



2026

User Manual for EHD ITR, MaxCam cooled Scientific Cameras



EHD imaging GmbH

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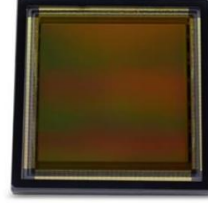
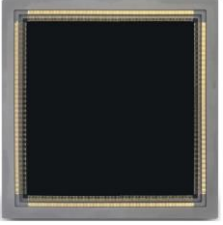
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1 Product List

1.1 Scientific High Sensitivity Camera Specifications(9)

1.1.1 sMAX Series(7)

Sensor	GSENSE2020BSI 	GSENSE4040 	GSENSE4040BSI 
Camera model	SC2020UV-ITR	MaxCam-4040FI-TE	MaxCam-4040UV-TE
Pixel size	6.5μm x 6.5μm	9μm x 9μm	9μm x 9μm
Sensor size	1.2"	3.2"	3.2"
Resolution	2048 x 2048 1024 x 1024(bin 2x2)	4096 x 4096 2048 x 2048 (bin 2x2)	4096 x 4096 2048 x 2048 (bin 2x2)
Spectral range	200nm-1100nm	300nm-1000nm	200nm-1100nm
QE	95%@560nm	74%@600nm	90%@550nm
Data Format	8bit / 11bit / 12bit / 16bit	8bit / 12bit / 16bit	8bit / 12bit / 16bit
Target application	Fluorescence imaging Spectral analysis Gene sequencing Semiconductor inspection	Fluorescence imaging Spectral analysis Astro observation	Fluorescence imaging Spectral analysis Astro observation Semiconductor inspection

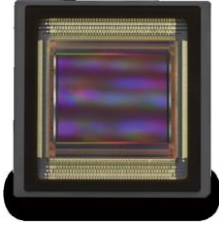
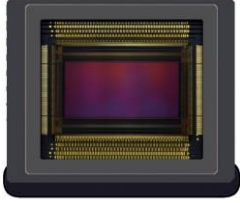
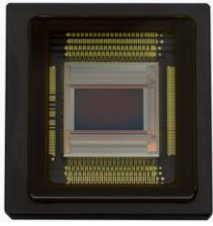
1.1.2 sCCD Series(1)

Sensor	E2V CCD261 
Camera model	SC01AM-TE Coming soon
Pixel size	15μm x 15μm
Sensor size	30.7mm x 4.0mm
Resolution	2048 x 264
Spectral range	250nm-1050nm
QE	95%@800nm
Data Format	8bit / 16bit
Target application	Raman spectra detection Photoluminescence / Fluorescence Hyperspectral imaging

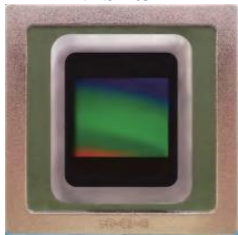
1.1.3 sNIRII Series(1)

Sensor	Nationally produced InGaAs Image sensor
Camera model	EHD-NIRII640A-U3-10G Coming soon
Pixel size	15μm x 15μm
Sensor size	3/4"
Resolution	640 x 512
Spectral range	900nm-1700nm
QE	TBD
Data Format	8bit / 16bit
Target application	Near-infrared II-region in vivo microscopy imaging

1.2 Scientific High Speed Camera Specifications(6)

Sensor	GSPRINT4521 	GSPRINT4510 	GSPRINT4502 
Camera model	MaxCam-4521C/M-TE Coming soon	MaxCam-4510C/M-TE Coming soon	MaxCam-4502C/M-TE Coming soon
Pixel size	4.5μm x 4.5μm	4.5μm x 4.5μm	4.5μm x 4.5μm
Sensor size	1.86"	1.44"	0.67"
Resolution	5120 x 4096 2560 x 2048(bin 2x2)	4608 x 2176 2304 x 1088 (bin 2x2)	2048 x 1216 1024 x 608 (bin 2x2)
Spectral range	300nm-1100nm	300nm-1100nm	300nm-1100nm
QE	62.8%@520nm (Mono)	63%@550nm (Mono)	65.7%@550nm (Mono)
Data Format	8bit / 10bit / 12bit	8bit / 10bit / 12bit	8bit / 10bit / 12bit
Target application	High speed industrial inspection High-end photography industry	High speed industrial inspection High-end photography industry	High speed industrial inspection High-end photography industry

1.3 Scientific High Resolution Camera Specifications(1)

Sensor	VPS2163A 
Camera model	MaxCam-2163M-TE Coming soon
Pixel size	0.5μm x 0.5μm
Sensor size	1.08"
Resolution	20480 x 27200
Spectral range	TBD
QE	TBD
Data Format	8bit / 10bit
Target application	Microscopic observation of cells or organisms

2 High Sensitivity Camera Specification(9)

2.1 SC2020UV-ITR

Table 2-1 SC2020UV-ITR camera specifications

Parameter		Model	SC2020UV-ITR	SC2020UV-ITR-U100	SC2020UV-ITR-CL100
Camera					
Sensor model			GSENSE2020BSI		
Sensor type			CMOS		
Spectral range			200nm - 1100nm		
pixel size			6.5 μm x 6.5 μm		
Target size			1.2"		
Resolution			2048 x 2048 1024 x 1024(bin 2x2)		
Frame Rate			72.5fps@2048x2048 72.5fps@1024x1024	89fps@2048x2048 100fps@1024x1024	108fps@2048x2048 108fps@1024x1024
Memory			512MB (4Gb)		
Conversion gain	11bit		1.03		
	12bit		0.42(HCG) 13.33(LCG)		
	12bit CMS		0.43		
	12bit Global reset		0.44(HCG) 1.92(LCG)		
	HDR 11HL		0.58		
	HDR 12HL		0.54		
Dynamic Range	11bit		61.38dB		
	12bit		59.73dB(HCG) 67.17dB(LCG)		
	12bit CMS		64.12dB		
	12bit Global reset		58.63dB(HCG) 61.27dB(LCG)		
	HDR 11HL		91.83dB		
	HDR 12HL		86.02dB		
Read noise	11bit		1.69e-		
	12bit		1.72e-(HCG) 23.25e-(LCG)		
	12bit CMS		1.07e-		
	12bit Global reset		2.08e-(HCG) 6.62e-(LCG)		
	HDR 11HL		0.97e-		
	HDR 12HL		1.78e-		
Full well charge	11bit		1.98ke-		
	12bit		1.67ke-(HCG) 53.07ke-(LCG)		
	12bit CMS		1.71ke-		
	12bit Global reset		1.78ke-(HCG) 7.66ke-(LCG)		
	HDR 11HL		37.85ke-		
	HDR 12HL		35.56ke-		
SNR	11bit		32.97dB		
	12bit		32.22dB(HCG) 47.25dB(LCG)		
	12bit CMS		32.34dB		
	12bit Global reset		32.49dB(HCG) 38.85dB(LCG)		
	HDR 11HL		45.78dB		
	HDR 12HL		45.51dB		
Sensitivity			1.1x10 ⁸ e-/((W/m ²).s)@550nm		
Dark current			Typical: 0.45e-/s/pix@ -30°C die temp		
QE			95%@560nm		
Exposure time range			12us-300s	12us-10s	12us-10s
Gain Range			1x – 21x	1x	1x – 21x
Shutter mode			Rolling shutter / Global reset		
Binning mode			Software 2x2, 3x3, 4x4, Hardware FPGA 2x2		
Data interface			USB3.0	USB3.0	CameraLink
Digital I/O			One optical-coupling isolated input, one optical-coupling isolated output, tow non-isolated input and output		
Data Format			8bit / 11bit / 12bit / 16bit		
Cooling temperature difference			Below room temperature 40 degrees Celsius		

General parameters	
Power supply	DC12V power supply
Power consumption	<25W
Temperature	Working temperature -30 ~ 60 ℃, storage temperature - 40 ~ 85 ℃
Humidity	20%-80% , non-condensing
Size	80*80*101.5
Weight	860g
Lens mount	C-mount interface
Software	Provide Complete SDK (software development kit) / EHDView / SDK development kit and CL View software based on Delsa acquisition card

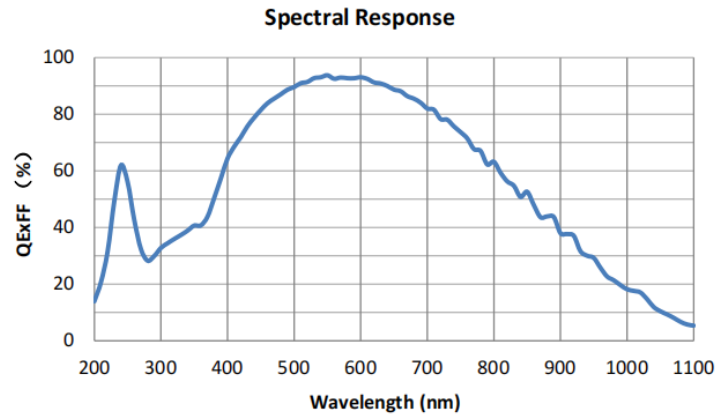


Figure 1 The spectral QE of GSENSE2020BSI

2.2 MaxCam-4040FI-TE

Table 2-2 MaxCam4040FI-TE camera specifications

Model		MaxCam-4040FI-TE MaxCam-4040FI-TE-GPS
Parameter		
Camera		
Sensor model		GSENSE4040
Sensor type		CMOS
Spectral range		300nm - 1000nm
pixel size		9 μm x 9 μm
Target size		3.2"
Resolution		4096 x 4096 2048 x 2048 (bin 2x2)
Frame Rate	USB3	20fps@4096x4096, 80fps@2048x2048
	CameraLink	23fps@4096x4096, 90fps@2048x2048
Memory		1024MB (8Gb)
Conversion gain	12bit	0.86e-/DN(HCG 16.5x) 20.94e-/DN (LCG 2.8x)
	12bit Global reset	TBD
	HDR16	0.94e-/DN
Dynamic Range	12bit	58.5dB(HCG 16.5x) 67.5dB(LCG 2.8x)
	12bit Global reset	TBD
	HDR16	82.5dB
Read noise	12bit	4.06e-(HCG 16.5x) 35.61e-(LCG 2.8x)
	12bit Global reset	TBD
	HDR16	4.59e-
Full well charge	12bit	3.45ke-(HCG 16.5x) 84.33ke-(LCG 2.8x)
	12bit Global reset	TBD
	HDR16	61.49ke-
SNR	12bit	35.4dB(HCG 16.5x) 49.3dB(LCG 2.8x)
	12bit Global reset	TBD
	HDR16	47.9dB
Sensitivity		23.82 V/(lux-s)@600nm
Dark current		0.15e-/s/pix
QE		74% @ 600nm
Dark signal inhomogeneity		0.5e-
Optical signal inhomogeneity		0.2%
Exposure time range		12us-3600s
Gain Range		1x – 16.5x
Shutter mode		Rolling shutter / Global reset
Binning mode		Software 2x2, 3x3, 4x4, Hardware 2x2
Data interface		USB3.0 / CameraLink
Digital I/O		One optical-coupling isolated input, one optical-coupling isolated output, tow non-isolated input and output
Data Format		8bit / 12bit / 16bit
Cooling temperature difference		Below room temperature 40 degrees Celsius
General parameters		
Power supply		DC19V 4.74A power supply
Power consumption		TEC ON: 58.7W; TEC OFF: 16.2W; TEC OFF + CameraLink Only: 8.2W
Temperature		Working temperature -30 ~ 45 ℃, storage temperature - 40 ~ 60 ℃
Humidity		0-95%
Size		100*100*127.7
Weight		1317g
Lens mount		M54 x 0.75
Software		EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK		C, C++, C#, Python
Operating system		Windows, Linux

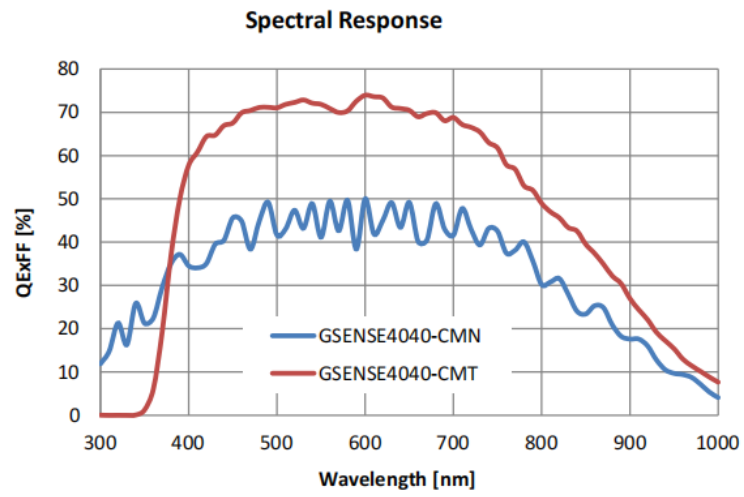


Figure 2 The spectral QE of GSENSE4040

2.3 MaxCam-4040UV-TE

Table 2-3 MaxCam-4040UV-TE camera specifications

Model		MaxCam-4040UV-TE MaxCam-4040UV-TE-GPS
Parameter		
Camera		
Sensor model		GSENSE4040BSI
Sensor type		CMOS
Spectral range		200nm - 1100nm
pixel size		9 μm x 9 μm
Target size		3.2"
Resolution		4096 x 4096 2048 x 2048 (bin 2x2)
Frame Rate	USB3	20fps@4096x4096
	CameraLink	23fps@4096x4096
Memory		1024MB (8Gb)
Conversion gain	12bit	0.35e-/DN(HCG 12x) 10.42e-/DN(LCG 3x)
	12bit Global reset	TBD
	HDR16	TBD
Dynamic Range	12bit	55.0dB(HCG 12x) 62.4dB(LCG 3x)
	12bit Global reset	TBD
	HDR16	TBD
Read noise	12bit	4.06e-(HCG 12x) 35.61e-(LCG 3x)
	12bit Global reset	TBD
	HDR16	TBD
Full well charge	12bit	1.30ke-(HCG 12x) 39.2ke-(LCG 3x)
	12bit Global reset	TBD
	HDR16	TBD
SNR	12bit	30.7dB(HCG 12x) 45.9dB(LCG 3x)
	12bit Global reset	TBD
	HDR16	TBD
Sensitivity		26.58 V/(lux-s)@550nm
Dark current		0.15e-/s/pix
QE		90% @ 550nm
Dark signal inhomogeneity		0.5e-
Optical signal inhomogeneity		0.2%
Exposure time range		12us-3600s
Gain Range		1x – 12x
Shutter mode		Rolling shutter / Global reset
Binning mode		Software 2x2, 3x3, 4x4
Data interface		USB3.0 / CameraLink
Digital I/O		One optical-coupling isolated input, one optical-coupling isolated output, tow non-isolated input and output
Data Format		8bit / 12bit / 16bit
Cooling temperature difference		Below room temperature 40 degrees Celsius
General parameters		
Power supply		DC19V 4.74A power supply
Power consumption		TEC ON: 58.7W; TEC OFF: 16.2W; TEC OFF + CameraLink Only: 8.2W
Temperature		Working temperature -30 ~ 45 ℃, storage temperature - 40 ~ 60 ℃
Humidity		0-95%
Size		100*100*127.7
Weight		1317g
Lens mount		M54 x 0.75
Software		EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK		C, C++, C#, Python
Operating system		Windows, Linux

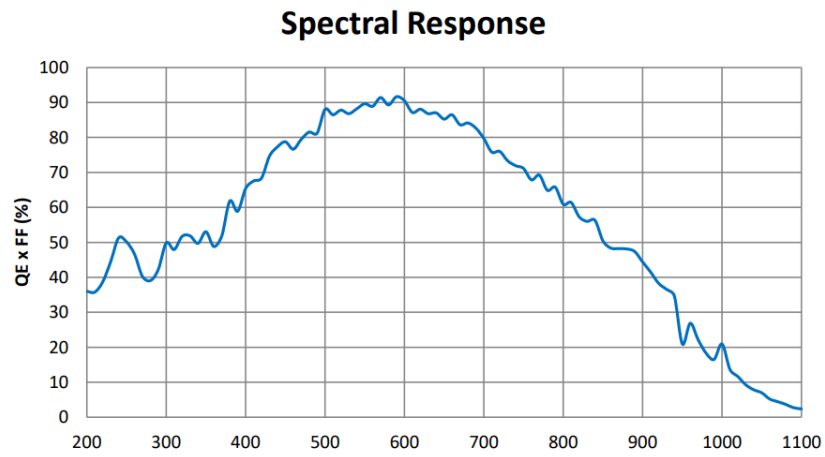


Figure 3 The spectral QE of GSENSE4040BSI

2.4 SC01AM-TE

Table 2-4 SC01AM-TE camera specifications

Parameter	Model
	sCCD01AM
	Camera
Sensor model	E2V CCD261
Sensor type	CCD
Spectral range	300nm - 1000nm
pixel size	15 μm x 15 μm
Target size	30.7mm x 4.0mm
Resolution	TBD@2048 x 264
Memory	512MB (4Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	3e- rms
Full well charge	75ke-
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	95% @ 800nm
Dark signal inhomogeneity	TBD
Optical signal inhomogeneity	TBD
Exposure time range	≤ 60 mins
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / GigE
Digital I/O	TBD
Data Format	8bit / 16bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 $^{\circ}\text{C}$, storage temperature - 40 ~ 60 $^{\circ}\text{C}$
Humidity	0-95%
Size	100*80*79.25
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

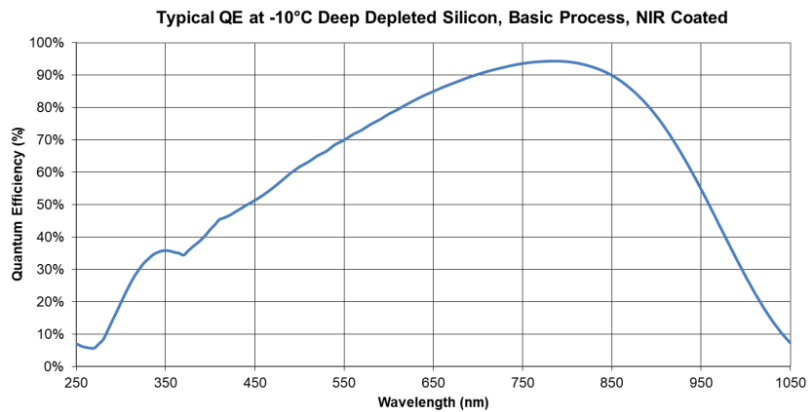


Figure 4 The spectral QE of CCD261

2.5 EHD-NIRII-640A-U3-10G

Table 2-5 EHD-NIRII-640A-U3-10G camera specifications

Parameter	Model
	sNIRII640A-U3-10G
	Camera
Sensor model	Nationally produced InGaAs Image sensor
Spectral range	900nm - 1700nm
pixel size	15 μm x 15 μm
Target size	3/4"
Resolution	TBD@640 x 512
Memory	512MB (4Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	75ke-
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	TBD
Dark signal inhomogeneity	TBD
Optical signal inhomogeneity	TBD
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / 10GigE
Digital I/O	TBD
Data Format	8bit / 16bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 $^{\circ}\text{C}$, storage temperature - 40 ~ 60 $^{\circ}\text{C}$
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

3 High Speed Camera Specification(6)

3.1 MaxCam-4521C-TE

Table 3-1 MaxCam-4521C-TE-U3-CXP camera specifications

Parameter	Model
	MaxCam-4521C-TE
	Camera
Sensor model	GSPRINT4521
Sensor type	CMOS
Spectral range	300nm-1100nm
pixel size	4.5μm x 4.5 μm
Target size	1.86"
Resolution	TBD@5120 x 4096 TBD@2560 x 2048(bin 2x2)
Memory	1024MB (8Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	TBD
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	TBD
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / CXP
Digital I/O	TBD
Data Format	8bit / 10bit / 12bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

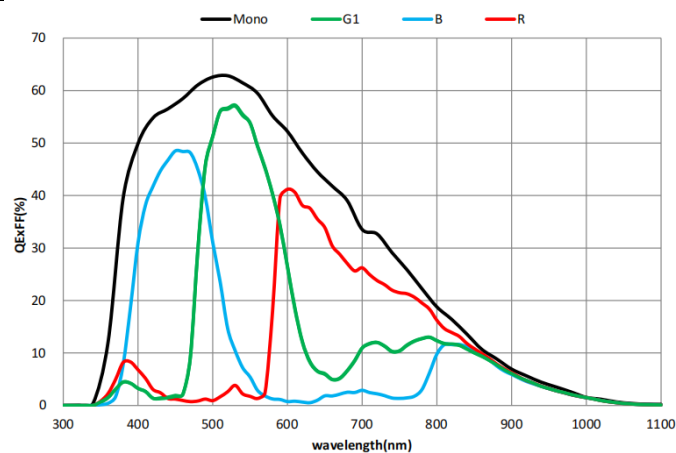


Figure 5 The spectral QE of GSPRINT4521

3.2 MaxCam-4521M-TE

Table 3-2 MaxCam-4521M-TE-U3-CXP camera specifications

Parameter	Model
	MaxCam-4521M-TE
	Camera
Sensor model	GSPRINT4521
Sensor type	CMOS
Spectral range	300nm-1100nm
pixel size	4.5μm x 4.5 μm
Target size	1.86"
Resolution	TBD@5120 x 4096 TBD@2560 x 2048(bin 2x2)
Memory	1024MB (8Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	TBD
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	62.8%@520nm (Mono)
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / CXP
Digital I/O	TBD
Data Format	8bit / 10bit / 12bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

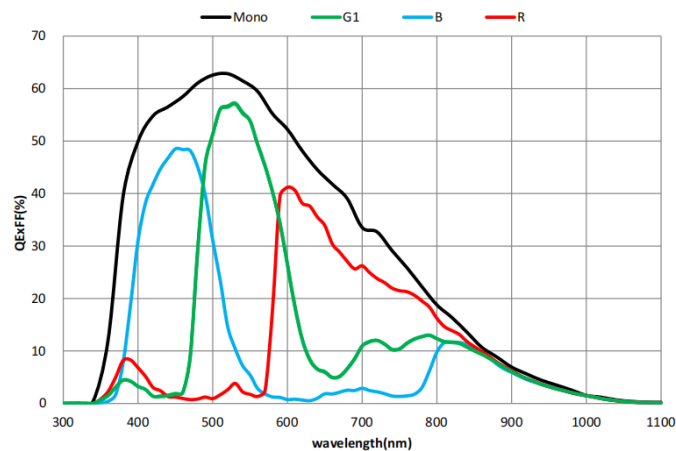


Figure 6 The spectral QE of GSPRINT4521

3.3 MaxCam-4510C-TE

Table 3-3 MaxCam-4510C-TE-U3-CXP camera specifications

Parameter	Model
	MaxCam-4510C-TE
	Camera
Sensor model	GSPRINT4510
Sensor type	CMOS
Spectral range	300nm-1100nm
pixel size	4.5μm x 4.5 μm
Target size	1.44”
Resolution	TBD@4608 x 2176 TBD@2304 x 1088 (bin 2x2)
Memory	1024MB (8Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	TBD
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	TBD
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / CXP
Digital I/O	TBD
Data Format	8bit / 10bit / 12bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

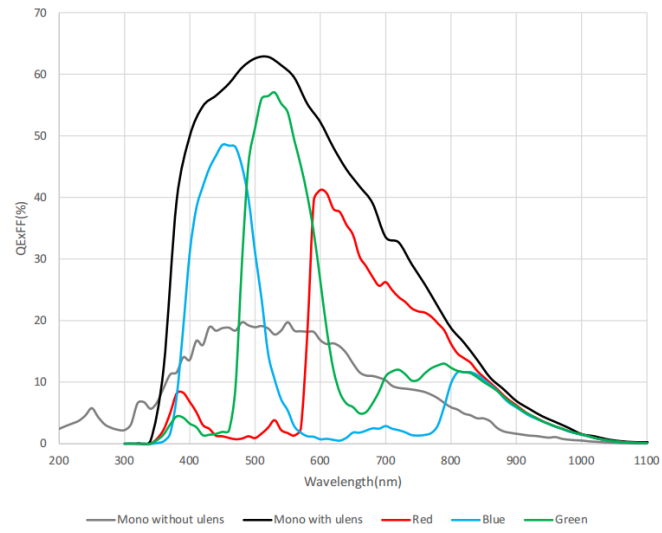


Figure 7 The spectral QE of GSPRINT4510

3.4 MaxCam-4510M-TE

Table 3-4 MaxCam-4510M-TE-U3-CXP camera specifications

Parameter	Model
	MaxCam4510M-TE
	Camera
Sensor model	GSPRINT4510
Sensor type	CMOS
Spectral range	300nm-1100nm
pixel size	4.5μm x 4.5 μm
Target size	1.44”
Resolution	TBD@4608 x 2176 TBD@2304 x 1088 (bin 2x2)
Memory	1024MB (8Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	TBD
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	63%@550nm (Mono)
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / CXP
Digital I/O	TBD
Data Format	8bit / 10bit / 12bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

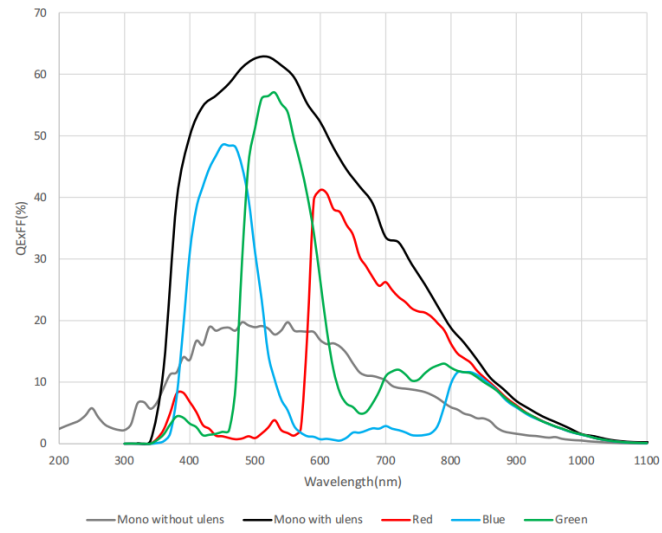


Figure 8 The spectral QE of GSPRINT4510

3.5 MaxCam-4502C-TE

Table 3-5 MaxCam-4502C-TE-U3-CXP camera specifications

Parameter	Model
	MaxCam-4502C-TE
	Camera
Sensor model	GSPRINT4502
Sensor type	CMOS
Spectral range	300nm-1100nm
pixel size	4.5μm x 4.5 μm
Target size	0.67”
Resolution	TBD@2048 x 1216 TBD@1024 x 608 (bin 2x2)
Memory	1024MB (8Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	TBD
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	TBD
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / CXP
Digital I/O	TBD
Data Format	8bit / 10bit / 12bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
	General parameters
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

3.6 MaxCam-4502M-TE

Table 3-6 MaxCam-4502M-TE-U3-CXP camera specifications

Parameter	Model
MaxCam-4502M-TE	
Camera	
Sensor model	GSPRINT4502
Sensor type	CMOS
Spectral range	300nm-1100nm
pixel size	4.5μm x 4.5 μm
Target size	0.67"
Resolution	TBD@2048 x 1216 TBD@1024 x 608 (bin 2x2)
Memory	1024MB (8Gb)
Conversion gain	TBD
Dynamic Range	TBD
Read noise	TBD
Full well charge	TBD
SNR	TBD
Sensitivity	TBD
Dark current	TBD
QE	65.7%@550nm (Mono)
Exposure time range	TBD
Gain Range	TBD
Shutter mode	TBD
Binning mode	Software 2x2, 3x3, 4x4
Data interface	USB3.0 / CXP
Digital I/O	TBD
Data Format	8bit / 10bit / 12bit
Cooling temperature difference	Below room temperature 40 degrees Celsius
General parameters	
Power supply	DC19V 4.74A power supply
Power consumption	TBD
Temperature	Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity	0-95%
Size	TBD
Weight	TBD
Lens mount	TBD
Software	EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK	C, C++, C#, Python
Operating system	Windows, Linux

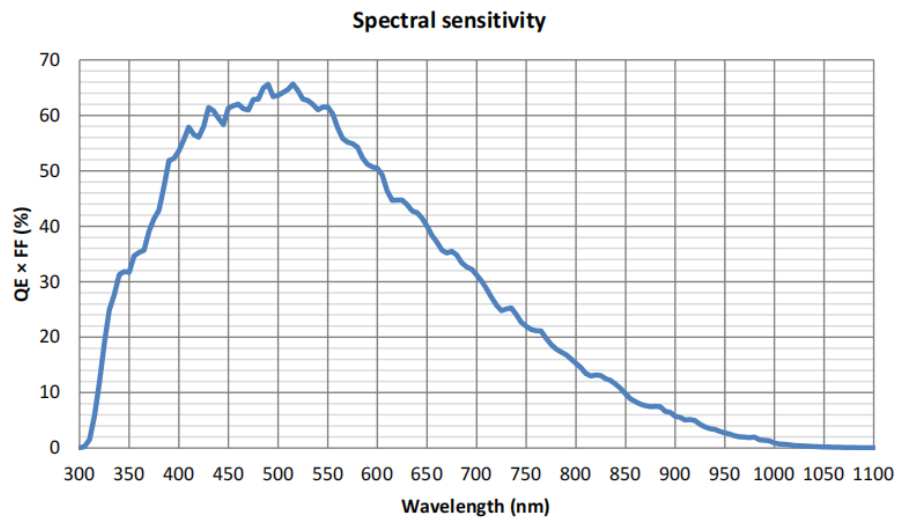


Figure 9 The spectral QE of GSPRINT4502

4 High Resolution Camera Specification(1)

4.1 MaxCam-2163M-TE

Table 4-1 SR600MMA camera specifications

Parameter	Model	SR600MMA
Camera		
Sensor model		VPS2163A
Sensor type		CMOS
Spectral range		300nm-1100nm
pixel size		0.5μm x 0.5 μm
Target size		1.08"
Resolution		20480 x 27200
Inter-frame space		6s
Memory		512MB (4Gb)
Conversion gain		TBD
Dynamic Range		TBD
Read noise		TBD
Full well charge		TBD
SNR		TBD
Sensitivity		TBD
Dark current		TBD
QE		TBD
Exposure time range		TBD
Gain Range		TBD
Shutter mode		Rolling shutter
Binning mode		Software 2x2, 3x3, 4x4
Data interface		USB3.0
Digital I/O		TBD
Data Format		8bit / 10bit
Cooling temperature difference		Below room temperature 40 degrees Celsius
General parameters		
Power supply		DC19V 4.74A power supply
Power consumption		TBD
Temperature		Working temperature -30 ~ 45 °C, storage temperature - 40 ~ 60 °C
Humidity		0-95%
Size		TBD
Weight		TBD
Lens mount		TBD
Software		EHDView, CLView software based on Delsa acquisition card, LabView, MATLAB, etc
SDK		C, C++, C#, Python
Operating system		Windows, Linux

5 Camera Dimension and Interface

5.1 SC2020UV-ITR

5.1.1 Mechanical Housing Dimensions

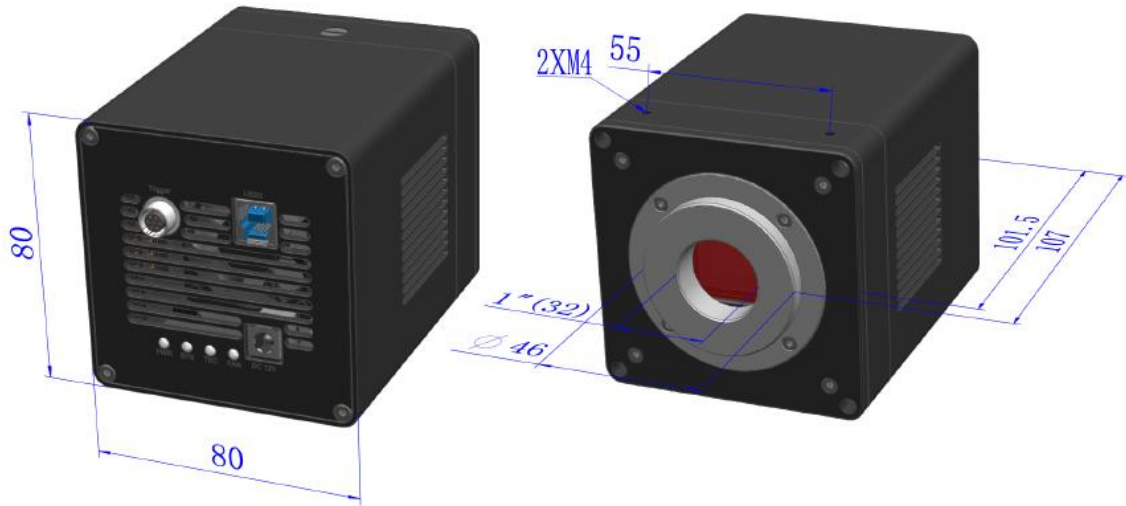


Figure 5-1 SC2020UV-ITR & SC2020UV-ITR-U100

dimensions (mm) **5.1.2 Interface Description**

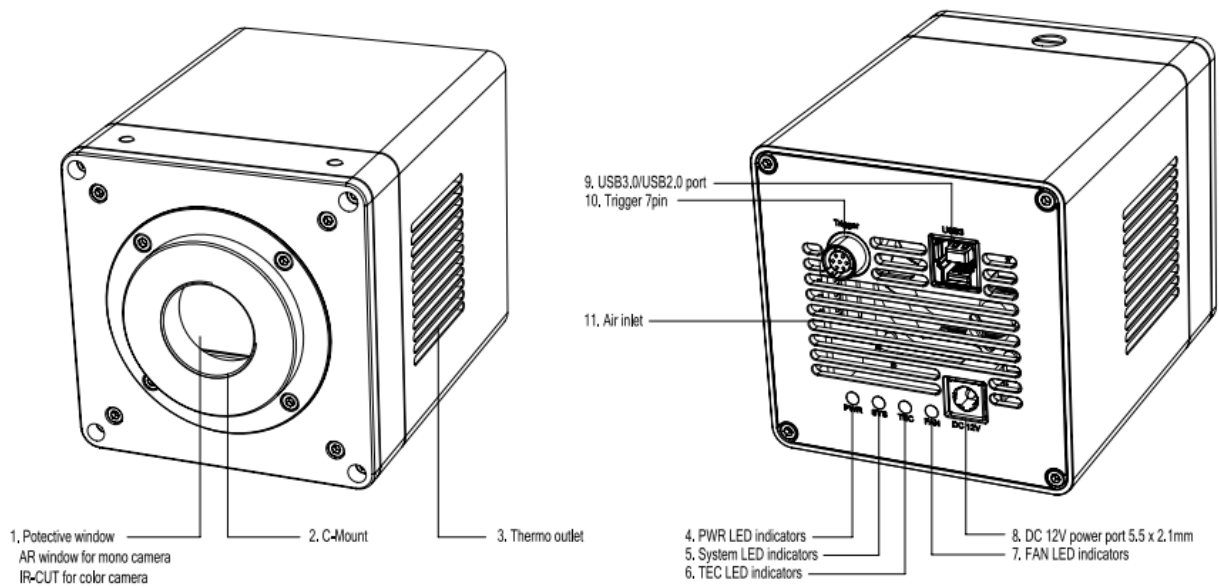


Figure 5-2 SC2020UV-ITR camera interface diagram

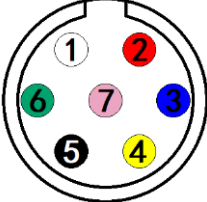
Table 5-1 SC2020UV-ITR Camera interface definition

Item	Specification
1	Filter window, AR window for mono camera
2	C mount
3	Thermo outlet
4	Power LED indicators
5	System LED indicators
6	TEC LED indicators
7	FAN LED indicators

8	DC 12V power port
9	USB 3.0/ USB 2.0 port
10	Trigger 7PIN
11	Air inlet

5.1.3 Power Supply and I/O Connector

Table 5-2 SC2020UV-ITR series pin signal definition

	Color	Pin	Signal	Signal description
	White	1	GND	Direct-coupled signal ground
	Red	2	12V	12VDC power input or output
	Blue	3	OPTO_GND	Opto-isolated signal ground
	Yellow	4	DIR_GPIO0	Direct-coupled General Purpose I/O (Software configurable input/output) (line2)
	Black	5	DIR_GPIO1	Direct-coupled General Purpose I/O (Software configurable input/output) (line3)
	Green	6	OPTO_IN	Opto-isolated input signal (line0)
	Pink	7	OPTO_OUT	Opto-isolated output signal (line1)

5.1.4 Packing Information

Table 5-3 Recommended accessories

Order number	Accessories name	Quantity	Instruction
1	Camera	1	Camera referred in this manual
2	Power adapter	1	Input: AC 100~240V 50Hz/60Hz,output: DC 12V 3A
3	I/O cable	1	7 Pin cable or extended cable
4	Cable	1	USB3.0 cable
5	Lens (optional)	1	C-mount lens

5.2 SC2020UV-ITR-CL100

5.2.1 Mechanical Housing Dimensions

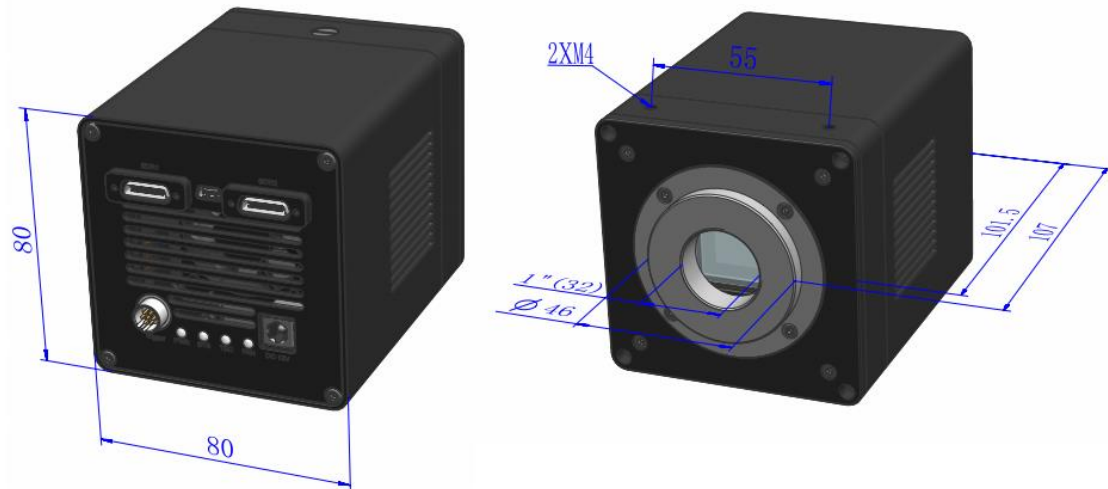


Figure 5-3 SC2020UV-ITR-CL100 dimensions (mm)

5.2.2 Interface Description

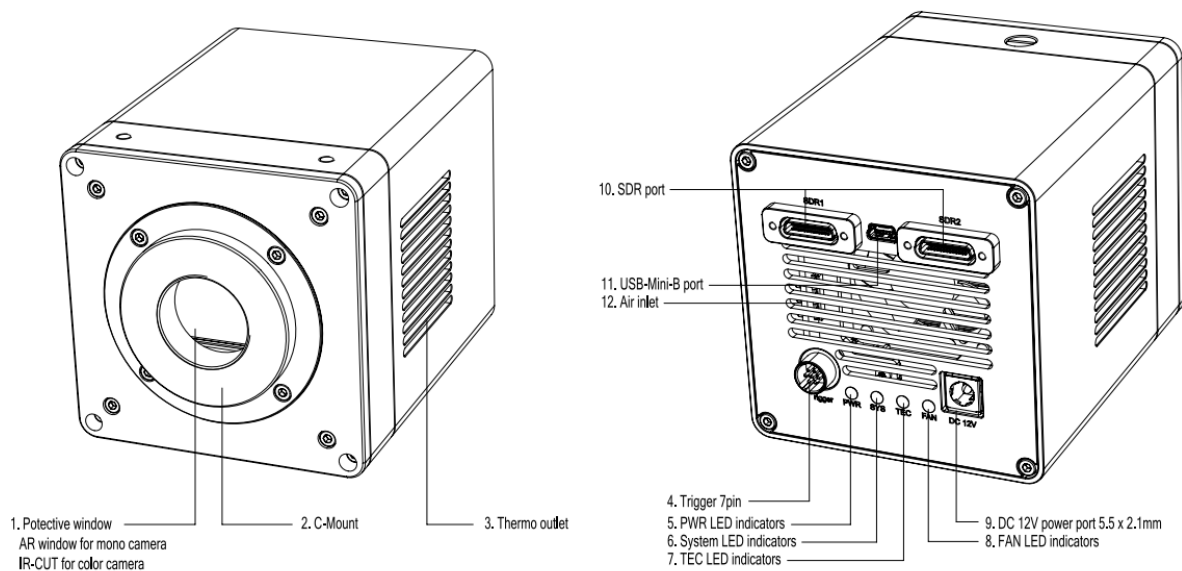


Figure 5-4 SC2020UV-ITR-CL100 Camera interface diagram

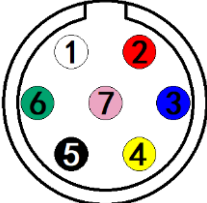
Table 5-4 SC2020UV-ITR-CL100 Camera interface definition

Item	Specification
1	Filter window, AR window for mono camera
2	C mount
3	Thermo outlet
4	Trigger 7PIN
5	Power LED indicators
6	System LED indicators
7	TEC LED indicators
8	FAN LED indicators
9	DC 12V power port, 5.5 × 2.1mm
10	CameraLink port

11	USB-Mini-B port
12	Air inlet

5.2.3 Power Supply and I/O Connector

Table 5-5 SC2020UV-ITR-CL100 series pin signal definition

	Color	Pin	Signal	Signal description
	White	1	GND	Direct-coupled signal ground
	Red	2	12V	12VDC power input or output
	Blue	3	OPTO GND	Opto-isolated signal ground
	Yellow	4	DIR_GPIO0	Direct-coupled General Purpose I/O (Software configurable input/output) (line2)
	Black	5	DIR_GPIO1	Direct-coupled General Purpose I/O (Software configurable input/output) (line3)
	Green	6	OPTO IN	Opto-isolated input signal (line0)
	Pink	7	OPTO OUT	Opto-isolated output signal (line1)

5.2.4 Packing Information

Table 5-6 Recommended accessories

Order number	Accessories name	Quantity	Instruction
1	Camera	1	Camera referred in this manual
2	Power adapter	1	Input: AC 100~240V 50Hz/60Hz,output: DC 12V 3A
3	I/O cable	1	7 Pin cable or extended cable
4	Cable	1	CameraLink cable
5	Lens (optional)	1	C-mount lens

5.3 MaxCam-4040FI-TE & MaxCam-4040UV-TE

5.3.1 Mechanical Housing Dimensions

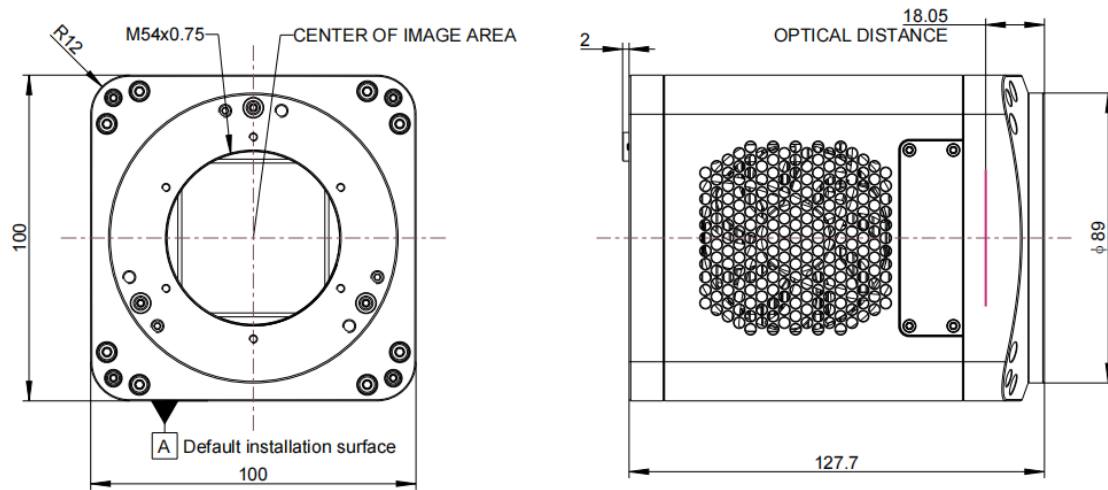


Figure 5-5 MaxCam-4040FI-TE & MaxCam-4040UV-TE dimensions (mm)

5.3.2 Interface Description

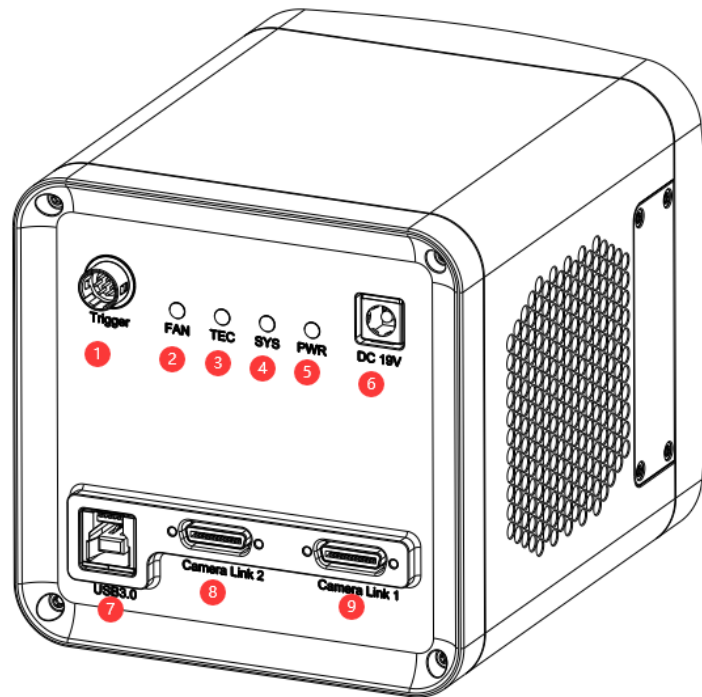


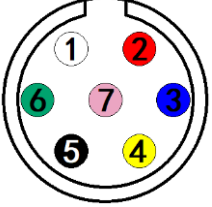
Figure 5-6 MaxCam-4040FI-TE & MaxCam-4040UV-TE Camera interface diagram

Item	Specification
1	Trigger 7PIN
2	FAN LED indicators
3	TEC LED indicators
4	System LED indicators
5	Power LED indicators
6	DC 19V power port
7	USB 3.0 port

Table 5-7 MaxCam-4040FI-TE & MaxCam-4040UV-TE Camera interface definition

5.3.3 Power Supply and I/O Connector

Table 5-8 MaxCam-4040FI-TE & MaxCam-4040UV-TE series pin signal definition

	Color	Pin	Signal	Signal description
	White	1	GND	Direct-coupled signal ground
	Red	2	19V	19VDC power input or output
	Blue	3	OPTO_GND	Opto-isolated signal ground
	Yellow	4	DIR_GPIO0	Direct-coupled General Purpose I/O (Software configurable input/output) (line2)
	Black	5	DIR_GPIO1	Direct-coupled General Purpose I/O (Software configurable input/output) (line3)
	Green	6	OPTO_IN	Opto-isolated input signal (line0)
	Pink	7	OPTO_OUT	Opto-isolated output signal (line1)

5.3.4 Packing Information

Table 5-9 Recommended accessories

Order number	Accessories name	Quantity	Instruction
1	Camera	1	Camera referred in this manual
2	Power adapter	1	Input: AC 100~240V 50Hz/60Hz,output: DC 19V 4A
3	I/O cable	1	7 Pin cable or extended cable
4	Cable	1	USB3.0 and CameraLink cable
5	Lens (optional)	1	C-mount lens

5.4 SC01AM-TE

5.4.1 Mechanical Housing Dimensions

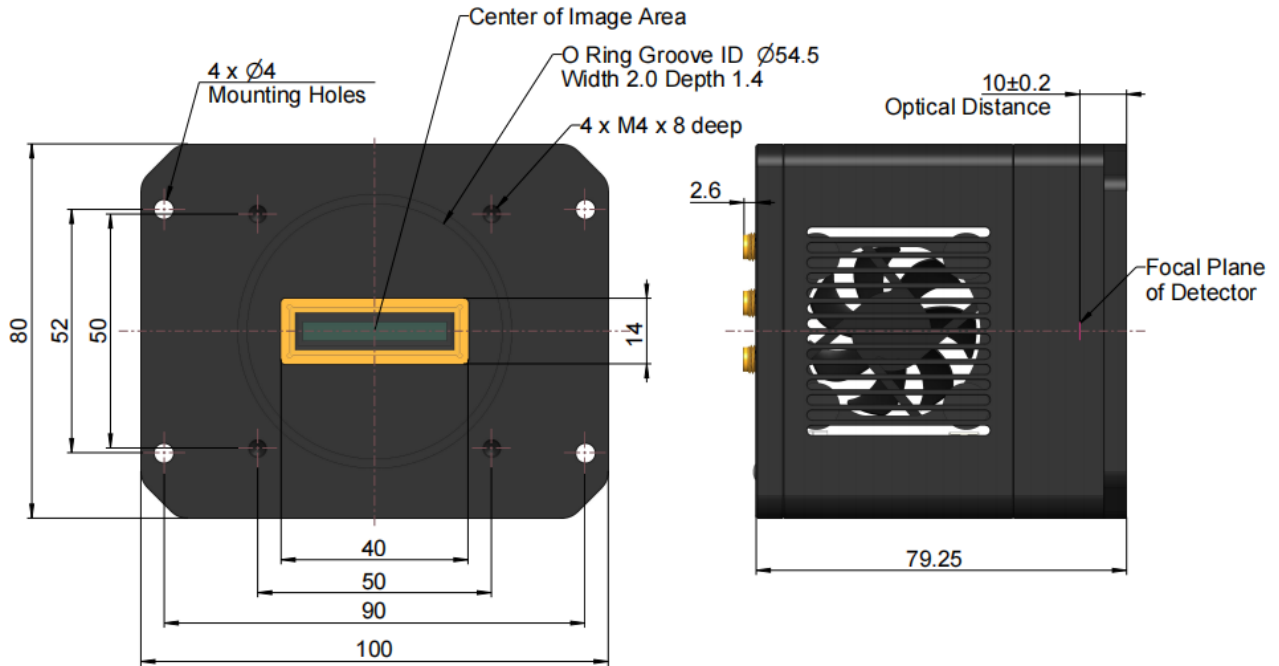


Figure 5-7 SC01AM-TE dimensions (mm)

5.4.2 Interface Description



Figure 5-8 SC01AM-TE Camera interface diagram

Item	Specification
1	DC 19V power port
2	USB 3.0 port
3	GigE port
4	Opto-isolated input
5	Opto-isolated output
6	Opto-isolated output

Table 5-10 SC01AM-TE Camera interface definition

5.4.3 Power Supply and I/O Connector

5.4.4 Packing Information

Table 5-11 Recommended accessories

Order number	Accessories name	Quantity	Instruction
1	Camera	1	Camera referred in this manual
2	Power adapter	1	Input: AC 100~240V 50Hz/60Hz,output: DC 19V 4A
3	I/O cable	1	7 Pin cable or extended cable
4	Cable	1	USB3.0 and GigE cable
5	Lens (optional)	1	

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