

S-Series Ultra-Compact USB2.0 Color 3MP CMOS Cameras

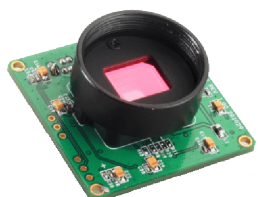
(Part Numbers: SCN-C030-U, SCE-C030-U)

FEATURES

- Ultra compact
- 4-pin GPIOs
- 2,048 x 1,536 active imaging pixels
- High-speed USB2.0 (480Mb/s)
- Digital output, no need for frame grabber
- Custom programmable with SDK provided
- DirectShow and TWAIN driver
- USB command set for non-Windows based applications
- Linux Driver
- External and Software trigger
- Strobe output for external flash
- ROI & pixel skipping/binning
- No need for external power supply
- OEM versions available

APPLICATIONS

- Digital microscopy
- Machine vision
- Medical imaging
- Semiconductor equipment
- Test instruments
- Document scanners
- 2D barcode readers



PRODUCT DESCRIPTION

Mightex S-series compact USB 2.0 cameras are optimized for machine-vision applications, and they can also be used for a wide variety of other applications such as digital microscopy and medical imaging, where quality, ease of use, and cost-effectiveness are crucial. These cameras have external trigger-in, strobe-out, and GPIOs. Frame rate can be as high as 6 fps in full resolution and up to 98 fps using ROI mode. In addition, a user-friendly GUI based application software and an SDK are provided for custom software development. A USB command set protocol is also provided for non-Windows based applications.

PERFORMANCE SPECIFICATIONS

Parameters	SCN-C030-U	SCE-C030-U	Unit
Board-level / enclosed	Board-level	Enclosed	
Number of GPIOs	4	4	
Resolution	2,048 x 1,536 color		
CMOS Chip	½" (5:4) Micron MT9T001, rolling shutter		
Pixel Size	3.2 x 3.2		µm
Scanning System	Progressive		
Dynamic Range	61		dB
Sensor SNR	43		dB
Gray Level	8		bit
Responsivity	2.1		V/lux-sec
Frame Rates* (@48MHz Clock)	6 @2,048 x 1,536 10 @1,600 x 1,200 12 @1,280 x 1,024 20 @1,024 x 768 26 @800 x 600 32 @752 x 480 35 @640 x 480 64 @320 x 240		fps
Sub Resolutions	Support arbitrary ROI (Nx, Ny), with Nx and Ny multiples of 4		
Shutter Speed (Exposure time)	1 ~ 750		ms
Hardware Gains	0.125x ~ 8x		
Trigger Mode	With external trigger		
Trigger Cable	ACC-CAM-CON8		
Strobe Out	Yes		
Lens Mount	C- mount or CS-mount (M12.5-mount or custom-defined lens mount supported)		
Built-in Filters	IR-cut (factory standard), no filter, or IR-pass		
Power Consumption	< 1.0		W
Dimension	40 x 40 x 25 (CS-mount) 40 x 40 x 30 (C-mount)	45 x 45 x 23 (CS-mount) 45 x 45 x 28 (C-mount)	mm
Weight (excluding lens)	60	120	g

* The actual achievable frame rate depends on exposure time, as well as available resources of PC

Distributor



amstechnologies
where technologies meet solutions

info@amstechnologies.com
www.amstechnologies-webshop.com

Contact us 

Mightex
Simply Brighter

S-Series Ultra-Compact USB2.0 Monochrome 1.3MP CMOS Camera

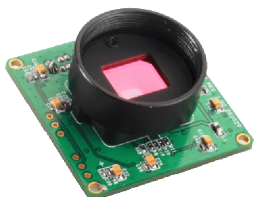
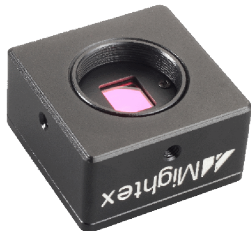
(Part Numbers: SCN-B013-U, SCE-B013-U)

FEATURES

- Ultra-Compact
- 4-pin GPIOs
- Higher sensitivity than color cameras, especially in IR
- 1,280 x 1,024 active imaging pixels
- High-speed USB2.0 (480Mb/s)
- Digital output, no need for frame grabber
- Custom programmable with SDK provided
- DirectShow and TWAIN drivers
- USB command set for non-Windows based applications
- Linux Driver
- External and Software trigger
- Strobe output for external flash
- ROI & pixel skipping
- No need for external power supply
- OEM versions available

APPLICATIONS

- Digital microscopy
- Machine vision
- Medical imaging
- Semiconductor equipment
- Test instruments
- Document scanners
- 2D barcode readers



PRODUCT DESCRIPTION

Mightex S-Series compact USB 2.0 cameras are optimized for machine-vision applications, and they can also be used for a wide variety of other applications such as digital microscopy and medical imaging, where quality, ease of use, and cost-effectiveness are crucial. These cameras have external trigger-in, strobe-out, and GPIOs. Monochrome cameras often exhibit 20% higher spatial resolution than their color counterparts because no pixel interpolation is necessary. Without a Bayer color filter on the sensor, monochrome cameras are also more sensitive than color sensors especially in near IR and UV regions. Frame rate can be as high as 20 fps in full resolution and up to 150 fps using ROI mode. In addition, a user-friendly GUI based application software and an SDK are provided for custom software development. A USB command set protocol is also provided for non-Windows based applications.

PERFORMANCE SPECIFICATIONS

Parameters	SCN-B013-U	SCE-B013-U	Unit
Board-level/enclosed	Board-level	Enclosed	
Number of GPIOs	4	4	
Resolution	1,280 x 1,024 monochrome		
CMOS Chip	½" (5:4) Micron MT9M001, rolling shutter		
Pixel Size	5.2 x 5.2		µm
Active Imager Size	6.66 x 5.32		mm
Scanning System	Progressive		
Dynamic Range	68		dB
Sensor SNR	45		dB
Gray Level	8		bit
Responsivity	2.1		V/lux-sec
Frame Rates* (@48MHz Clock)	20 @1,280 x 1,024 31 @1,024 x 768 45 @800 x 600 52 @752 x 480 52 @640 x 480 120 @320 x 240		fps
Sub Resolutions	Support arbitrary ROI (Nx, Ny), with Nx and Ny multiples of 4		
Shutter Speed (Exposure time)	1 ~ 750		ms
Hardware Gains	0.125x ~ 8x		
Trigger Mode	With external trigger		
Trigger Cable	ACC-CAM-CON8		
Strobe Out	Yes		
Lens mount	C- mount or CS-mount (M12.5-mount or custom-defined lens mount supported)		
Built-in Filters	IR-cut (factory standard), No filter, or IR-pass		
Power consumption	< 1.0		W
Dimension	40 x 40 x 25 (CS-mount) 40 x 40 x 30 (C-mount)	45 x 45 x 23 (CS-mount) 45 x 45 x 28 (C-mount)	mm
Weight (excluding lens)	60	120	g

* The actual achievable frame rate depends on exposure time, as well as available resources of the host PC system.

S-Series Ultra-Compact Global Shutter 752x480 Color CMOS Cameras

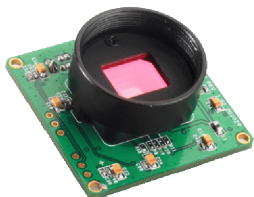
(Part Numbers: SCN-CG04-U, SCE-CG04-U)

FEATURES

- Ultra-Compact
- True Global Shutter
- 4-pin GPIOs
- 752 x 480 active imaging pixels
- High-speed USB2.0 (480Mb/s)
- Digital output, no need for frame grabber
- Custom programmable with SDK provided
- DirectShow and TWAIN driver
- USB command set for non-Windows based applications
- Linux Driver
- External and Software trigger
- Strobe output for external flash
- ROI & pixel skipping/binning
- No need for external power supply
- OEM versions available

APPLICATIONS

- Digital microscopy
- Machine vision
- Medical imaging
- Semiconductor equipment
- Test instruments
- High-quality ID photo capture
- Document scanners
- 2D barcode readers
- Web camera & video



PRODUCT DESCRIPTION

Mightex S-series compact USB 2.0 cameras with global shutter are optimized for machine-vision applications, and they can also be used for a wide variety of other applications such as digital microscopy and medical imaging, where quality, ease of use, and cost-effectiveness are crucial. These cameras have global shutter, external trigger-in, strobe-out, and a powerful camera engine that supports multiple cameras. Frame rate can be as high as 38 fps in full resolution and up to 210 fps using ROI mode. In addition, a user-friendly GUI based application software and an SDK are provided for custom software development. A USB command set protocol is also provided for non-Windows based applications.

PERFORMANCE SPECIFICATIONS

Parameters	SCN-CG04-U	SCE-CG04-U	Unit
Board-level/enclosed	Board-level	Enclosed	
Number of GPIOs	4	4	
Resolution	752 x 480 color		
CMOS Chip	1/3" Micron MT9V032, global shutter (Micron TrueSNAP)		
Pixel Size	6.0 x 6.0		µm
Scanning System	Progressive		
Dynamic Range	> 55		dB
Gray Level	8		bit
Responsivity	4.8		V/lux-sec
Frame Rates* (@26MHz Clock)	38 @752 x 480 40 @640 x 480 82 @320 x 240 130 @160 x 120 170 @64 x 64		fps
Sub Resolutions	Support arbitrary ROI (Nx, Ny), with Nx and Ny multiples of 4		
Shutter Speed (Exposure time)	0.05 ~ 750		ms
Hardware Gains	1x ~ 4x		
Trigger Mode	With external trigger		
Trigger Cable	ACC-CAM-CON8		
Strobe Out	Yes		
Lens mount	C- mount or CS-mount (M12.5-mount or custom-defined lens mount supported)		
Built-in Filters	IR-cut (factory standard), No filter, or IR-pass		
Power consumption	< 1.0		W
Dimension	40 x 40 x 25 (CS-mount) 40 x 40 x 30 (C-mount)	45 x 45 x 23 (CS-mount) 45 x 45 x 28 (C-mount)	mm
Weight (excluding lens)	60	120	g

* The actual achievable frame rate depends on exposure time, as well as available resources of the host PC system.

S-Series Ultra-Compact Global Shutter 752x480 Monochrome CMOS Cameras

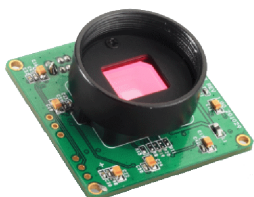
(Part Numbers: SCN-BG04-U, SCE-BG04-U)

FEATURES

- Ultra-Compact
- True Global Shutter
- 4-pin GPIOs
- 752 x 480 active imaging pixels
- High-speed USB2.0 (480Mb/s)
- Digital output, no need for frame grabber
- Custom programmable with SDK provided
- DirectShow and TWAIN driver
- USB command set for non-Windows based applications
- Linux Driver
- External and Software trigger
- Strobe output for external flash
- ROI & pixel skipping/binning
- No need for external power supply
- OEM versions available

APPLICATIONS

- Digital microscopy
- Machine vision
- Medical imaging
- Semiconductor equipment
- Test instruments
- High-quality ID photo capture
- Document scanners
- 2D barcode readers
- Web camera & video



PRODUCT DESCRIPTION

Mightex S-series compact USB 2.0 cameras with global shutter are optimized for machine-vision applications, and they can also be used for a wide variety of other applications such as digital microscopy and medical imaging, where quality, ease of use, and cost-effectiveness are crucial. These cameras have global shutter, external trigger-in, strobe-out. Monochrome cameras often exhibit 20% higher spatial resolution than their color counterparts because no pixel interpolation is necessary. Without a Bayer color filter on the sensor, monochrome cameras are also more sensitive than color sensors especially in near IR and UV regions. Frame rate can be as high as 38 fps in full resolution and up to 210 fps using ROI mode. In addition, a user-friendly GUI based application software and an SDK are provided for custom software development. A USB command set protocol is also provided for non-Windows based applications.

PERFORMANCE SPECIFICATIONS

Parameters	SCN-BG04-U	SCE-BG04-U	Unit
Board-level/enclosed	Board-level	Enclosed	
Number of GPIOs	4	4	
Resolution	752 x 480 Mono		
CMOS Chip	1/3" Micron MT9V032, global shutter (Micron TrueSNAP)		
Pixel Size	6.0 x 6.0		µm
Scanning System	Progressive		
Dynamic Range	> 55		dB
Gray Level	8		bit
Responsivity	4.8		V/lux-sec
Frame Rates* (@24MHz Clock)	38 @752 x 480 40 @640 x 480 82 @320 x 240 130 @160 x 120 170 @64 x 64		fps
Sub Resolutions	Support arbitrary ROI (Nx, Ny), with Nx and Ny multiples of 4		
Shutter Speed (Exposure time)	0.05 ~ 750		ms
Hardware Gains	1x ~ 4x		
Trigger Mode	With external trigger		
Trigger Cable	ACC-CAM-CON8		
Strobe Out	Yes		
Lens mount	C- mount or CS-mount (M12.5-mount or custom-defined lens mount supported)		
Built-in Filters	IR-cut (factory standard), No filter, or IR-pass		
Power consumption	< 1.0		W
Dimension	40 x 40 x 25 (CS-mount) 40 x 40 x 30 (C-mount)	45 x 45 x 23 (CS-mount) 45 x 45 x 28 (C-mount)	mm
Weight (excluding lens)	60	120	g

* The actual achievable frame rate depends on exposure time, as well as available resources of the host PC system.

S-Series Ultra-Compact USB2.0 Color 3MP CMOS Cameras

(Part Numbers: SCN-C030-U, SCE-C030-U)

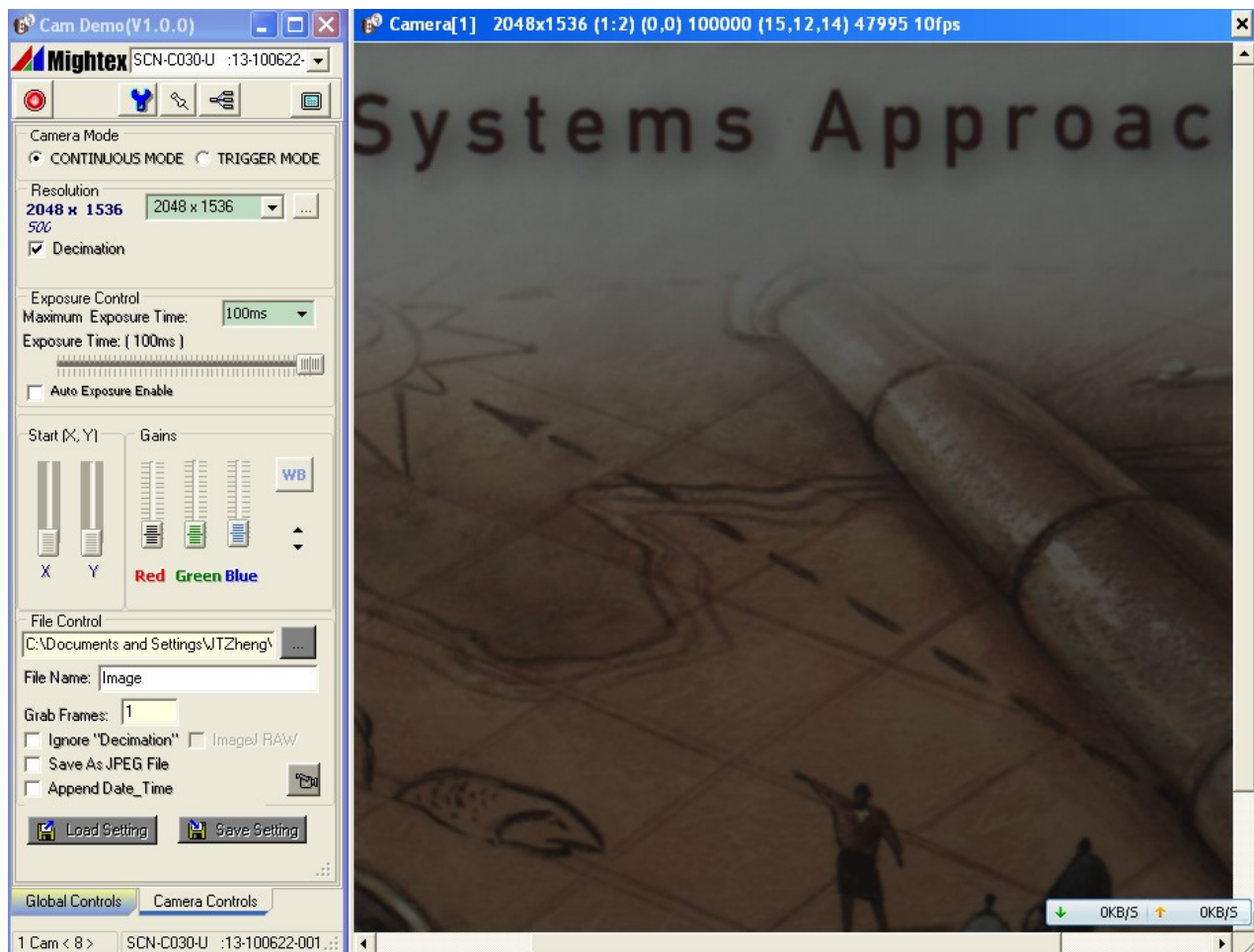
OPERATION CONDITION

Operating Temperature Range: 0°C ~ 45°C
Storage Temperature Range: -25°C ~ 85°C
Relative Humidity, Non-condensing: 5% ~ 95%

RECOMMENDED SYSTEM CONFIGURATION

Processor: Pentium III 900 MHz or better, or a compatible processor
Operating System: Windows 2000, XP, Vista, Windows 7 and 8
RAM: 256MB or greater
Hard Disk Space: 30MB for software installation, plus additional space for storing captured images
USB2.0 Host Controller: Intel integrated host controller (recommended)

EXAMPLE OF GRAPHICAL USER INTERFACE

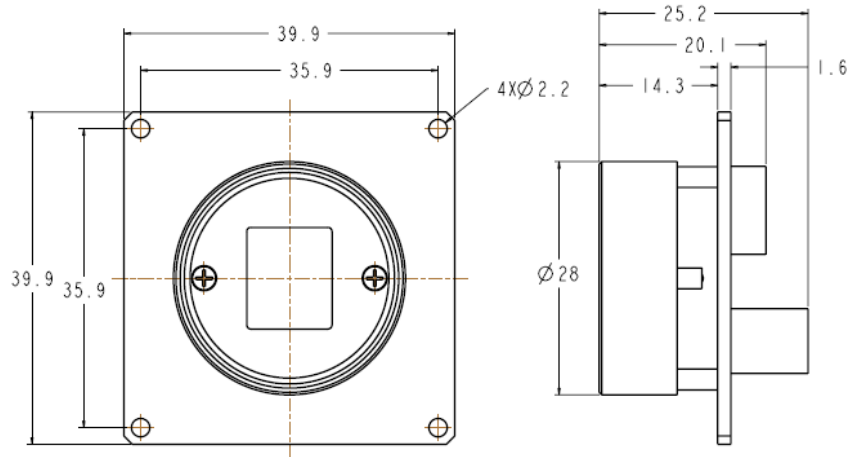


S-Series Ultra-Compact USB2.0 Monochrome 1.3MP CMOS Camera

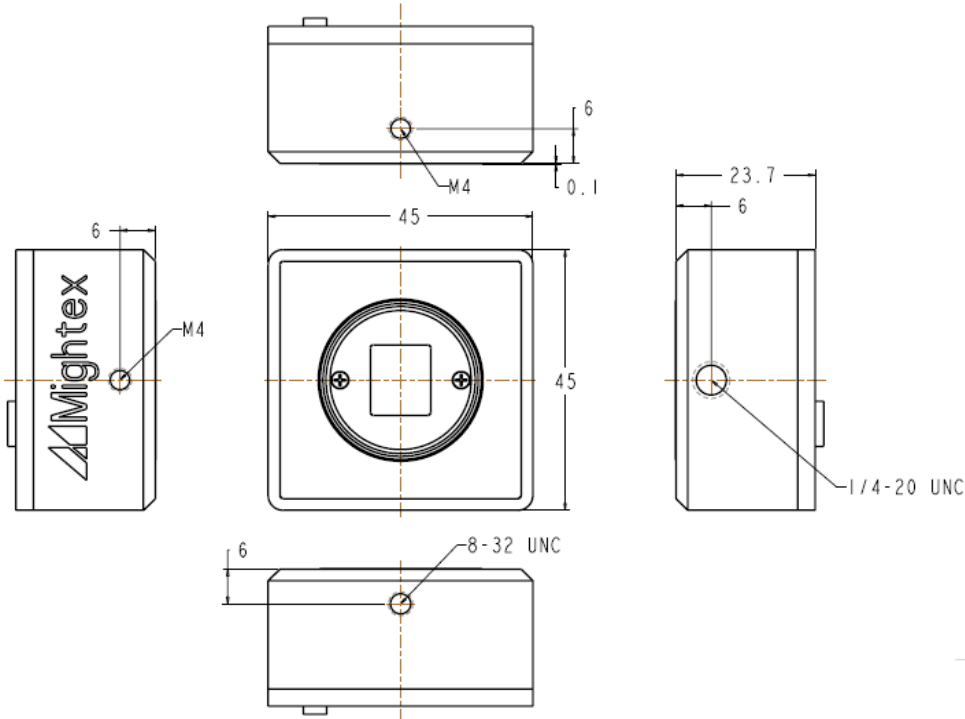
(Part Numbers: SCN-B013-U, SCE-B013-U)

INSTALLATION DRAWINGS

1) Board-level Camera with CS-mount



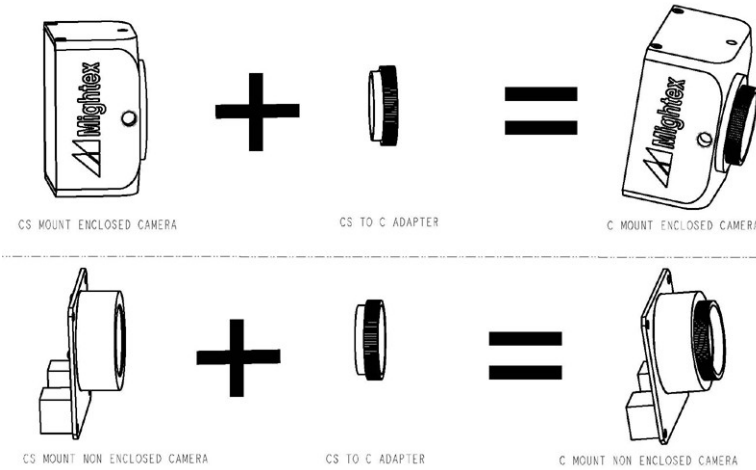
2) Enclosed camera with CS-mount



S-Series Ultra-Compact USB2.0 Monochrome 1.3MP CMOS Camera

(Part Numbers: SCN-B013-U, SCE-B013-U)

WHAT'S IN A C-MOUNT CAMERA?



A C-mount camera is composed of a CS-mount camera and a CS-to-C-mount adapter. The latter is essentially a 5mm thick threaded ring.

With a world-class OEM design team, Mightex offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call 1-416-840 4991 or email sales@mightex.com for details.

Distributor



amstechnologies
where technologies meet solutions

info@amstechnologies.com
www.amstechnologies-webshop.com

Contact us 