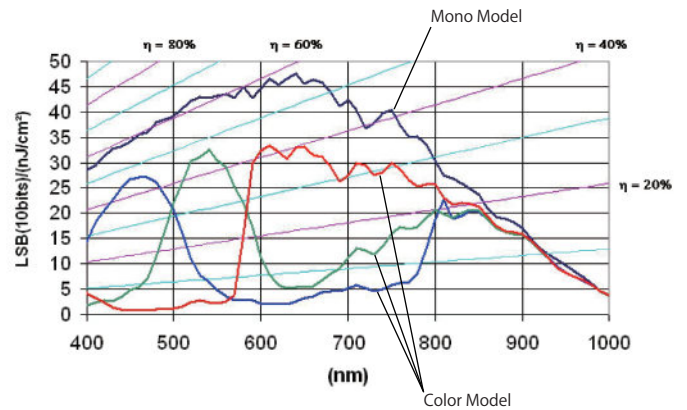
Model Numbers	: STC-MCE132U3V (Color) • STC-MBE132U3V (Mono)
Image Sensors	: 1/1.8" 1.3MP CMOS e2V EV76C560ACT-EQT (Color) e2V EV76C560ABT-EQV (Mono)
Effective Pixels	: 1280(H) x 1024(V)
Pixel Cell Size	: 5.3(H) x 5.3 (V) μm
Scanning Method	: Progressive Scan
Shutter Type	: Rolling Shutter / Global Shutter
Scan Mode	: Full Scan / AOI
Frame Rate :	<ul style="list-style-type: none"> • 1.3M(1280 x 1024) : 60fps (Raw8/10bit), 55fps(RGB8) • XGA(1024 x 768) : 80fps (Raw8/10bit), 71fps(RGB8) • VGA(640 x 480) : 127fps (Raw8/10bit), 106fps(RGB8) • Minimum AOI(32 x 32) <ul style="list-style-type: none"> : 1222fps(Raw8/10bit, Rolling Shutter) : 1270fps(Raw8/10bit, Global Shutter) : 416fps(Raw8/10bit, Rolling Shutter) : 424fps(Raw8/10bit, Global Shutter)
Video Output Format	: RGB8,RAW8bit/10bit(Color) • RAW8bit/10bit(Mono)
S/N Ratio (8bit)	: less than 3 Digit (Gain 0 dB)
Minimum Illumination	: 28.14 lux at F1.2 (Color) • 0.26 lux at F1.2 (Mono)
ALC	: Auto Shutter / Gain Auto / Manual
Electronic Shutter	: Exposure Time: 16 μs ~ 0.97s
Gain	: Analog 0 ~ 11.97dB

	: Digital x0.00 ~ x7.98
Offset	: Digital 0 ~ 255(12bit)
AOI	: Horizontal : 32 ~ 1280 pixels / Vertical : 32 ~ 1024 lines Minimum Increment : 4 horizontal pixels / 4 vertical lines
Binning	: Horizontal 1/2, Vertical 1/2 ※Horizontal & Vertical Binning Sum cannot be set separately ※This will not increase the frame rate
Skipping	: Horizontal 1/2,1/4 Vertical 1/2,1/4 ※Vertical & Horizontal can be set separately ※This will increase the frame rate
Mirror Image	: Horizontal Flip / Vertical Flip / Vertical & Horizontal Flip
Pixel Defect Correction	: 32 points maximum(Default : ON)
White Balance	: Manual / One-Shot / No Auto
Operating Modes	: Free-run / Edge Preset Trigger
Frame Memory	: One Frame
Interface	: USB3.0 Super speed (USB3.0 Micro B)
IO Input & Output	: 2 Input / 2 Outputs
Input Voltage	: +5(typ.) (USB Standard)
Power Consumption	: less than 2.0 W

Dimensions



Spectral Sensitivity



※Specifications are subject to change without notice.

2.3MP USB3 Vision Camera CMOS Global Shutter

NEW

High Performance 2.3 MP CMOS

STC-MBS231U3V 【Mono】

STC-MCS231U3V 【Color】

Sentech has released the STC-MB(C)S231U3V (41 fps) USB3 Vision Camera. This high performance camera is available at an outstanding price. Thanks to Global Shutter, this camera is capable of capturing moving objects with no problem. With the simplicity of USB 3.0, this camera allows any user to integrate this camera with ease.



Pregius



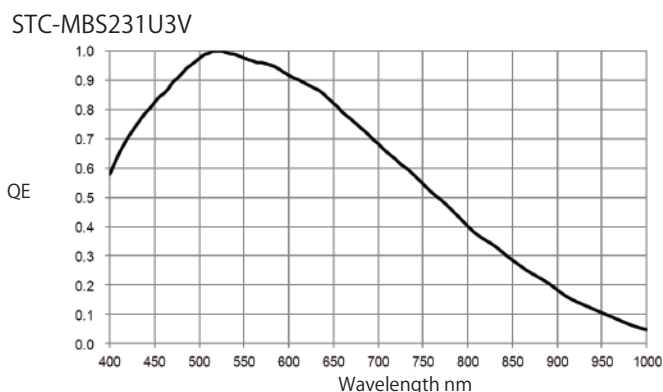
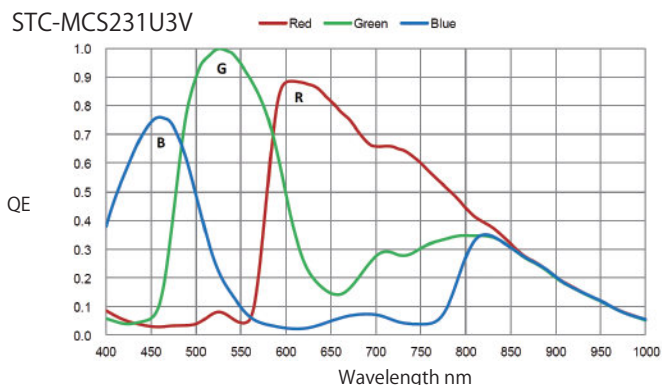
Features

- 1920 (H) x 1200 (V)
- 5.86 μm x 5.86 μm
- 41.6 fps
- 1/1.2" Sensor
- USB3 Vision Compliant
- Global Shutter
- USB 3.0 MicroB Connector
- 28 x 28 x 40 mm (excluding connectors)

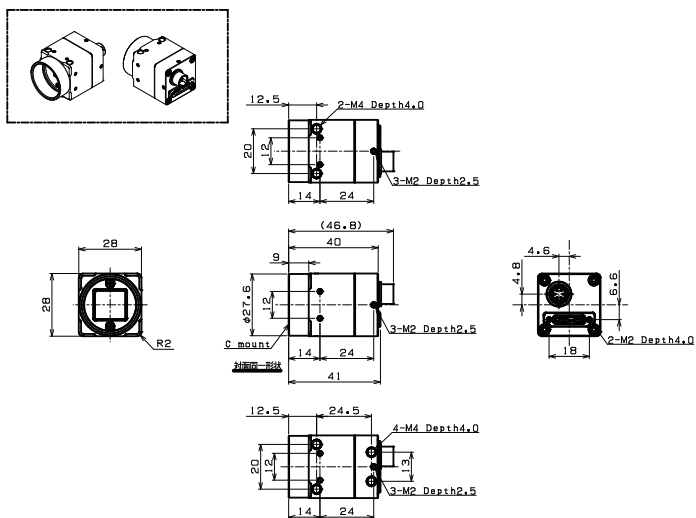
Specifications

Product Name	: STC-MCS231U3V (Color) STC-MBS231U3V (Mono)
Imager	: 1/1.2" 2.4M CMOS (SONY IMX249)
Shutter Type	: Global Shutter
Effective Pixels	: 1920 (H) x 1200 (V)
Cell Size	: 5.86 (H) x 5.86 (V) μm
Scanning Method	: Progressive
Scan Mode	: Full Scan
Frame Rate	: 41.6fps (RAW8,10bit)、32.4fps (RAW12bit)
Video Output	: 8/10/12 bit Raw Data
S/N Ratio	: 3 digit Less than (gain 0dB)
Sensitivity (Typ.)	: 1160 Lux (Color)、570 Lux (Mono)
ALC	: Auto Shutter / Auto Gain / Manual
Electronic Shutter	: Exposure Time 18.6 μsec ~ 20sec (Full Scan、RAW8bit) Exposure Time 23.4 μsec ~ 40sec (Full Scan、RAW10,12bit)
Analog Gain	: 0 dB ~ 24 dB
Digital Gain	: 0 dB ~ 6 dB
Offset	: 0 ~ 511 digit (RAW12bit)、0 ~ 127 digit (RAW10bit) 0 ~ 31 digit (RAW8bit)
ROI	: Supported
Binning	: Supported (Mono only, Horizontal & Vertical x 2)
Decimation	: Supported
Mirror Image	: Mirror / Upside Down / Left & Right Reversal
Pixels Defect	: Supported (Max. 64 pixels)
Correction	
Whit Balance	: Auto / Push to Set / Manual (Color only)
Operating Mode	: Free-Run / Edge Preset Trigger / Pulse Width Trigger / Start-Stop Trigger (Software trigger only)
Interface	: USB3.0 Super speed
IO (Input / Output)	: 3 GPIO / 1 Hardware Reset
Input Voltage	: +5V (typ.) (USB standard)
Consumption	: TBD
Dimensions	: 28 (W) x 28 (H) x 40 (D) mm (excluding connector)
Optical Filter	: IR Cut Filter (Color only)
Lens Mount	: C Mount
USB Connector	: USB 3.0 MicroB Connector
I/O Connector	: HR10A-7R-6PB (Hirose) or equivalent
Compliance	: RoHS Compliant

Spectral Response



Drawings



※ Pregius is a trademark of Sony Corporation.

※ Specifications are subject to change without notice.

VGA/2M/2.4M/4M USB3.0 CMOS Global Shutter



High-Speed VGA/2M/2.4M/4M CMOS

STC-MBCM33U3V 【VGA Mono】*	STC-MCCM33U3V 【VGA Color】*
STC-MBCM200U3V 【2M Mono】	STC-MCCM200U3V 【2M Color】
STC-MBS241U3V 【2.4M Mono】*	STC-MCS241U3V 【2.4M Color】*
STC-MBCM401U3V 【4M Mono】	STC-MCCM401U3V 【4M Color】

※VGA & 2.4M In Development

These cameras have been added to Sentech's USB3 Vision camera line up. Using C-MOSIS Sensors, these cameras possess an extremely high frame rate. This camera uses the new USB 3.0 interface, allowing for simple interfacing for the user. Near IR versions are available for the 2M & 4M cameras.



Features

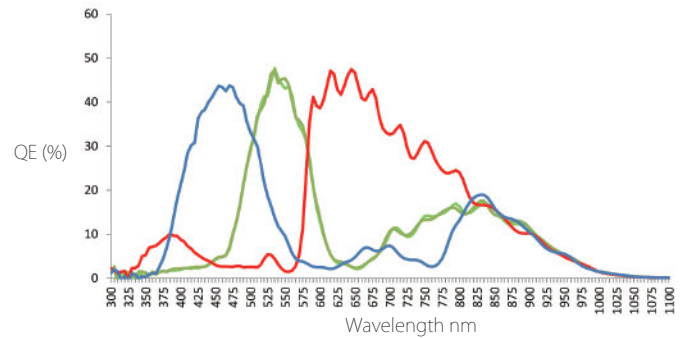
- VGA
640(H) x 480(V) 480fps
7.4 μm x 7.4 μm 1/3"
- 2M
2048(H) x 1088(V) 150fps
5.5 μm x 5.5 μm 2/3"
- 2.4M
1936(H) x 1216(V) 145fps
5.86 μm x 5.86 μm 1/1.2"
- 4M
2048(H) x 2048(V) 80fps
5.5 μm x 5.5 μm 1"

Specifications

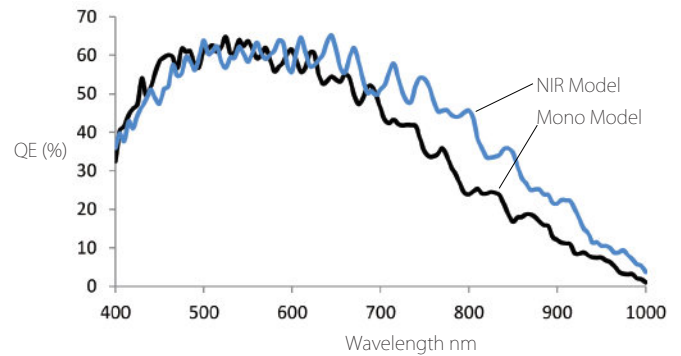
Model Number	: STC-MCCM33U3V (VGA Color) STC-MBCM33U3V (VGA Mono) STC-MCCM200U3V (2M Color) STC-MBCM200U3V (2M Mono) STC-MBCM200U3V-NIR (2M NIR) STC-MCS241U3V (2.4M Color) STC-MBS241U3V (2.4M Mono) STC-MCCM401U3V (4M Color) STC-MBCM401U3V (4M Mono) STC-MBCM401U3V (4M NIR)
Image Sensors	: 1/3" VGA CMOS (CMOSIS CMV300) 2/3" 2M CMOS (CMOSIS CMV2000) 1/1.2" 2.4M CMOS (SONY IMX174LLJ-C) 1" 4M CMOS (CMOSIS CMV4000)
Shutter Type	: Global Shutter
Effective Pixels	: 640 (H) x 480 (V) (VGA) 2048 (H) x 1088 (V) (2M) 1936 (H) x 1216 (V) (2.4M) 2048 (H) x 2048 (V) (4M)
Pixel Cell Size	: 7.4 (H) x 7.4 (V) μm (VGA) 5.5 (H) x 5.5 (V) μm (2M/4M) 5.86 (H) x 5.86 (V) μm (2.4M)
Scan Method	: Progressive Scan
Scan Mode	: Full Scan / AOI
Frame Rate	: 480fps (VGA) 150fps (2M) 145ps (2.4M) 80fps (4M)
Video Format	: 8/10/12 bit Raw Data, RGB 8 bit (Color) 8/10/12 bit Raw Data (Mono, IR)
S/N Ratio	: TBD
Minimum Scene	: TBD
Illumination	
ALC	: TBD
Electronic Shutter	: TBD
AOI	: Horizontal : 32 ~ 640 / Vertical : 32 ~ 480 (VGA) Horizontal : 32 ~ 2048 / Vertical : 32 ~ 1088 (2M) Horizontal : 32 ~ 1936 / Vertical : 32 ~ 1216 (2.4M) Horizontal : 32 ~ 2048 / Vertical : 32 ~ 2048 (4M) Minimum Increment : Horizontal 4 Pixels/ Vertical 4 Pixels
Binning	: Included
Skipping	: Included
Mirror Image	: Horizontal Flip / Vertical Flip / Horizontal & Vertical Flip
White Balance	: TBD
Operating Modes	: Free-Run / Edge Preset Trigger / Trigger Pulse Width
Interface	: USB3.0 Super speed (USB3.0 Micro B)
IO(Input/Output)	: 3GPIO
Power	: TBD
Consumption	
Compliance	: RoHS Compliant

Spectral Sensitivity

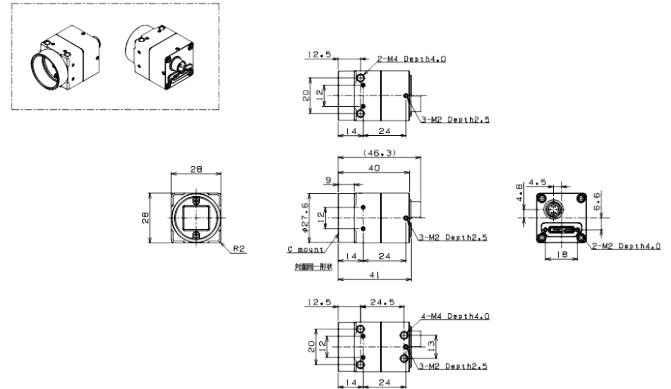
STC-MCCM200(401)U3V



STC-MBCM200(401)U3V / STC-MBCM200(401)U3V-NIR



Dimensions



※Specifications are subject to change without notice.