SIMTRUM
理创科技

8K Multi-Line Scan Camera

2023 V1
For customized projects please Contact us:
sales@simtrum.cn

8K Multi-Line Scan Camera

Our 8K multi-line scan camera series features 8K resolution and pixel size coveing 7μm *7μm pixel and 5μm * 5μm pixel. Our products have been applied to inspections of plate and web, railway and traffic,food and medicine, as well as other sorting and appearance inspections.

Camera with Pixel Size 7μm *7μm

Feature

STU8KCL-100KT

- Global shutter CMOS
- Binning/LUT/FFC
- High sensitivity and lownoise
- Spatial correction/rparallax correction
- Scanning direction configurable
- Real-time temperature monitoring
- Digital gain /offset control
- Camera link interface

STU8KCL-100KT

STU8KCXP10-200KT
STU8KCXP10-66KC

- Global shutter CMOS
- High sensitivity and lownoise
- Spatial correction/rparallax correction
- Scanning direction configurable
- Real-time temperature monitoring
- Rich exposure control modes(external trigger, free run)
- Binning/LUT/FFC/automatic white balance
- CoaXPress10 nterface
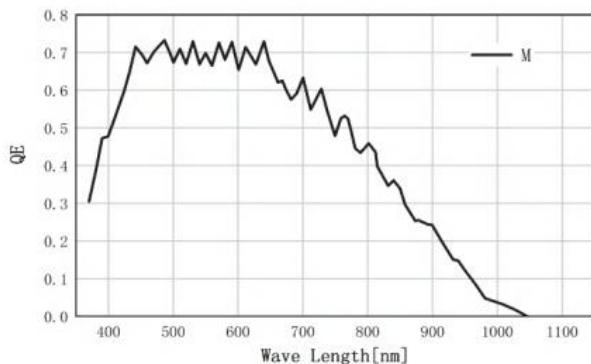
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STU8KCXP10-66KC
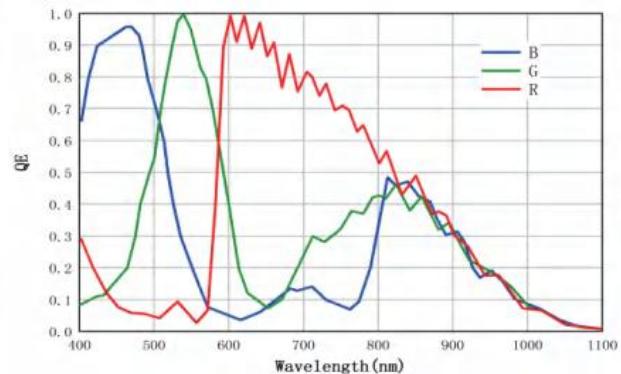
Application

- Plate and web inspection
- Lithium batery/solar panel inspection
- Railway and traffic application
- Food and medicine inspection
- Other sorting and appearance inspections

Spectral response
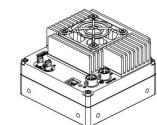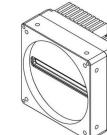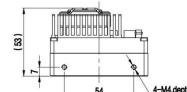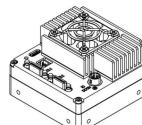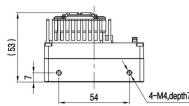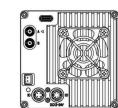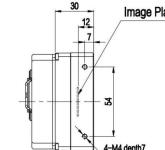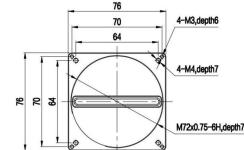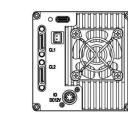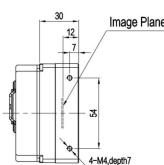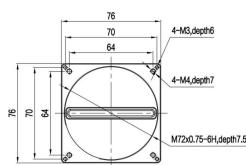

STU8KCL-100KT
STU8KCXP10-200KT

STU8KCXP10-66KC

Drawings

STU8KCL-100KT

STU8KCXP10-66KC
STU8KCXP10-200KT

Camera with Pixel Size 5µm * 5µm

Feature

STL8KCL-30KF

- ROI/FFC
- Global shutter CMOS
- High sensitivity and low noise
- Camera link interface
- Bi-directional scanning technology
- Spatial correction/parallax correction
- Analog gain/digital gain/offset control

STL8KCL-30KF

STL8KCL-50KX

- Global shutter CMOS
- ROI/FFC/LUT
- Support 2/3/4 lamps exposure
- Scanning direction configurable
- High sensitivity(4 lines/Lamp)
- Rich exposure control modes (external trigger,free-run)
- Simplify application system structure

STL8KCL-50KX

STL8KCL-100KT

- Global shutter CMOS
- High sensitivity and low noise
- Camera link interface
- Up to 8 lines integration
- Rich exposure control modes (external trigger, free-run)
- FFC/LUT/ROI

STL8KCL-100KT

STL8KCXP-43KC

- Global shutter CMOS
- Trilinear color TDI sensor
- High sensitivity and low noise
- CoaXPress interface
- Gamma table
- Auto white balance/FFC/ROI
- Spatial correction/rarallax correction

STL8KCXP-43KC

Application

### STL8KCL-100KT
STL8KCL-50KX
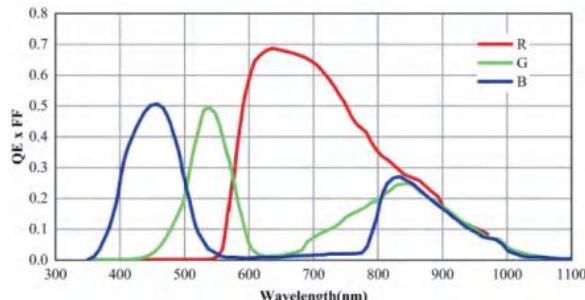
- Lithium battery/solar pane inspection
- Semiconductor inspection
- Print and package inspection
- Plate and web inspection (STL8KCL-100KT only)
- Flat panel display inspection (STL8KCL-50KX only)
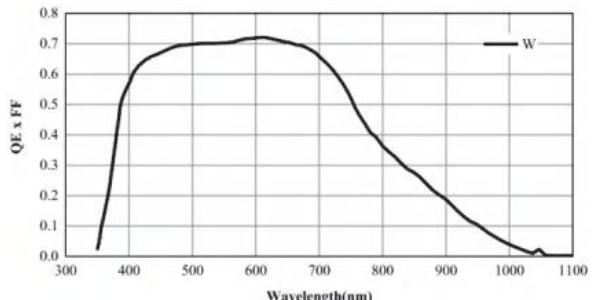
STL8KCL-30KF
STL8KCXP-43KC

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

Spectral response
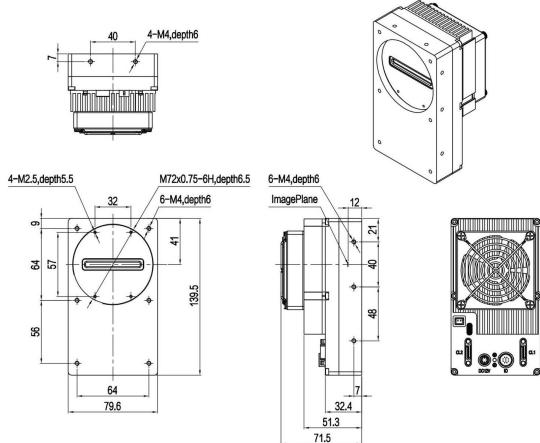
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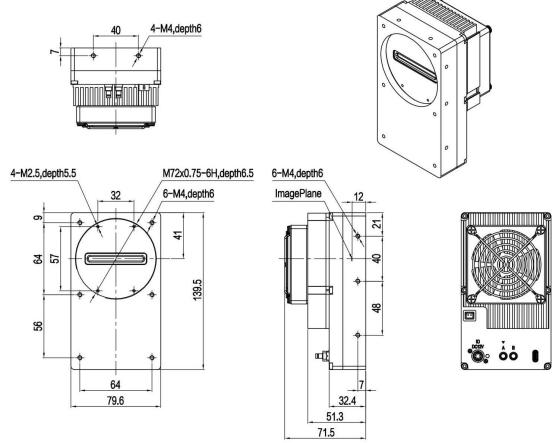
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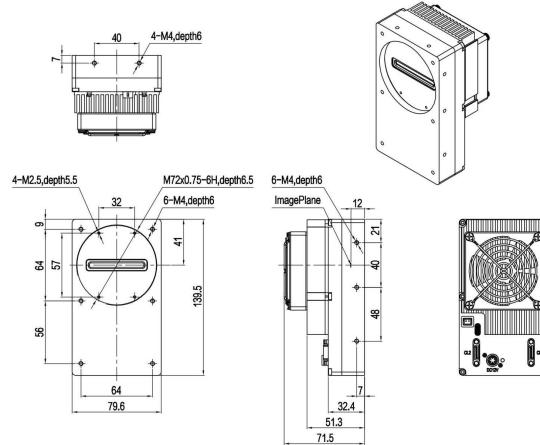
Drawings

STL8KCL-50KX

STL8KCXP-43KC

STL8KCL-30KF
STL8KCL-100KT

Specifications

Model	STU8KCL-100KT	STU8KCXP10-200KT	STU8KCXP10-66KC	STL8KCL-100KT	STL8KCXP-43KC	STL8KCL-50KX	STL8KCL-30KF
Sensor	Global Shutter CMOS						
Image Mode	Mono	Mono	Color	Mono	Color	Mono	Color
Optical Size	57.34 mm	57.34 mm	57.34 mm	41.60 mm	41.60 mm	41.60 mm	41.60 mm
Resolution	8192* 2	8192* 2	8192 * 3	8320 * 8	8320 * 12	8320 * 16	8320 * 16（4 rows per RGBC）
Pixel Size	7μm *7μm	7μm *7μm	7μm * 7μm	5μm * 5μm	5μm * 5μm	5μm * 5μm	5μm * 5μm
Max Line Rate	100kHz@10Tap 71.4kHz@8Tap 40.8kHz@4Tap 20.4kHz@2Tap	197kHz@8bit 191kHz@10bit 159kHz@12bit	66.7kHz@8bit 63.8kHz@10bit 53.1kHz@12bit	100kHz@4Line TDI 60kHz@8Line TDI	43kHz@8bit 39kHz@10bit	50kHz@2Lamps 33kHz@3Lamps 25kHz@4Lamps	34kHz / 43kHz ROI
Bit Depth	8/10/12 bit	8/10/12 bit	8/10/12 bit	8/10/12 bit	8/10 bit	8/10 bit	8/10 bit
Dynamic Range	≥64.7 dB	Single line mode:63.0dB , Double line average mode:65.3dB	≥63.0 dB	≥54 dB	≥52 dB	≥52 dB	≥58 dB
Data Rate	850 MB/s	1953 MB/s	1957 MB/s	850 MB/s	1216.8 MB/s	840 MB/s	830 MB/s
Trigger Mode	Free-run/external pulse/external PWM	Line Trigger/frame Trigger		Free-run/external pulse/external PWM			
Exposure Control	Program/pulse width						
ExposureTime	3.013μs - 63997μs （Step：0.012μs）	3.013μs-63997us (Step:0.012us)	3.013μs-63997us (Step:0.012μs)	3μs - 63997μs （step：1μs）	1μs - 797μs （step：0.1μs）	1μs - 63997μs （step：1μs）	1μs - 63997μs （step：1μs）
Analog Gain	/	/	/	1/2/4x	1/2/4x	1/2/4x	1/2/4x
Digital Gain	0.01-8.00x	0.01-8.00x	0.01-8.00x	1-8x	0.1-8.0x	1-8x	1-8x
Data Interface	Camera Link	CoaXPress10	CoaXPress10	Camera link	CoaxPress	Camera Link	Camera Link
Lens Interface	M72 * 0.75			M72 * 0.75 / F Mount			
Power Interface	Hirose HR10A-7R-6PB(Male)						
Power Supply	DC12V±10% 1.5A	DC12-24V(±10%)2A	DC12-24V(±10%) 2A	DC12V±10% 2.5A	DC12V±10% 3A	DC12V±10% 3A	DC12V±10% 3A
Power Dissipation	11.1 W	15.0 W	15.0 W	18.0 W	21.0 W	21.0 W	21.0 W
Dimensions (W*H*D)(mm)	76x76x53	76x76x53	76x76x53	79.6x139.5x71.5	79.6x139.5x71.5	79.6x139.5x71.5	79.6x139.5x71.5
Operating Temperature	0-65℃	0-65℃	0-65℃	0-55℃	0-60℃	0-55℃	0-55℃
Storage Temperature	-20-75℃						

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