

Single Line Scan Camera



2023 V1

For customized projects please Contact us:

sales@simtrum.cn

Single Line Scan Camera

Our single line scan camera series features single line CMOS, and pixel size covering $7\mu\text{m} \times 7\mu\text{m}$ pixel, $5.6\mu\text{m} \times 5.6\mu\text{m}$ pixel and $3.5\mu\text{m} \times 3.5\mu\text{m}$ pixel. Our products have been applied to inspections of print, package, document scanning, logistics sorting and other industrial inspections.

Camera with $7\mu\text{m} \times 7\mu\text{m}$ Pixel Size

Feature

STA8KCL-80KM

- Global shutter CMOS
- Camera link interface
- Horizontal binning: 2x1
- LUT
- High sensitivity and low noise
- Serial port control/GUI configuration tool optional



STA8KCL-80KM

STA8KXGV-80KM

- Global shutter CMOS
- GigE vision interface
- High sensitivity and low noise
- Binning and GUI configuration tool
- SFP+ compatible with optical/electrical port



STA8KXGV-80KM

STA2KGV-80KM

STA8KGV-45KM

- Global shutter CMOS
- GigE vision interface
- High sensitivity and low noise
- LUT/FFC



STA2KGV-80KM



STA8KGV-45KM

Application

STA2KGV-80KM

STA8KGV-45KM

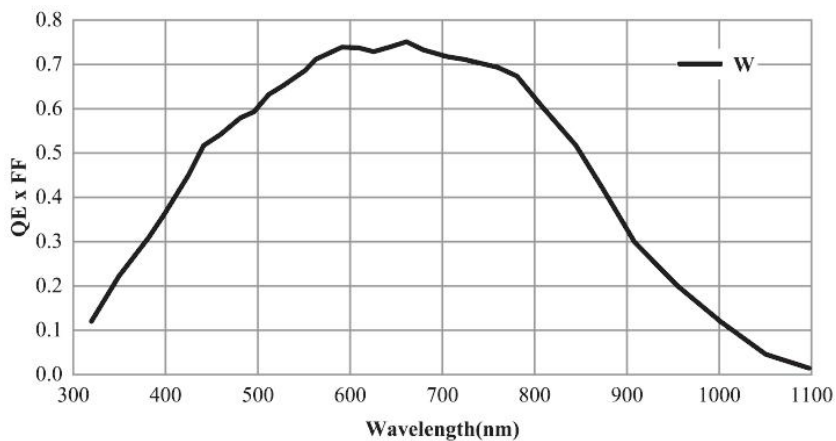
STA8KCL-80KM

- Print and package inspection
- Document scanning/logistics sorting
- Food and medicine inspection
- Plate and web inspection

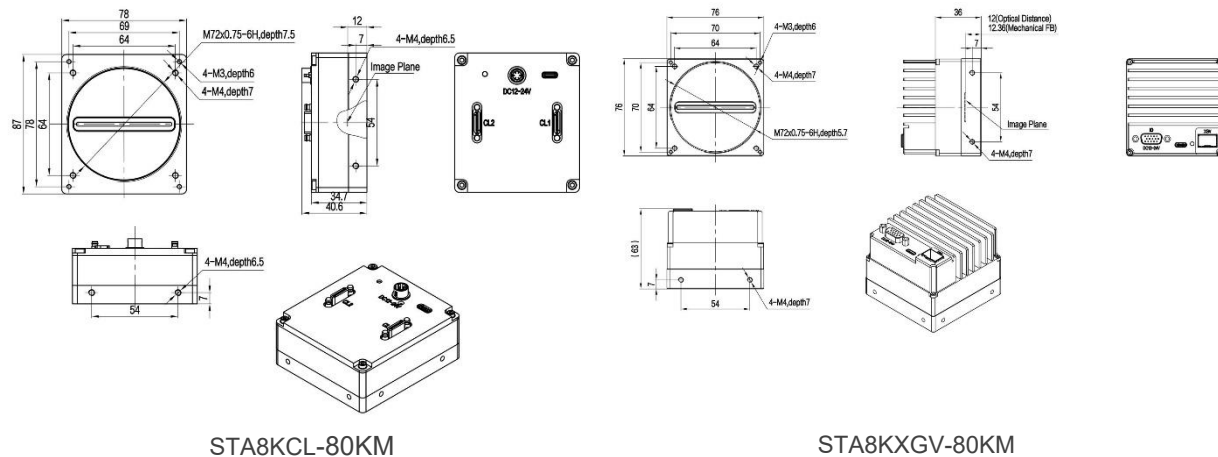
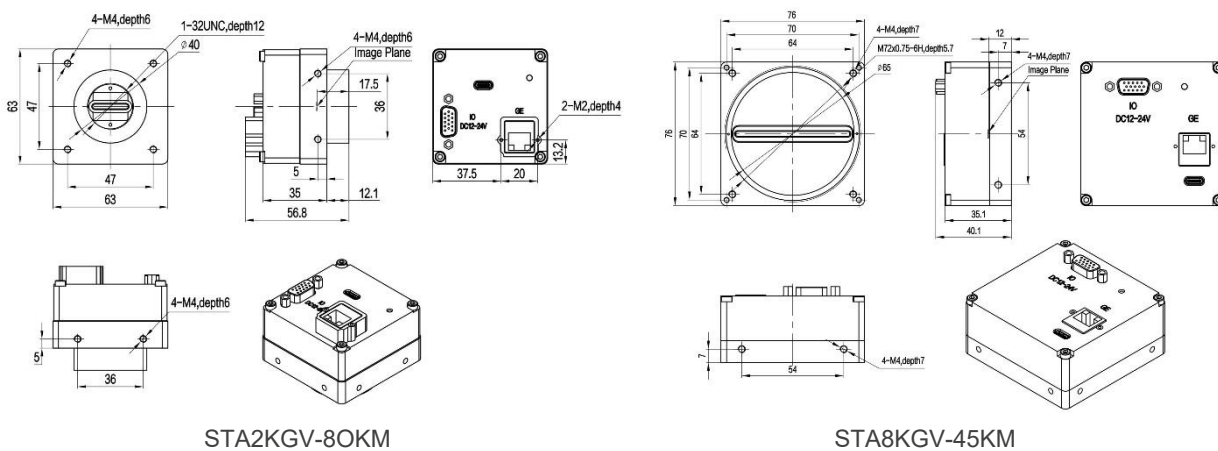
STA8KXGV-80KM

- Printed circuit board inspection
- Flat panel display inspection
- Lithium battery/Solar panel inspection
- Semiconductor inspection
- Plate and web inspection

Spectral response



Drawings



Camera with 5.6μm*5.6μm Pixel Size

Feature

STA15KCL-18KC

- Global shutter CMOS
- Camera link interface
- Bi-directional scanning
- FFC/auto white balance
- High sensitivity and low noise
- Serial port control/GUI configuration tool optional
- Internal trigger/external trigger optional

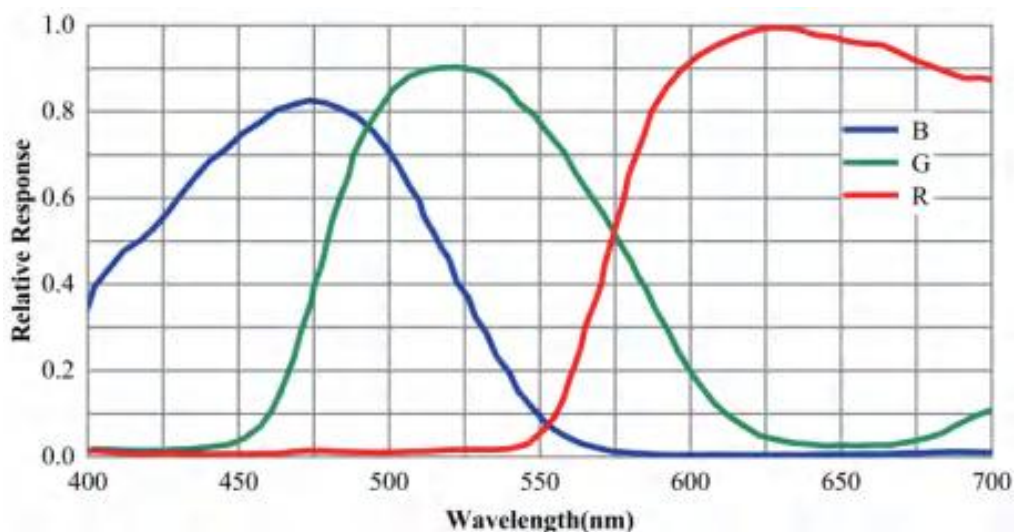


STA15KCL-18KC

Application

- Printed circuit board inspection
- Semiconductor inspection
- Print and package inspection
- Food and medicine inspection

Spectral response



Camera with 3.5 μm*3.5 μm Pixel Size

Feature

STA16KCL-40KM

- Global shutter CMOS
- Camera link interface
- FFC/LUT
- Horizontal binning:2x1
- High sensitivity and low noise



STA16KCL-40KM

STA16KCXP-80KM

- ROI / FFC
- Global shutter CMOS
- Coaxpress interface
- High sensitivity and low noise
- Real time temperature monitoring
- Scanning direction configurable



STA16KCXP-80KM

STA4KGV-80KM

- Global shutter CMOS
- GigE vision interface
- High sensitivity and low noise
- LUT/FFC



STA4KGV-80KM

Application

STA16KCL-40KM

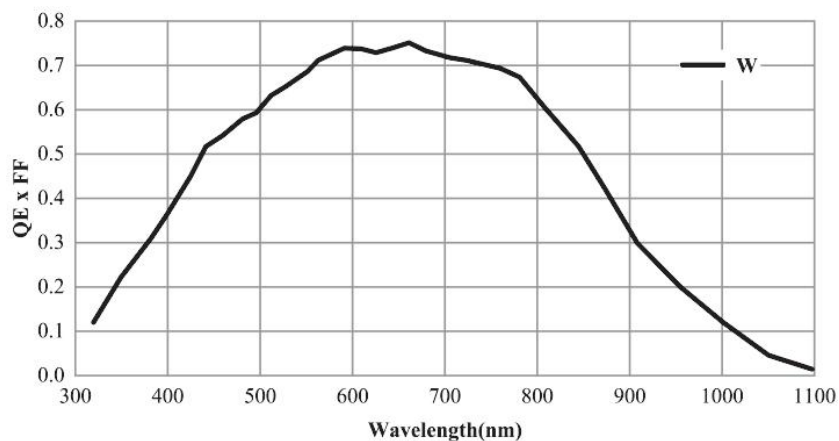
STA16KCXP-80KM

- Printed circuit board inspection
- Flat panel display inspection
- Lithium battery/Solar panel inspection
- Semiconductor inspection
- Plate and web inspection

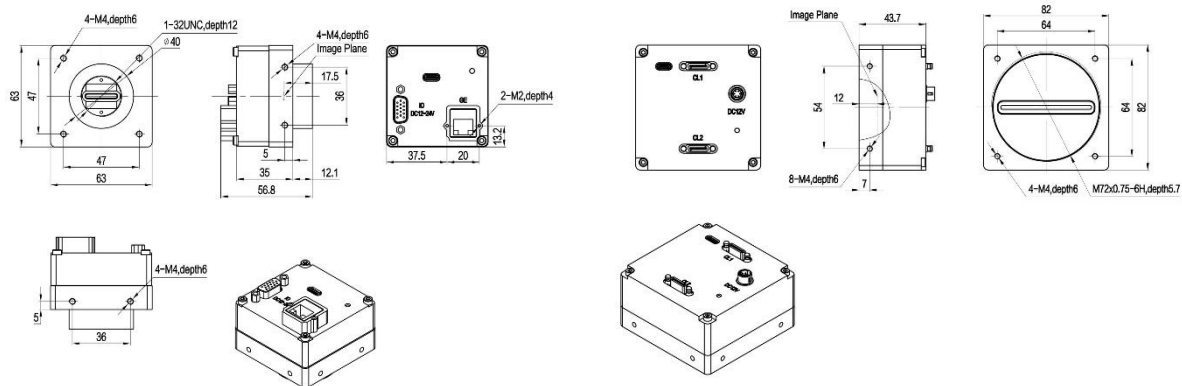
STA4KGV-80KM

- Print and package inspection
- Document scanning/logistics sorting
- Food and medicine inspection
- Plate and web inspection

Spectral response

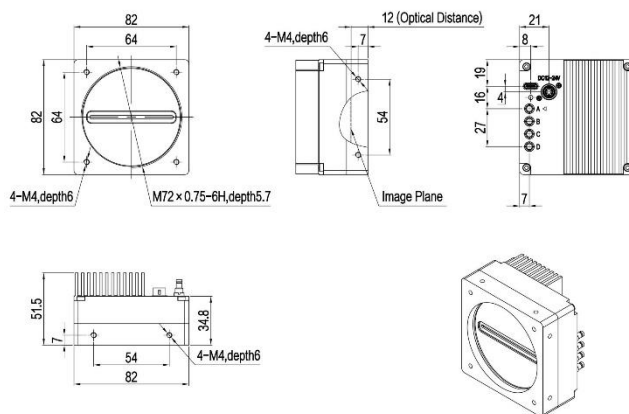


Drawings



STA4KGV-80KM

STA16KCL-40KM



STA16KCXP-80KM

Specifications

Model	STA2KGV-80KM	STA4KGV-80KM	STA8KGV-45KM	STA8KXGV-80KM	STA8KCL-80KM	STA15KCL-18Kc	STA16KCL-40KM	STA16KcXP-80KM
Sensor	Global shutter CMOS							
Image Mode	Mono	Mono	Mono	Mono	Mono	Color	Mono	Mono
Optical Size	14.33mm	14.33mm	57.34 mm	57.34mm	57.34mm	86.38mm	57.34mm	57.34 mm
Resolution	2048*1	4096*1	8192*1	8192*1	8192*1	1/2Tap:15424*3; 3Tap:15420*3	16384*1	16384* 1
Pixel Size	7μm*7μm	3.5μm*3.5μm	7μm*7μm	7μm*7μm	7μm*7μm	5.6μm*5.6μm	3.5μm*3.5μm	3.5μm*3.5μm
Max Line Rate	60kHz (80kHz with SAccel™)	30kHz(80kHz with SAccel™)	15k.Hz(45kHz with SAccel™)	80kHz	80kHz	18kHz@3Tap; 10kHz@2Tap; 5kHz@1Tap	51kHz	80 kHz
Bit Depth	8bit	8bit	8bit	8/10bit	8/10bit	8/10bit	8/10bit	8/10 bit
Dynamic Range	≥54dB	≥54dB	≥54dB	≥66dB	≥69.4dB	≥45dB	≥66dB	≥66 dB
Data Rate	123 MB/s	123 MB/s	123 MB/s	1225MB/s	680MB/s	820MB/s(3Tap)	835MB/s	1638.4 MB/s
Trigger Mode	Free-run/line trigger control/frame trigger control				Free-run/external pulse/external PWM			
Exposure Control	Pulse width/program							
ExposureTime	2.5μs-1s (Step: 0.1μs)	2.5μs-1s (Step: 0.1μs)	2.5μs-1s (Step: 0.1μs)	2μs-0.1s (Step:0.01μs)	2.5μs-10s (Step:0.1μs)	1μs-49998μs (Step:1μs)	2.5μs-1s (Step:0.1μs)	2μs-10s (Step:0.0117μs)
Analog Gain	1/2/4/8x	1/2/4/8x	1/2/4/8x	1/2/4/8x	1/2/4/8x	1/1.67/2/3.34x	1/4x	1/2/4/8x
Digital Gain	0.001-8.000x	0.001-8.000x	0.001-8.000x	0.001-8.000x	0.01-8.00x	0.01-8.00x	0.01-8.00x	0.001-8.000x
Data Interface	GigE Vision	GigE Vision	GigE Vision	10GigE Vision(UsingSFP+)	Camera Link	Camera Link	Camera Link	CoaxPress
Lens Interface	C Mount	C Mount	M72*0.75	M72*0.75	M72*0.75	M95 * 1	M72*0.75	M72*0.75
Power Interface	HD15(Female)				Hirose HR 10A-7R-6PB(Male)			
Power Supply	C12-24V(±10%)0.5A	DC12-24V(±10%)0.5A	DC12-24V(±10%)0.5A	DC12-24V(±10%)0.5A	DC12-24V(±10%)1A	DC12V±10% 2A	DC12-24V(±10%)1A	DC12-24V(±10%)1.5A
Power Dissipation	3.0 W	3.4 W	4.2 W	12.0W	<5.0W	15.0W	6.0W	8.4W
Dimensions (W*H*D)(mm)	63.0x63.0x56.8	63.0x63.0x56.8	76.0x76.0x40.1	76.0x76.0x63.0	78.0x87.0x40.6	120.0x110.0x66.0	82.0x82.0x49.7	82.0x 82.0x51.5
Operating Temperature	0-65℃	0-65℃	0-65℃	0-65℃	0-65℃	0-45℃	0-65℃	0-65℃
Storage Temperature	-20-75℃							