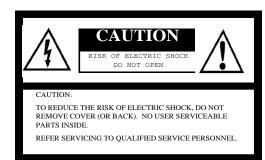


GigE Vision Camera Series (PoE) & (PoEHS)



Safety Precautions



vv ai iiiiig

This equipment generates and uses radio frequency energy and if not installed and used properly, I.e., in strict accordance with the instruction manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

For Canada

For U.S.A



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Warning:

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Product Precautions

- Handle the camera with care. Do not abuse the camera. Avoid striking or shaking it. Improper handling or storage could damage the camera.
- Do not pull or damage the camera cable.
- During camera use, do not wrap he unit in any material. This will cause the internal temperature of the unit to increase.
- Do not expose the camera to moisture, or do not try to operate it in wet areas.
- Do not operate the camera beyond its temperature, humidity and power source ratings.
- While the camera is not being used, keep the lens or lens cap on the camera to prevent dust or contamination from getting in the CCD or filter area and scratching or damaging this area.
- Do not keep the camera under the following conditions:
 - In wet, moist, and high humidity areas
 - Under hot direct sunlight
 - In high temperature areas
 - Near an object that releases a strong magnetic or electric field
 - Areas with strong vibrations
- Use a soft cloth to clean the camera. Use pressured air spray to clean the surface of the glass. DO not scratch the surface of the glass.



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I. Product Precautions

- ➤ Handle the camera with care. Do not abuse the camera. Avoid striking or shaking it. Improper handling or storage could damage the camera.
- Do not pull or damage the camera cable.
- > During camera use, do not wrap the unit in any material. This will cause the internal temperature of the unit to increase.
- > Do not expose the camera to moisture, or do not try to operate it in wet areas.
- > Do not operate the camera beyond its temperature, humidity and power source ratings.
- While the camera is not being used, keep the lens or lens cap on the camera to prevent dust or contamination from getting in the CCD or filter area and scratching or damaging this area.
- > Do not keep the camera under the following conditions:
 - In wet, moist, and high humidity areas
 - Under hot direct sunlight
 - In high temperature areas
 - Near an object that releases a strong magnetic or electric field
 - Areas with strong vibrations
- > Apply the power that satisfies the requirements specified in this document to the camera.
- ➤ Use a soft cloth to clean the camera. Use pressured air spray to clean the surface of the glass. DO not scratch the surface of the glass.
- > The camera is a general-purpose electronic device; using the camera for the equipment that may threaten human life or cause dangers to human bodies directly in case of failure or malfunction of the camera is not guaranteed. Use the camera for special purposes at your own risk.



II. General Specifications

- A. Electronic Specifications
- 1. STC-SB33POE/SC33POE

Model Number		STC-SB33POE	STC-SC33POE
Imager		1/3" Interline VGA monochrome	1/3" interline VGA color
		progressive CCD: ICX424AL	progressive CCD: ICX424AQ
Total Pict	ture Elements	692 (H) x	(504 (V)
Active Pic	cture Elements	VGA: 648 (H	H) x 494 (V)
Cell Size		7.4 (H) x 7	′.4 (V) μm
Scanning	System	Progre	essive
		89.91007 Hz at	full resolution
Vertical F	requency	0.72026 to 363.09837 Hz adjustable via the communication	
(Frame Ra	ate)	(Frame rate depends	s on the AOI setting)
		Maximum frame rate (363.09837 Hz) is w	hen vertical resolution AOI setting is 78.
Horizonta	al Frequency	47.202	28 kHz
Pixel Freq	quency	36.818	1 MHz
Naina	@ 8bit output	≤ 3 Digit (C	Gain 0 dB)
Noise	@ 10bit output	≤ 12 Digit (Gain 0 dB)
Level	@ 12bit output	≤ 48 Digit (Gain 0 dB)
Minimum	Scene Illumination	0.58 Lux at F1.2, 89.91007Hz	25.75 Lux at F1.2, 89.91007Hz
Sync. Syst	tem	Inte	rnal
Video O.	tout Former	Dinital 0, 10 and 12 hit Day, Data	Digital 8, 10 or 12 bit Raw data or
video Ou	tput Format	Digital 8, 10 or 12 bit Raw Data RGB 8 bit	RGB 8 bit
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)	
Protocol		GigE Vision® 1.2 and GenlCam™ 2.0 compliant	
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds	
- Funnacura	Timo	Preset trigger mode: 0,10 useconds to 16,777,215 useconds	
Exposure	Tille	Pulse width mode: 0,10 useconds to Unlimited	
		'0':Electric shutter Off(Full exposure)	
ALC		AE and AGC (ON/OFF)	
Gain		0 to 20	0.4 dB
Gamma		Gamma 1.0 (Factory default) or uploadable gamma table	
AOI Funct	tion	Variable AOI setting vi	a the communication
Smear Re	eduction	Selectable ON/OFF via	a the communication
Color Inte	erpolation	N/A	Available on RGB Output
			Auto, Manual, Push to Set
White Ba	lance	N/A	White Balance are available
			on both raw data and RGB outputs
Operational Mode Ed		Edge preset trigger, Pulse width trigg	er (unlimited long exposure) *Note1
Communication		UART communication	through Ethernet port
I/O One opt-isolated input and two open collector outputs		two open collector outputs	
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O	connector or Power over Ethernet
Dower	Input Voltage	(Power-I/O connector po	wer supply is prioritized.)
Power	Consumption	12V: 2.9W/2.7W, PoE: 3.4W/3.1W	
	(Max/Default)	120. 2.500/2.700,	FUL. 3.44V/3.1VV



2. STC-SB83POE/SC83POE

Scanning System Progressive 36.42046 Hz at full resolution Vertical Frequency 0.44236 to 145.68185 Hz changeable via the communication (Frame Rate) (Frame rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) is when vertical resolution AOI setting is 94. Horizontal Frequency 2.8.9907 kHz Pixel Frequency 3.6.818175 MHz © 8 bit output © 3.0 ligit (Gain 0 dB) © 10bit output © 12 bit (Gain 0 dB) © 12bit output © 12 bit (Gain 0 dB) © 12bit output © 12 bit (Gain 0 dB) © 12bit output 0.536 Lux at F1.2, 36.42046 Hz 0.548 logit (Gain 0 dB) Output Format Digital 8, 10 or 12 bit Raw Data Digital 8, 10 or 12 bit Raw data or RGB 8 bit Interface PoE : IEEE802.3af CLASS2 (1000BASE-T) Protocol GigE Vision* 1.2 and GeniCam* 2.0 compliant Preset tringger mode: 0,10 useconds to 16,777,215 useconds Preset tringger mode: 0,10 useconds to 16,777,215 useconds Preset tringger mode: 0,10 useconds to 16,777,215 useconds Preset tringger mode: 0,10 useconds to 10,0 Unlimited O'Electric shutter Off(Full exposure) ALC	Model N	umber	STC-SB83POE	STC-SC83POE	
Total Picture Elements Active Picture Active Picture Active Picture Elements Active	Imagor		1/3" interline XGA monochrome	1/3" interline XGA color	
Active Picture Elements XGA: 1024 (H) x 768 (V) Cell Size 4.65 (H) x 4.65 (V) µm Scanning System Progressive 36.42046 Hz at full resolution Vertical Frequency (1,4236 to 145,68185 Hz changeable via the communication (Frame Rate) (Frame Rate) Maximum frame rate (145,68185 Hz) is when vertical resolution AOI setting) Maximum frame rate (145,68185 Hz) is when vertical resolution AOI setting is 94. Horizontal Frequency 28.9907 kHz Pixel Frequency 36.818175 MHz 3 Digit (Gain 0 dB) (a) 10bit output (b) 12bit output (c) 12bit output (c) 12bit output (c) 48 Digit (Gain 0 dB) (c) 12bit output (c) 12bit output (c) 12bit output (c) 15bit out	imager		progressive CCD: ICX204AL	progressive CCD: ICX204AK	
Scanning System Progressive Progressive Progressive 36.42046 Hz at full resolution Vertical Frequency 0.44236 to 145.68185 Hz changeable via the communication (Frame Rate) (Frame rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) changeable via the communication (Frame Rate) (Frame rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) changeable via the communication (Frame Rate) (Frame rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) changeable via the communication (Frame Rate) (Frame rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) is when vertical resolution AOI setting is 94. Horizontal Frequency 36.818175 MHz ② 8 Bbit output 36.818175 MHz ③ 8 Bbit output 4 12 Digit (Gain 0 dB) ② 12 Dit output 4 12 Digit (Gain 0 dB) ③ 12 Dit output 5 12 Digit (Gain 0 dB) ③ 12 Digit (Gain 0 dB) ③ 12 Digit (Gain 0 dB) ④ 12 Dit Lux at F1.2, 36.42046 Hz ⑤ 19 Digital 8, 10 or 12 bit Raw Data ☐ Digital 8, 10 or 12 bit Raw Data ☐ RGB 8 bit ☐ Internal ☐ Digital 8, 10 or 12 bit Raw Data ☐ RGB 8 bit ☐ Protocol ☐ Gige Vision* 1.2 and GeniCam™ 2.0 compliant ☐ Preset continuous mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 useconds ☐ Preset trigger mode: 0,10 useconds to 16,777,215 usecon	Total Pict	ture Elements	1077 (H) x	788 (V)	
Scanning System Progressive 36.42046 Hz at full resolution Vertical Frequency (Frame Rate) (Frame Rate) (Frame rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) is when vertical resolution AOI setting is 94. Horizontal Frequency 28.9907 kHz 36.818175 MHz 36.818175 MHz 8 8bit output 36.818175 MHz 31 Digit (Gain 0 dB) 4 19 Digit and 0 dB) Minimum Scene Illumination 1.536 Lux at F1.2, 36.42046 Hz 19.14 Lux at F1.2, 36.42046 Hz Video Output Format Digital 8, 10 or 12 bit Raw Data RGB 8 bit Internal Digital 8, 10 or 12 bit Raw Data RGB 8 bit Preset continuous mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Pulse width mode: 0,10 useconds to 16,777,215 useconds Pulse width mode: 0,10 useconds to 10,777,215 useconds Pulse width mode: 0,10 useconds to 10,777,	Active Pi	cture Elements	XGA: 1024 (H	I) x 768 (V)	
Section Sect	Cell Size		4.65 (H) x 4.0	65 (V) μm	
Vertical Frequency 0.44236 to 145.68185 Hz changeable via the communication Frame Rate Vertical Frequency (Frame Rate) (Frame Rate depends on the AOI setting) Maximum frame rate (145.68185 Hz) is when vertical resolution AOI setting is 94.	Scanning	System	Progres	ssive	
(Frame Rate)			36.42046 Hz at full resolution		
Maximum frame rate (145.68185 Hz) is when vertical resolution AOI setting is 94. Horizontal Frequency 28.9907 kHz Pixel Frequency 36.818175 MHz @ 8bit output 53 Digit (Gain 0 dB) @ 10bit output 212 Digit (Gain 0 dB) @ 10bit output 312 Digit (Gain 0 dB) @ 10bit output 32 Digit (Gain 0 dB) ### 12 Digit (Gain 0 dB) ### 12 Digit (Gain 0 dB) ### 15.36 Lux at F1.2, 36.42046 Hz ### 19.14 Lux at F1.2, 26.4204 Hz ### 19.14 Lux	Vertical F	requency	0.44236 to 145.68185 Hz chang	eable via the communication	
Horizontal Frequency Sa.818175 MHz	(Frame R	ate)	(Frame rate depends	on the AOI setting)	
Pixel Frequency Noise Level @ 8bit output			Maximum frame rate (145.68185 Hz) is wh	nen vertical resolution AOI setting is 94.	
Rotice R	Horizont	al Frequency	28.9907	7 kHz	
Noise Level @ 10bit output @ 12bit output	Pixel Fred	quency	36.81817	'5 MHz	
Level @ 10bit output ≤ 12 Digit (Gain O dB) Ø 12bit output ≤ 48 Digit (Gain O dB) Minimum Scene Illumination 1.536 Lux at F1.2, 36.42046 Hz 19.14 Lux at F1.2, 36.42046 Hz Sync. System Internal Video Output Format Digital 8, 10 or 12 bit Raw Data Digital 8, 10 or 12 bit Raw data or RGB 8 bit Internal Video Output Format Digital 8, 10 or 12 bit Raw Data Digital 8, 10 or 12 bit Raw data or RGB 8 bit Internal Protocol GigE Vision* 1.2 and GenICam™ 2.0 compliant Preset continuous mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 u	Noico	@ 8bit output	≤ 3 Digit (Ga	ain 0 dB)	
@ 12bit output		@ 10bit output	≤ 12 Digit (G	Gain 0 dB)	
Sync. System Internal	Levei	@ 12bit output	≤ 48 Digit (G	Gain 0 dB)	
Video Output Format Digital 8, 10 or 12 bit Raw Data Digital 8, 10 or 12 bit Raw data or RGB 8 bit Interface PoE: IEEE802.3af CLASS2 (1000BASE-T) Protocol GigE Vision® 1.2 and GenICam™ 2.0 compliant Preset continuous mode: 0,10 useconds to 16,777,215 useconds Exposure Time Preset trigger mode: 0,10 useconds to 16,777,215 useconds Pulse width mode: 0,10 useconds to Unlimited '0':Electric shutter Off(Full exposure) ALC AE and AGC (ON/OFF) Gain 0 to 20.4 dB Gamma Gamma 1.0 (Factory default) or uploadable gamma table AOI Function Variable AOI setting via the communication Smear Reduction Selectable ON/OFF via the communication Color Interpolation N/A Available on RGB Output White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 AW/2 3W PoE: 2 6W/2 5W	Minimun	n Scene Illumination	1.536 Lux at F1.2, 36.42046 Hz	19.14 Lux at F1.2, 36.42046 Hz	
Nightal 8, 10 or 12 bit Naw Data RGB 8 bit Interface PoE : IEEE802.3af CLASS2 (1000BASE-T) Protocol GigE Vision® 1.2 and GenlCam™ 2.0 compliant Preset continuous mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to Unlimited O':Electric shutter Off(Full exposure) ALC	Sync. Sys	tem	Intern	nal	
Interface PoE : IEEE802.3af CLASS2 (1000BASE-T) Protocol GigE Vision® 1.2 and GenICam™ 2.0 compliant Preset continuous mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to Unlimited '0':Electric shutter Off(Full exposure) ALC AE and AGC (ON/OFF) Gain 0 to 20.4 dB Gamma Gamma 1.0 (Factory default) or uploadable gamma table AOI Function Variable AOI setting via the communication Smear Reduction Selectable ON/OFF via the communication Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port 1/O One opt-isolated input and two open collector outputs Input Voltage Consumption 12V: 2 4W/2 3W PoF: 2 6W/2 5W	Video O	.t.ot Farman	Dicital 0, 40 as 42 hit Barr Data	Digital 8, 10 or 12 bit Raw data or	
Protocol GigE Vision® 1.2 and GenICam™ 2.0 compliant Preset continuous mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Pulse width mode: 0,10 useconds to Unlimited '0':Electric shutter Off(Full exposure) ALC AE and AGC (ON/OFF) Gain 0 to 20.4 dB Gamma Gamma 1.0 (Factory default) or uploadable gamma table AOI Function Variable AOI setting via the communication Smear Reduction Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.)	video Ot	itput Format	Digital 8, 10 or 12 bit Raw Data	RGB 8 bit	
Preset continuous mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Preset trigger mode: 0,10 useconds to 16,777,215 useconds Pulse width mode: 0,10 useconds to Unlimited '0':Electric shutter Off(Full exposure) ALC AE and AGC (ON/OFF) Gain O to 20.4 dB Gamma Gamma 1.0 (Factory default) or uploadable gamma table AOI Function Variable AOI setting via the communication Smear Reduction Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.)	Interface		PoE : IEEE802.3af CLA	ASS2 (1000BASE-T)	
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Pulse width mode: 0,10 useconds to Unlimited '0':Electric shutter Off(Full exposure) ALC AE and AGC (ON/OFF) Gain 0 to 20.4 dB Gamma Gamma 1.0 (Factory default) or uploadable gamma table AOI Function Variable AOI setting via the communication Smear Reduction Selectable ON/OFF via the communication Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.)			Preset continuous mode: 0,10 useconds to 16,777,215 useconds		
Pulse width mode: 0,10 useconds to Unlimited '0':Electric shutter Off(Full exposure) ALC AE and AGC (ON/OFF) Gain 0 to 20.4 dB Gamma Gamma 1.0 (Factory default) or uploadable gamma table AOI Function Variable AOI setting via the communication Selectable ON/OFF via the communication Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.)	Evposuro	Timo	Preset trigger mode: 0,10 useconds to 16,777,215 useconds		
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Gain Gamma Gamma 1.0 (Factory default) or uploadable gamma table Variable AOI setting via the communication Selectable ON/OFF via the communication Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.)			'0':Electric shutter Off(Full exposure)		
Gamma Gamma 1.0 (Factory default) or uploadable gamma table Variable AOI setting via the communication Smear Reduction Selectable ON/OFF via the communication Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W	ALC		AE and AGC (ON/OFF)		
AOI Function Smear Reduction Selectable ON/OFF via the communication Selectable ON/OFF via the communication N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W Poe: 2 6W/2 5W	Gain		0 to 20.4 dB		
Smear Reduction Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W PoF: 2 6W/2 5W	Gamma		Gamma 1.0 (Factory default) or uploadable gamma table		
Color Interpolation N/A Available on RGB Output Auto, Manual, Push to Set White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W	AOI Fund	tion	Variable AOI setting via	the communication	
White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W	Smear Re	eduction	Selectable ON/OFF via	the communication	
White Balance N/A White Balance are available on both raw data and RGB outputs Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W	Color Inte	erpolation	N/A	Available on RGB Output	
Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W				Auto, Manual, Push to Set	
Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W	White Ba	lance	N/A	White Balance are available	
Operational Mode Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1 Communication UART communication through Ethernet port I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W				on both raw data and RGB outputs	
Power I/O One opt-isolated input and two open collector outputs +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W	Operational Mode				
Power Input Voltage +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, Post: 2 6W/2 5W	Communication				
Power Input Voltage +10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet (Power-I/O connector power supply is prioritized.) Consumption 12V: 2 4W/2 3W, Post: 2 6W/2 5W	1/0		One opt-isolated input and two open collector outputs		
Power Consumption (Power-I/O connector power supply is prioritized.) 12V: 2 4W/2 3W, PoF: 2 6W/2 5W					
Consumption 12V: 2 4W/2 3W, PoF: 2 6W/2 5W		Input Voltage	•		
(Max/Default) 12V: 2.4W/2.3W, PoE: 2.6W/2.5W		Consumption			
		(Max/Default)	12V: 2.4W/2.3W, PoE: 2.6W/2.5W		



3. STC-SB152POE/SC152POE

Model No	umber	STC-SB152POE	STC-SC152POE
Imager		1/2" interline SXGA monochrome	1/2" interline SXGA color
		progressive CCD: ICX205AL	progressive CCD: ICX205AK
Total Pict	cure Elements	1434 (H) x	1050 (V)
Active Pic	cture Elements	SXGA: 1360 (H	H) x 1040 (V)
Cell Size		4.65 (H) x 4.	.65 (V) μm
Scanning	System	Progre	essive
		19.25919 Hz at full resolution	
Vertical F	requency	0.31386 to 77.03675 Hz chang	eable via the communication
(Frame Ra	ate)	(Frame rate depends	on the AOI setting)
		Maximum frame rate (77.03675 Hz) is when vertical resolution AOI setting is 199.	
Horizonta	al Frequency	20.568	8 kHz
Pixel Fred	quency	36.818	1MHz
Noise	@ 8bit output	≤ 3 Digit (G	Gain 0 dB)
Level	@ 10bit output	≤ 12 Digit (0	Gain 0 dB)
Level	@ 12bit output	≤ 48 Digit (0	Gain 0 dB)
Minimum	Scene Illumination	0.41 Lux at F1.2, 19.25954 Hz	15.49 Lux at F1.2, 19.25954 Hz
Sync. Syst	tem	Inter	nal
Vidoo Ou	tput Format	Digital 8, 10 or 12 bit Raw Data RGB 8 bit	Digital 8, 10 or 12 bit Raw data or
video Ou	tput i orinat		RGB 8 bit
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)	
Protocol		GigE Vision® 1.2 and Ge	nlCam™ 2.0 compliant
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds	
Exposure	Time	Preset trigger mode: 0,10 useconds to 16,777,215 useconds	
LAPOSUIC	Time	Pulse width mode: 0,10 useconds to Unlimited	
		'0':Electric shutter Off(Full exposure)	
ALC		AE and AGC	(ON/OFF)
Gain		0 to 20	1.4 dB
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table
AOI Funct	tion	Variable AOI setting via	a the communication
Smear Re	eduction	Selectable ON/OFF via	the communication
Color Inte	erpolation	N/A	Available on RGB Output
			Auto, Manual, Push to Set
White Ba	lance	N/A	White Balance are available
			on both raw data and RGB outputs
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1	
Communication		UART communication through Ethernet port	
I/O		One opt-isolated input and two open collector outputs	
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O c	onnector or Power over Ethernet
Dower	Input Voltage	(Power-I/O connector power supply is prioritized.)	
Power	Consumption	12V: 2.9W/2.8W, PoE: 3.3W/3.1W	
	(Max/Default)	120. 2.300/2.800,	FUL. 3.34V/3.14V



4. STC-SB202POE/SC202POE

Model No	umber	STC-SB202POE	STC-SC202POE
Imager		1/1.8" interline UXGA monochrome	1/1.8" interline UXGA color
		progressive CCD: ICX274AL	progressive CCD: ICX274AQ
Total Pict	cure Elements	1688(H)x	1248(V)
Active Pic	cture Elements	UXGA: 1624 (I	H) x 1236 (V)
Cell Size		4.4 (H) x 4	.4 (V) μm
Scanning	System	Progre	essive
		15.31640 Hz at	full resolution
Vertical F	requency	0.29261 to 61.26600 Hz chang	eable via the communication
(Frame Ra	ate)	(Frame rate depends	on the AOI setting)
		Maximum frame rate (61.26600 Hz) is wh	nen vertical resolution AOI setting is 232.
Horizonta	al Frequency	19.176	1 kHz
Pixel Fred	quency	36.818	1MHz
Noise	@ 8bit output	≤ 3 Digit (G	Gain 0 dB)
Level	@ 10bit output	≤ 12 Digit (0	Gain 0 dB)
LCVCI	@ 12bit output	≤ 48 Digit (0	Gain 0 dB)
Minimum	Scene Illumination	0.156 Lux at F1.2, 15.31640 Hz	7.272Lux at F1.2, 15.31640 Hz
Sync. Syst	tem	Inter	rnal
Vidoo Ou	tput Format	Digital 8, 10 or 12 bit Raw Data RGB 8 bit	Digital 8, 10 or 12 bit Raw data or
video Ou	tput i orinat		RGB 8 bit
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)	
Protocol		GigE Vision® 1.2 and Ge	nlCam™ 2.0 compliant
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds	
Exposure	Time	Preset trigger mode: 0,10 useconds to 16,777,215 useconds	
LAPOSUIC	Time	Pulse width mode: 0,10 useconds to Unlimited	
		'0':Electric shutter Off(Full exposure)	
ALC		AE and AGC	C (ON/OFF)
Gain		0 to 20).4 dB
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table
AOI Funct	tion	Variable AOI setting via	a the communication
Smear Re	eduction	Selectable ON/OFF via	a the communication
Color Inte	erpolation	N/A	Available on RGB Output
			Auto, Manual, Push to Set
White Ba	lance	N/A	White Balance are available
			on both raw data and RGB outputs
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1	
Communication		UART communication t	through Ethernet port
I/O		One opt-isolated input and two open collector outputs	
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O c	connector or Power over Ethernet
Dower	Input Voltage	(Power-I/O connector pov	wer supply is prioritized.)
Power	Consumption	12V: 3.0W/2.9W, PoE: 3.3W/3.3W	
	(Max/Default)	120. 3.000/2.900,	FUL. 3.348/3.348



5. STC-SB500POE/SC500POE

Model Nu	ımber	STC-SB500POE	STC-SC500POE
Imager		2/3" interline QSXGA monochrome	2/3" interline QSXGA color
		progressive CCD: ICX625AL	progressive CCD: ICX625AQ
Total Pict	ure Elements	2536 (H) x 2068 (V)	
Active Pic	ture Elements	QSXGA: 2448 (H) x 2058 (V)	
Cell Size		3.45 (H) x 3.45 (V) μm	
Scanning	System	Progressive	
		15.18586 Hz at full resolution	
		0.48175 to 60.71422 Hz adjustable via the communication	
Vertical F	requency	(Frame rate depends on the AOI setting.)	
(Frame Ra	ate)	Maximum frame rate (60.71422 Hz) is wh	nen vertical resolution AOI setting is 128.
		(For certain video output format, frame rate may dro	op due to the limitation of Gigabit Ethernet transfer
		rate	e.)
Horizonta	al Frequency	31.565	57KHz
Pixel Freq	luency	81.818	2 MHz
Noise	@ 8bit output	≤ 4 Digit (C	Gain 0 dB)
Level	@ 10bit output	≤ 15 Digit (Gain 0 dB)
Level	@ 12bit output	≤ 60 Digit (Gain 0 dB)
Minimum	Scene Illumination	0.10 Lux at F1.2, 15.18586 Hz	6.48Lux at F1.2, 15.18586 Hz z
Sync. Syst	em	Inter	rnal
Vidoo Out	tput Format	Digital 8, 10 or 12 bit Raw Data	Digital 8, 10 or 12 bit Raw data or
video odi	tput i ormat		RGB 8 bit
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)	
Protocol		GigE Vision® 1.2 and Ge	nlCam™ 2.0 compliant
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds	
Exposure	Time	Preset trigger mode: 0,10 used	conds to 16,777,215 useconds
Lxposure	Time	Pulse width mode: 0,10 useconds to Unlimited	
		'0':Electric shutter Off(Full exposure)	
ALC		AE and AGC (ON/OFF)	
Gain		0 to 18.309 dB	
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table
AOI Funct	tion	Variable AOI setting vi	a the communication
Smear Re	duction	Selectable ON/OFF via	a the communication
Color Inte	erpolation	N/A	Available on RGB Output
			Auto, Manual, Push to Set
White Balance		N/A	White Balance are available
			on both raw data and RGB outputs
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1	
Communication		UART communication through Ethernet port	
1/0	/O One opt-isolated input and two open collector outputs		two open collector outputs
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O c	connector or Power over Ethernet
Power	mput voitage	(Power-I/O connector power supply is prioritized.)	
r UVVEI	Consumption	12V: 4.1W/3.5W, PoE: 4.5W/3.8W	
	(Max/Default)	120. 4.1075.300,	1 OL. 7.344/ 3.044



6. STC-SB33POEHS/SC33POEHS

Model N	umber	STC-SB33POEHS	STC-SC33POEHS	
Imager		1/3" Interline VGA monochrome	1/3" interline VGA color	
Imager		progressive CCD: ICX424AL	progressive CCD: ICX424AQ	
Total Pict	ture Elements	692 (H) x	: 504 (V)	
Active Pic	cture Elements	VGA: 648 (F	H) x 494 (V)	
Cell Size		7.4 (H) x 7	.4 (V) μm	
Scanning	System	Progre	essive	
		122.27770 Hz at full resolution		
Vertical F	requency	0.97957 to 486.33176 Hz adjus	stable via the communication	
(Frame R	ate)	(Frame rate depends	on the AOI setting)	
		Maximum frame rate (486.33176 Hz) is w	then vertical resolution AOI setting is 80.	
Horizonta	al Frequency	64.19536KHz		
Pixel Fred	quency	50.072	7MHz	
Noise	@ 8bit output	≤ 3 Digit (G	Gain O dB)	
Level	@ 10bit output	≤ 12 Digit (Gain 0 dB)	
Level	@ 12bit output	≤ 48 Digit (0	Gain 0 dB)	
Minimum	n Scene Illumination	1.464 Lux at F1.2, 122.27770Hz	46.728 Lux at F1.2, 122.27770Hz	
Sync. Syst	tem	Inter	rnal	
Vidoo Ou	itnut Format	Digital 8, 10 or 12 bit Raw Data RGB 8 bit	Digital 8, 10 or 12 bit Raw data or	
video Ou	itput Format		RGB 8 bit	
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)		
Protocol		GigE Vision® 1.2 and GenlCam™ 2.0 compliant		
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds		
Exposure	Timo	Preset trigger mode: 0,10 useconds to 16,777,215 useconds		
Lxposure	rille	Pulse width mode: 0,10 useconds to Unlimited		
		'0':Electric shutter Off(Full exposure)		
ALC		AE and AGC (ON/OFF)		
Gain		0 to 18.	0 to 18.309 dB	
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table	
AOI Func	tion	Variable AOI setting vi	a the communication	
Smear Re	eduction	Selectable ON/OFF via	a the communication	
Color Inte	erpolation	N/A	Available on RGB Output	
			Auto, Manual, Push to Set	
White Balance		N/A	White Balance are available	
			on both raw data and RGB outputs	
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1		
Communication		UART communication through Ethernet port		
I/O One opt-isolated input and two open collector outputs		two open collector outputs		
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O c	connector or Power over Ethernet	
Dower	Input Voltage	(Power-I/O connector pov	wer supply is prioritized.)	
Power	Consumption	12V: 2 2W/2 0W Par. 2 4W/2 4W		
	(Max/Default)	12V: 3.2W/2.9W, PoE: 3.4W/3.1W		



7. STC-SB32POEHS/SC32POEHS

Model Number		STC-SB32POEHS	STC-SC32POEHS
Imagor		1/2" interline VGA monochrome	1/2" interline VGA color
Imager		progressive CCD: ICX414AL	progressive CCD: ICX414AQ
Total Pic	ture Elements	659(H)x	494(V)
Active Pi	cture Elements	VGA: 648 (F	I) x 494 (V)
Cell Size		9.9 (H) x 9	.9 (V) μm
Scanning	g System	Progre	essive
		122.27770 Hz at	t full resolution
Vertical I	Frequency	0.97957 to 486.33176 Hz adjus	stable via the communication
(Frame R	Rate)	(Frame rate depends	on the AOI setting)
		Maximum frame rate (486.33176 Hz) is w	then vertical resolution AOI setting is 80.
Horizont	al Frequency	64.195	36KHz
Pixel Fre	quency	50.0727	² 2 MHz
Noise	@ 8bit output	≤ 3 Digit (G	Gain 0 dB)
Level	@ 10bit output	≤ 12 Digit (Gain 0 dB)
LCVCI	@ 12bit output	≤ 48 Digit (0	Gain 0 dB)
Minimun	n Scene Illumination	1.2 Lux at F1.2, 122.27770Hz	43.64 Lux at F1.2, 122.27770Hz
Sync. Sys	stem	Inter	rnal
Video O	itnut Format	Digital 9 10 or 12 hit Bay Data	Digital 8, 10 or 12 bit Raw data or
video Ot	utput Format	Digital 8, 10 or 12 bit Raw Data	RGB 8 bit
Interface	2	PoE : IEEE802.3af CL	ASS2 (1000BASE-T)
Protocol		GigE Vision® 1.2 and Ge	nlCam™ 2.0 compliant
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds	
Exposure	Time	Preset trigger mode: 0,10 useconds to 16,777,215 useconds	
LAPOSUIC	2 Time	Pulse width mode: 0,10 useconds to Unlimited	
		'0':Electric shutter Off(Full exposure)	
ALC		AE and AGC (ON/OFF)	
Gain		0 to 18.309 dB	
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table
AOI Fund	ction	Variable AOI setting vi	a the communication
Smear Re	eduction	Selectable ON/OFF via	a the communication
Color Int	erpolation	N/A	Available on RGB Output
			Auto, Manual, Push to Set
White Ba	alance	N/A	White Balance are available
			on both raw data and RGB outputs
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1	
Communication		UART communication t	hrough Ethernet port
I/O	I/O One opt-isolated input and two open collector outputs		two open collector outputs
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet	
Dower	input voitage	(Power-I/O connector power supply is prioritized.)	
Power	Consumption	12V: 3.4W/2.9W, PoE: 3.7W/3.2W	
	(Max/Default)	12V. 3.4VV/2.3VV, CUE. 3./VV/3.2VV	



8. STC-SB133POEHS/SC133POEHS

Model N	umber	STC-SB133POEHS	STC-SC133POEHS
Imagar		1/3" Interline SXGA monochrome	1/3" interline SXGA color
Imager		progressive CCD: ICX445AL	progressive CCD: ICX445AQ
Total Pict	ture Elements	1348 (H)	x 976 (V)
Active Pic	cture Elements	SXGA: 1280 ((H) x 966 (V)
Cell Size		3.75 (H) x 3	3.75 (V) μm
Scanning	System	Progre	essive
		39.82294 Hz at full resolution	
Vertical F	requency	0.60158 to 159.61423 Hz adju	stable via the communication
(Frame R	ate)	(Frame rate depends	s on the AOI setting)
		Maximum frame rate (159.61423 Hz) is w	hen vertical resolution AOI setting is 168.
Horizonta	al Frequency	39.424	17 kHz
Pixel Fred	quency	65.454	5MHz
N1-1	@ 8bit output	≤ 4 Digit (C	Gain 0 dB)
Noise	@ 10bit output	≤ 15 Digit (Gain 0 dB)
Level	@ 12bit output	≤ 60 Digit (Gain 0 dB)
Minimum	n Scene Illumination	0.276 Lux at F1.2, 39.82294 Hz	19.488 Lux at F1.2, 39.82294 Hz
Sync. Syst	tem	Inte	rnal
\" \ O		D: 11 10 40 40 11 D D .	Digital 8, 10 or 12 bit Raw data or
Video Ou	itput Format	Digital 8, 10 or 12 bit Raw Data	RGB 8 bit
Interface		PoE : IEEE802.3af CL	ASS2 (1000BASE-T)
Protocol		GigE Vision® 1.2 and GenlCam™ 2.0 compliant	
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds	
F	Time	Preset trigger mode: 0,10 useconds to 16,777,215 useconds	
Exposure	rime	Pulse width mode: 0,10 useconds to Unlimited	
		'0':Electric shutter Off(Full exposure)	
ALC		AE and AGC (ON/OFF)	
Gain		0 to 18.309 dB	
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table
AOI Func	tion	Variable AOI setting vi	a the communication
Smear Re	eduction	Selectable ON/OFF via	a the communication
Color Inte	erpolation	N/A	Available on RGB Output
			Auto, Manual, Push to Set
White Ba	lance	N/A	White Balance are available
			on both raw data and RGB outputs
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1	
Communication		UART communication through Ethernet port	
1/0		One opt-isolated input and	two open collector outputs
		+10.8 to +26.4 Vdc via power-I/O connector or Power over Ethernet	
_	Input Voltage	(Power-I/O connector power supply is prioritized.)	
Power	Consumption		
	(Max/Default)	12V: 3.0W/2.8W,	POE: 3.3W/3.1W



9. STC-SB152POEHS/SC152POEHS

Model Nu	umber	STC-SB152POEHS	STC-SC152POEHS	
Imagor		1/2" interline SXGA monochrome	1/2" interline SXGA color	
Imager		progressive CCD: ICX267AL	progressive CCD: ICX267AK	
Total Pict	ure Elements	1434 (H) x	(1050 (V)	
Active Pic	cture Elements	SXGA: 1360 (I	H) x 1040 (V)	
Cell Size		4.65 (H) x 4	l.65 (V) μm	
Scanning	System	Progressive		
		34.23358 Hz at full resolution		
Vertical F	requency	0.55789 to 136.93433 Hz chan	geable via the communication	
(Frame Ra	ate)	(Frame rate depends	s on the AOI setting)	
		Maximum frame rate (136.93433 Hz) is w	hen vertical resolution AOI setting is 122.	
Horizonta	al Frequency	36.561	47 KHz	
Pixel Freq	quency	65.454	5MHz	
Noise	@ 8bit output	≤ 4 Digit (C	Gain 0 dB)	
Noise Level	@ 10bit output	≤ 15 Digit (Gain 0 dB)	
Levei	@ 12bit output	≤ 60 Digit (Gain 0 dB)	
Minimum	Scene Illumination	0.996 Lux at F1.2, 39.82294 Hz	27.684 Lux at F1.2, 39.82294 Hz	
Sync. Syst	tem	Inte	rnal	
Midae O.	tout Formet	Digital 0, 10 as 12 bit Daw Data	Digital 8, 10 or 12 bit Raw data or	
video Ou	tput Format	Digital 8, 10 or 12 bit Raw Data RGB 8 bit	RGB 8 bit	
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)		
Protocol		GigE Vision® 1.2 and GenlCam™ 2.0 compliant		
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds		
Fymasiura	Time	Preset trigger mode: 0,10 useconds to 16,777,215 useconds		
Exposure	Time	Pulse width mode: 0,10 useconds to Unlimited		
		'0':Electric shutter Off(Full exposure)		
ALC		AE and AGC (ON/OFF)		
Gain		0 to 18.	309 dB	
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table	
AOI Funct	tion	Variable AOI setting vi	ia the communication	
Smear Re	eduction	Selectable ON/OFF via	N/OFF via the communication	
Color Inte	erpolation	N/A	Available on RGB Output	
			Auto, Manual, Push to Set	
White Ba	lance	N/A	White Balance are available	
			on both raw data and RGB outputs	
Operational Mode		Edge preset trigger, Pulse width trigger (unlimited long exposure) *Note1		
Communication		UART communication through Ethernet port		
1/0		One opt-isolated input and two open collector outputs		
	Input Voltage	+10.8 to +26.4 Vdc via power-I/O	connector or Power over Ethernet	
Power	Input Voltage	(Power-I/O connector po	wer supply is prioritized.)	
rower	Consumption	121/- 2 51/1/2 21/1 Date 2 7/1/2 51/1		
	(Max/Default)	12V: 3.5W/3.2W, PoE: 3.7W/3.5W		



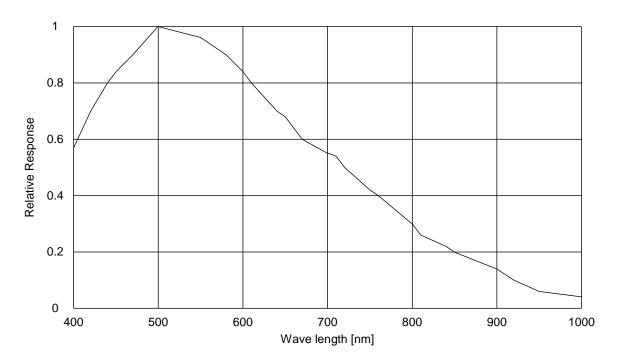
10. STC-SB202POEHS/SC202POEHS

Model Number		STC-SB202POEHS	STC-SC202POEHS	
Imager		1/1.8" interline UXGA monochrome	1/1.8" interline UXGA color	
Imager		progressive CCD: ICX274AL	progressive CCD: ICX274AQ	
Total Pict	ure Elements	1688 (H)x	1248 (V)	
Active Pic	cture Elements	UXGA: 1624 (I	H) x 1236 (V)	
Cell Size		4.4 (H) x 4	.4 (V) μm	
Scanning	System	Progre	essive	
		30.63280 Hz at full resolution		
Vertical F	requency	0.58522 to 122.53119 Hz chang	geable via the communication	
(Frame Ra	ate)	(Frame rate depends	s on the AOI setting)	
		Maximum frame rate (122.53119 Hz) is wl	hen vertical resolution AOI setting is 112.	
Horizonta	al Frequency	38.3522	264 kHz	
Pixel Freq	quency	73.636	4MHz	
Niese	@ 8bit output	≤ 4 Digit (G	Gain O dB)	
Noise	@ 10bit output	≤ 15 Digit (Gain 0 dB)	
Level	@ 12bit output	≤ 60 Digit (Gain 0 dB)	
Minimum	Scene Illumination	0.348Lux at F1.2, 30.63280 Hz	14.532Lux at F1.2, 30.63280 Hz	
Sync. Syst	tem	Inter	rnal	
Video O.	tout Farment	Disital 0, 10 as 12 bit Daw Data	Digital 8, 10 or 12 bit Raw data or	
video Ou	tput Format	Digital 8, 10 or 12 bit Raw Data RGB 8 bit	RGB 8 bit	
Interface		PoE: IEEE802.3af CLASS2 (1000BASE-T)		
Protocol		GigE Vision® 1.2 and Ge	nlCam™ 2.0 compliant	
		Preset continuous mode: 0,10 useconds to 16,777,215 useconds		
Evposuro	Timo	Preset trigger mode: 0,10 useconds to 16,777,215 useconds		
Exposure	Tille	Pulse width mode: 0,10 useconds to Unlimited		
		'0': Electric shutter Off(Full exposure)		
ALC		AE and AGC (ON/OFF)		
Gain		0 to 18.309 dB		
Gamma		Gamma 1.0 (Factory default)	or uploadable gamma table	
AOI Funct	tion	Variable AOI setting vi	a the communication	
Smear Re	eduction	Selectable ON/OFF via	a the communication	
Color Inte	erpolation	N/A	Available on RGB Output	
			Auto, Manual, Push to Set	
White Ba	lance	N/A	White Balance are available	
			on both raw data and RGB outputs	
Operational Mode		Edge preset trigger, Pulse width trigg	er (unlimited long exposure) *Note1	
Communication		UART communication t	through Ethernet port	
I/O One opt-isolated input and two open collector outputs		two open collector outputs		
	In must Maltage	+10.8 to +26.4 Vdc via power-I/O c	connector or Power over Ethernet	
Power	Input Voltage	(Power-I/O connector pov	(Power-I/O connector power supply is prioritized.)	
	Consumption	12V: 4.1W/3.9W, PoE: 4.4W/4.2W		
	(Max/Default)	12V: 4.1W/3.9W,	P0E: 4.4W/4.2W	

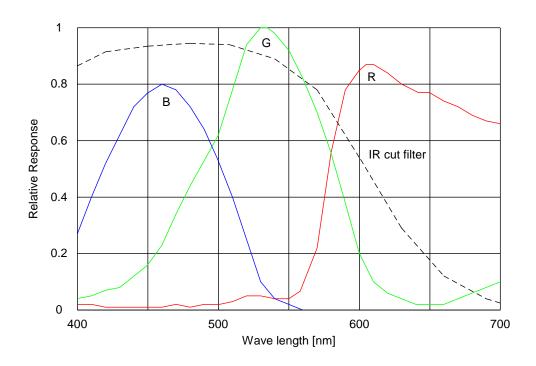


B. Spectral Sensitivity Characteristics

1. STC-SB33POE / STC-SB33POEHS

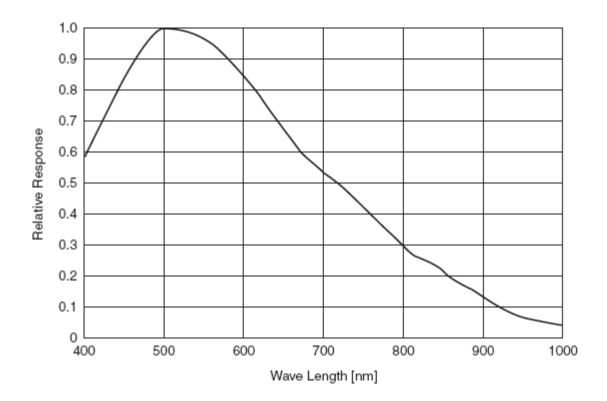


2. STC-SC33POE / STC-SC33POEHS (with IR Cut Filter)

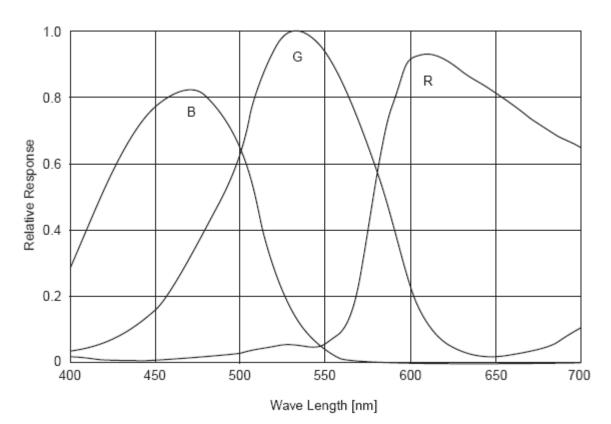




3. STC-SB32POE

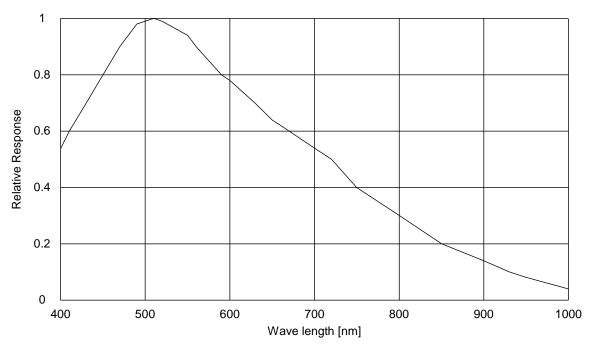


4. STC-SC32POE (with IR Cut Filter)

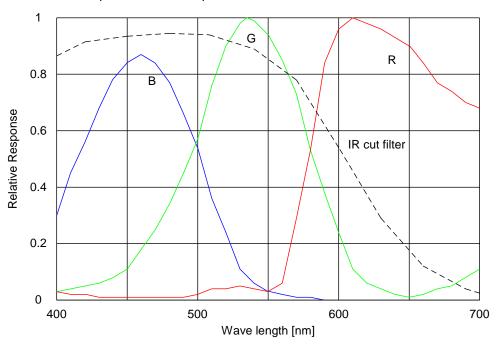




5. STC-SB83POE

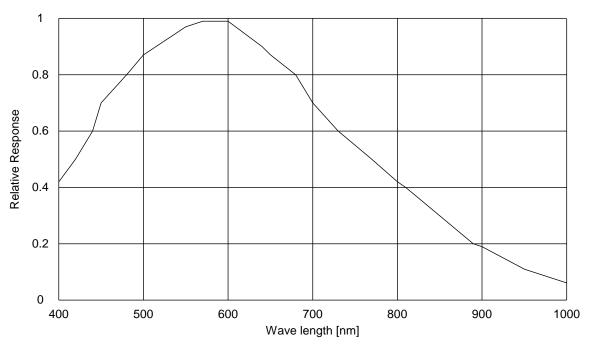


6. STC-SC83POE (with IR Cut Filter)

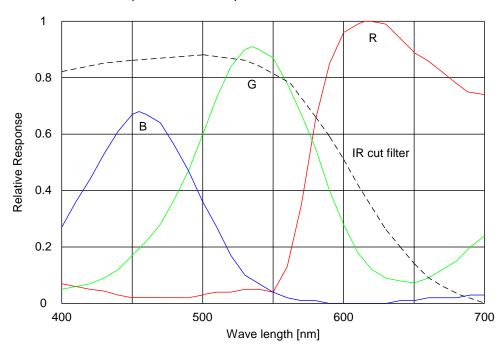




7. STC-SB133POEHS

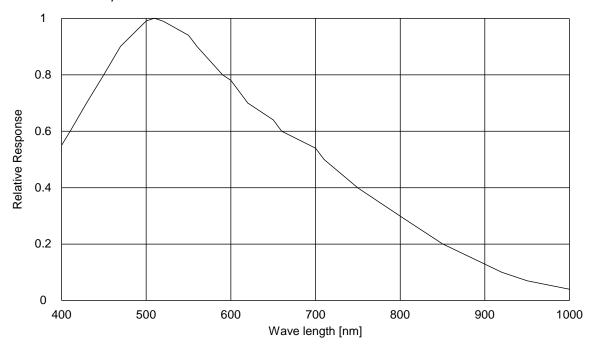


8. STC-SC133POEHS (with IR Cut Filter)

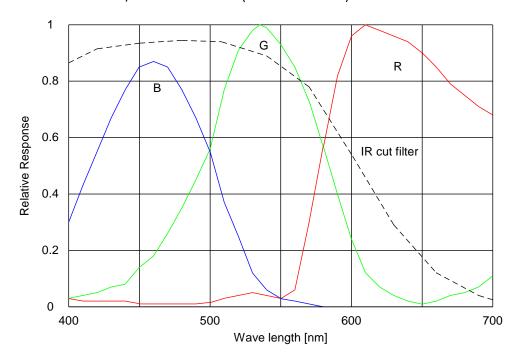




9. STC-SB152POE / STC-SB152POEHS

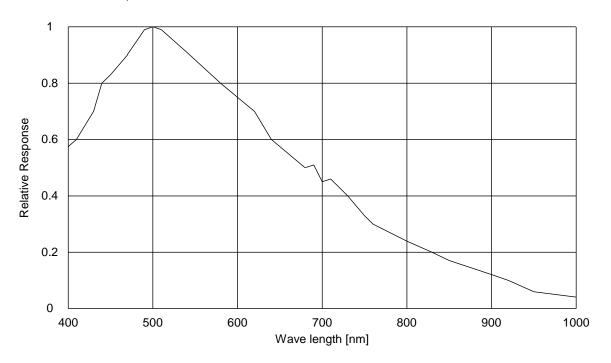


10. STC-SC152POE / STC-SC152POEHS (with IR Cut Filter)

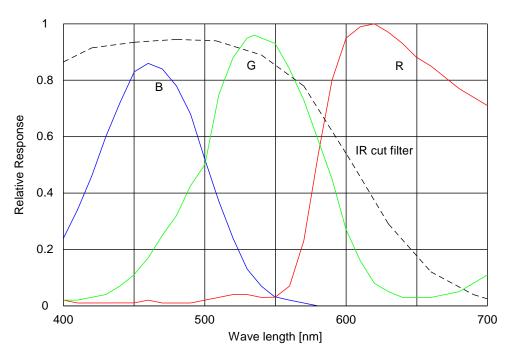




11. STC-SB202POE / STC-SB202POEHS

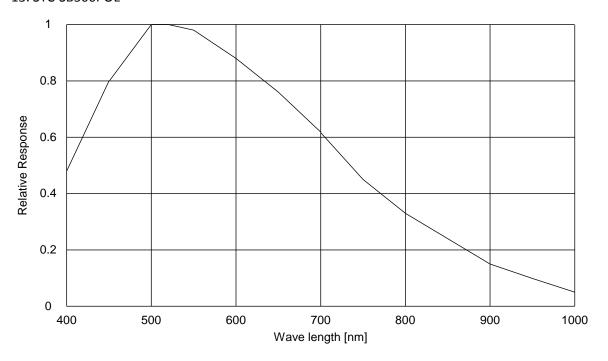


12. STC-SC202POE / STC-SC202POEHS (with IR Cut Filter)

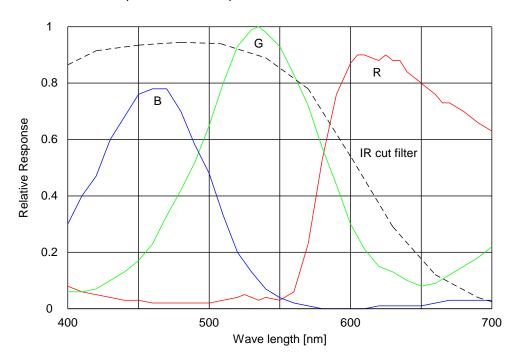




13. STC-SB500POE



14. STC-SC500POE (with IR Cut Filter)





C. Mechanical Specifications

	STC-SB33POE / STC-SB83POE /	STC-SC33POE / STC-SC83POE /			
	TC-SB152POE / STC-SB202POE /	TC-SC152POE / STC-SC202POE /			
Model Number	STC-SB500POE / STC-SB33POEHS /	STC-SC500POE / STC-SC33POEHS /			
	STC-SB32POEHS / STC-SB133POEHS / STC-	STC-SC32POEHS / STC-SC133POEHS / STC-			
	SB152POEHS / STC-SB202POEHS	SC152POEHS / STC-SC202POEHS			
Dimensions	35 (W) x 35 (H) x 55.9(D) mm excluding connectors				
Optical Filter	No Filter	IR Cut Filter on			
Optical Center Accuracy	Positional accuracy in H and V directions: +/- 0.3 mm				
Optical Center Accuracy	Rotational accuracy of H and V: +/- 1.5 deg.				
Material	Aluminum (AC)				
Lens Mount	C mount				
Connectors	RJ45 connector				
	Power- I/O connector: HR10A-7R-6PB (Hirose) or equivalent				
Camera Mount Screws	Two 1/4" Tripod screw holes: (One on each top and bottom plate),				
	Twelve M4 screws holes: (Four on each top and bottom plate, two on each side plate)				
Weight	About 130g				



D. Environmental Specifications

Model Number		STC-SB33POE / STC-SC33POE / STC-SB83POE / STC-SC83POE /	
		STC-SB152POE / STC-SC152POE / STC-SB202POE / STC-SC202POE /	
		STC-SB33POEHS / STC-SC33POEHS / STC-SB32POEHS / STC-SC32POEHS /	
		STC-SB133POEHS / STC-SC133POEHS / STC-SB152POEHS / STC-SC152POEHS	
Operational	Minimum	Environmental Temperature -5 ⁰ C	
	Maximum	Camera housing temperature (top plate) shall not exceed 65°C	
		(This corresponds to an environmental temperature of approximately 40°C)	
Storage temperature Environmental Temperature: -30°C to 65°C		Environmental Temperature: -30°C to 65°C	
Vibration		20Hz to 200Hz to 20Hz (5min./cycle), acceleration 10G, 3 directions 30 min. each	
Shock		Acceleration 38G, half amplitude 6ms, 3 directions 3 times each	
Standard Compliancy EMS: EN61000-6-2, EMI: EN55011		EMS: EN61000-6-2, EMI: EN55011	
RoHS		RoHS Compliant	

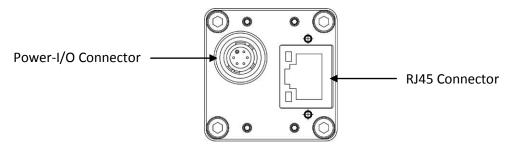
Model Number		STC-SB500POE / STC-SC500POE	
Operational Temperature	Minimum	Environmental Temperature -5 ⁰ C	
	N. A. a. visas visas	Camera housing temperature (top plate) shall not exceed 65°C	
	Maximum	(This corresponds to an environmental temperature of approximately 30°C)	
Storage temperature Environmental Temperature: -30°C to 65°C		Environmental Temperature: -30 ^o C to 65 ^o C	
Vibration 20Hz to 20Hz to 20Hz (5min./cycle), acceleration 10G, 3 directions 30 mi		20Hz to 200Hz to 20Hz (5min./cycle), acceleration 10G, 3 directions 30 min. each	
Shock		Acceleration 38G, half amplitude 6ms, 3 directions 3 times each	
Standard Compliancy		EMS: EN61000-6-2, EMI: EN55011	
RoHS		RoHS Compliant	

Model Number		STC-SB202POEHS / STC-SC202POEHS	
Operational Temperature	Minimum	Environmental Temperature -5 ⁰ C	
	Maximum	Camera housing temperature (top plate) shall not exceed 65°C	
	IVIAXIIIIUIII	(This corresponds to an environmental temperature of approximately 35°C)	
Storage tempera	prage temperature Environmental Temperature: -30°C to 65°C		
Vibration 20Hz to 20Hz to 20Hz (5min./cycle), acceleration 10G, 3 directions 30 min.		20Hz to 200Hz to 20Hz (5min./cycle), acceleration 10G, 3 directions 30 min. each	
Shock		Acceleration 38G, half amplitude 6ms, 3 directions 3 times each	
Standard Compliancy		EMS: EN61000-6-2, EMI: EN55011	
RoHS		RoHS Compliant	

Note: When the camera is used in a condition that exceeds the maximum environmental temperature specified above, please make sure that the camera is set up to properly radiate heat (maintaining the camera's top case plate's temperature to be less than 65 deg. C).



III. Connector Specifications



A. RJ45 Connector

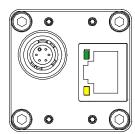
<u>This product is PoE compliant. Please supply power through the power-I/O connector when using non-PoE-compliant NIC.</u>

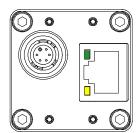
1. Pin Assignment

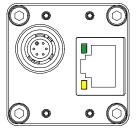
Pin No.	Signal Name
1	TA+
2	TA-
3	TB+
4	TC+
5	TC-
6	TB-
7	TD+
8	TD-

2. LED Information

Green LED	Yellow LED	Status
Green Light ON	Orange Light ON	Power ON
Green Light ON	Orange Light Blinking	1Gb Transferring
Light OFF	Orange Light Blinking	100 Mb Transferring







<u>Please use a 1Gb supported NIC, Network Switcher and LAN Cable. Check that the NIC and Network Switcher being used is "1Gb transferring".</u>

For further details on the Connection, please see "System Configurations (Example Connections)".

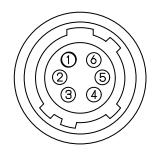


B. Power-I/O Connector

- ➤ HR10A-7R-6PB (Hirose) or equivalent.
- ➤ This connector is for the power supply (12Vdc) and input / output signals.
- ➤ Use HR10A-7P-6S (Hirose) or equivalent on the cable side.

1. Pin Assignment

Pin No.	Signal Name	IN / OUT	Voltage	
1	GND	IN	0V	
2	I/O-1	OUT	Open Collector	
3	1/0-2	OUT	Open Collector	
4	TRG_In-	IN	Low: Smaller than +1.0V	
	(Opt. Isolated -)	IIN	High: +3.0 to +26.4V	
5	TRG_In+	IN	*potential difference between TRG_In-	
	(Opt. Isolated +)	IIN	and TRG_In+	
6	POWER IN	IN	+10.8 to +26.4 Vdc	



- Output Signals can be assigned through the camera setting communication.
 (Device Code = 00H, Command = F0H and F1H)
 - 2. IO Signal Patterns for Pin No. 2 (I/O-1) and Pin No. 3 (I/O-2)

	Comm	HR10A-7R-6PB (Hirose)			
F0H[30]	F1[3]	F0H[74]	F1[4]	I/O-1 (Pin No.2) / I/O-2 (Pin No.3)	
For I/O-1 (Pin No. 2)		For I/O-2 (Pin No.3)		1/0-1 (Fill No.2) / 1/0-2 (Fill No.3)	
0H		ОН		FrameTriggerWait	
(initial setting)	-	ОП	-	(initial setting for I/O-1)	
1H	Set Value	1H	Set Value	UserOutput	
211		2H		ExposureActive	
2H	-	(initial setting)		(initial setting for I/O-2)	
3H	-	3H	-	TriggerAuxiliary	
4H	-	4H		TriggerInternal	
5H	-	5H		SensorReadOut	
6H	-	6H		StrobeSignal	
7H-FH	-	7H-FH	-	For Test Use Only	

Note: I/O-1 can only be assigned by FOH [3..0] and F1[3], and I/O-2 can only be assigned by F0H[7..4] and F1[4].



1) FrameTriggerWait

The user can check the camera condition (camera exposure and image output processing by the trigger signal with this FrameTriggerWait signal).

This signal is LOW for the period from the trigger input signal to the image output.

- a) High status (3.3V): No processing by the trigger signal. The camera accepts the trigger signal.
- b) Low status (0V): The camera is exposed and the image output processes by the trigger signal.

The camera default setting is the input trigger signal is INVALID while at the low status of this signal. When the exposure starts while the image output by the next trigger signal, please change the camera setting (Device code: 00H, Command No. :13H) to accept the trigger signal while the image outputs.

The noise appears on the image when the exposure begins while the image is output. The noise appears on the image when the start exposure while the image is output. In this case, please change the "H reset" for the exposure start mode (Device code: 00H, Command No.: 12H) to change the exposure start point to the next HD timing.

2) UserOutput

The status of the UserOutput signal can change with the "UserOutputValue".

3) ExposureActive

The user can check the exposure time with the ExposureActive signal.

4) TriggerAuxiliary

The TriggerAuxiliary signal is the input trigger signal.

5) TriggerInternal

The TriggerInternal signal is the input trigger signal with the trigger delay time.

6) SensorReadOut

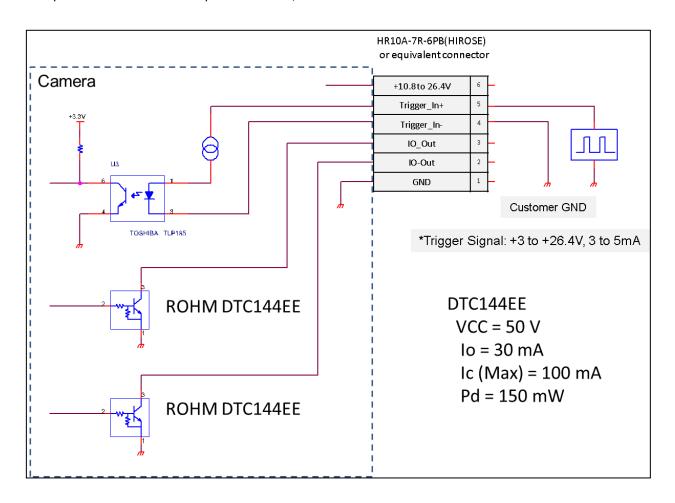
The SensorReadOut signal is the FVAL signal, which is the image output period of the time.

7) StrobeSignal

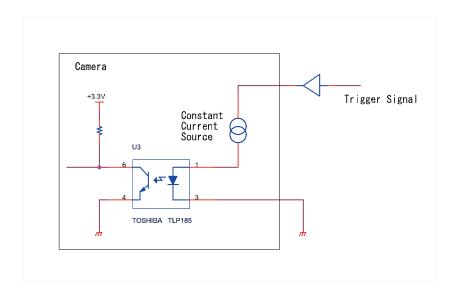
The StrobeSignal signal is the strobe control signal.



3. Equivalent Circuit for the Input Pin of the I/O Connector

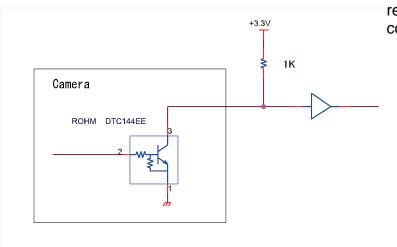


a. Typical Input Circuit



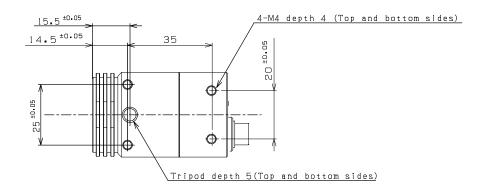


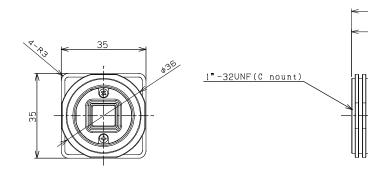
b. Typical Output Circuit

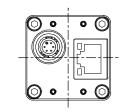


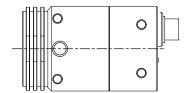
Note; Vcc and pull-up resistor can be configurable.

IV. Dimensions









64.5 55.9

Unit: mm



Revisions

Rev	Date	Changes	Note
1.0	August 13, 2012	New document	
1.02	October 12, 2012	Updated:	
		Vertical Frequency	
		Operational Temperature	
		Power-I/O Pin Assignment	
		Equivalent Circuit for the Input Pin of the I/O Connector	
1.03	December 7, 2012	Updated:	
		Power Consumption, Lux, Description of Exposure Time	
		Pin, IO Signal Patterns, Equivalent Circuit	
1.04	January 21, 2013	Updated:	
		Added Ethernet Cable Holes to III.	
1.06	May 10, 2013	Updated:	
		Added Typical Input Circuits	