SIMTRUM

16K Multi-Line Scan Camera

2023 V1

For customized projects please Contact us:
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16K Multi-Line Scan Camera

This 16K multi-line scan camera series features 16K resolution and pixel size coveing 5µm * 5µm pixel and 3.5µm * 3.5µm pixel. Our products have been applied to printed circuit board inspection,flat panel display inspection, lithium battery and solar panel inspection, semiconductor inspection and food and medicine inspection.

Camera with Pixel Size 5µm * 5µm

Feature
STR16KCL-51KT
STR16KCL-51KT4
- Global shutter CMOS
- High sensitivity and low noise
- Camera link interface
- Rich exposure control modes (external trigger, free-run)
- Binning/LUT/FFC/automatic white balance
- Spatial correction/parallax correction
- Scanning direction configurable
- Real-time temperature monitoring

STR16KCL-51KT
STR16KCL-51KT4

STR16KCXP10-40KC
STR16KCXP10-70KC
- Global shutter CMOS
- High sensitivity and low noise
- CoaXPress10 interface
- Rich exposure control modes (external trigger, free-run)
- Binning/LUT/FFC/automatic white balance
- Spatial correction/parallax correction
- Scanning direction configurable
- Real-time temperature monitoring

STR16KCXP10-40KC
STR16KCXP10-70KC

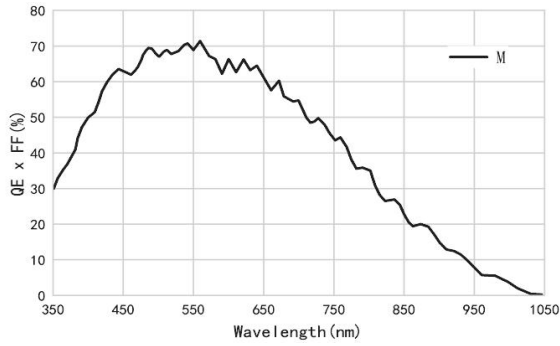### Application
STR16KCL-51KT
STR16KCL-51KT4
- Printed circuit board inspection
- Flat panel display inspection
- Lithium battery/solar panel inspection
- Semiconductor inspection
- Food and medicine inspection
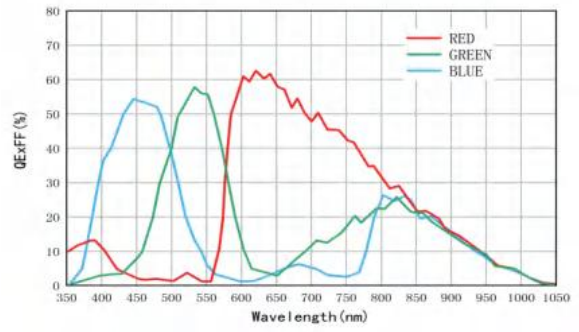
STR16KCXP10-40KC
STR16KCXP10-70KC
- Printed circuit board inspection
- Semiconductor inspection
- Print and package inspection
- Food and medicine inspection
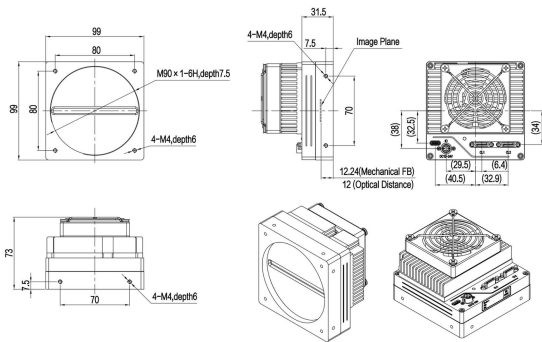- Plate and web inspection

Spectral response
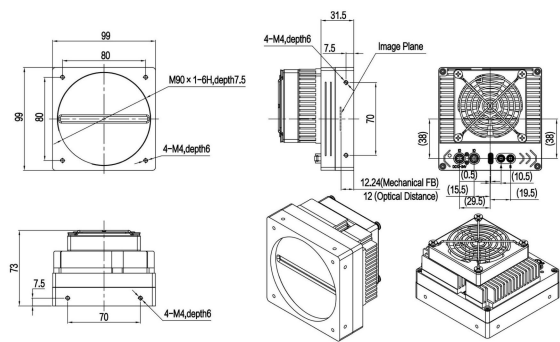

STR16KCL-51KT
STR16KCL-51KT4

STR16KCXP10-40KC
STR16KCXP10-70KC

Drawings

STR16KCL-51KT
STR16KCL-51KT4

STR16KCXP10-40KC
STR16KCXP10-70KC

Camera with Pixel Size 3.5µm * 3.5µm

Feature

STU16KCXP10-100KT

- 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 interface
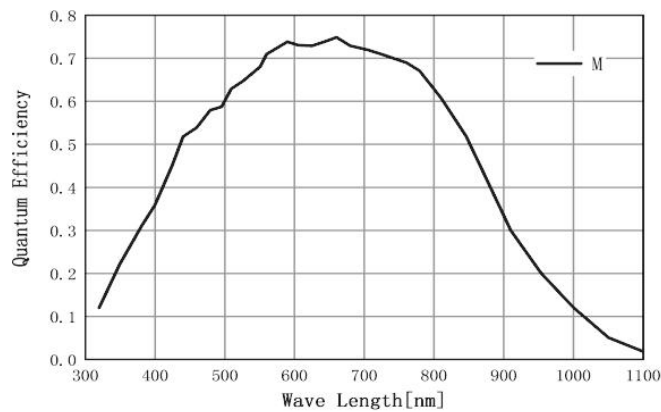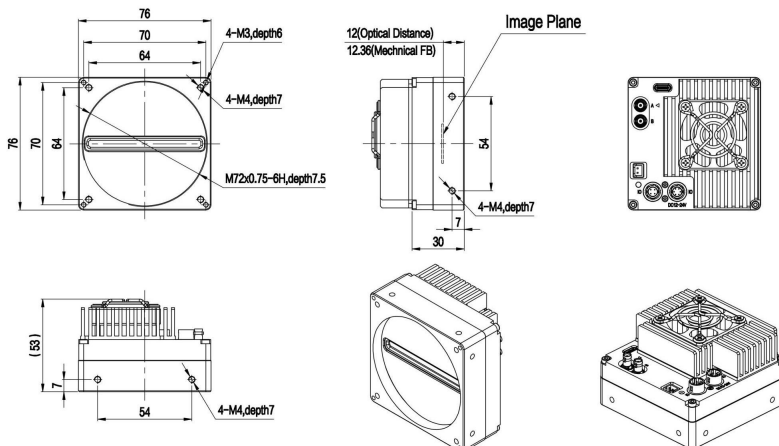
STU16KCXP10-100KT

Application

- Plate and web inspection
- Railway and traffic application
- Lithium battery/solar panel inspection

- Food and medicine inspection
- Other sorting and appearance inspections

Spectral response

Drawings

Specifications

Model	STR16KCL-51KT	STU16KCXP10-100KT	STR16KCXP10-70KC	STR16KCL-51KT4	STR16KCXP10-40KC
Sensor	Global Shutter CMOS				
Image Mode	Mono	Mono	Color	Mono	Color
Optical Size	81.92 mm	57.34 mm	81.92 mm	81.92 mm	81.92 mm
Resolution	16384*2	16384*2	16384*3	16384* 4	16384*6
Pixel Size	5μm * 5μm	3.5μm * 3.5μm	5μm*5μm	5μm * 5μm	5μm * 5μm
Max Line Rate	51.0kHz@8bit, 40.8kHz@10bit	100kHz@8bit, 95.7kHz@10bit, 79.7kHz@12bit	ROI OFF:39.9kHz@8bit, 31.9kHz@10bit, ROI ON:68.4kHz@8/10bit	51.0kHz@8bit, 40.8kHz@10bit	39.8kHz@8bit, 31.9kHz@10bit
Bit Depth	8/10bit	8/10/12 bit	RGB/BGR@8/10bit	8/10bit	RGB/BGR@8/10bit
Dynamic Range	≥64.8 dB	Single line mode:63.0dB, Double line average mode:65.3dB	≥62.8 dB	≥64.8 dB	≥64.8 dB
Data Rate	830 MB/s	1959 MB/s	1900 MB/s	830 MB/s	1900 MB/s
Trigger Mode	Free-run/external pulse/external PWM	Line trigger/frame frigger		Free-run/external pulse/external PWM	Line trigger/frame frigger
Exposure Control	External PWM/Program				
ExposureTime	3μs-63997μs(Step:0.0125μs)	3.013μs-63997μs(Step:0.012μs)	3μs-63997μs(Step:0.0125μs)	3μs-63997μs(Step:0.0125μs)	3μs-63997us(Step:0.0125μs)
Analog Gain	1/2x	/	1/2x	1/2x	1/2/4/8x
Digital Gain	0.01-8.00x	0.1-8.00x	0.1-8x	0.01-8.00x	0.01-8.00x
Data Interface	Camera Link	CoaXPress10	CoaXPress10	Camera Link	CoaXPress10
Lens Interface	M90 * 1	M72 * 0.75	M90 * 1	M90 * 1	M90* 1
Power Interface	Hirose HR10A-7R-6PB(Male)				
Power Supply	DC12-24V±10% 2A	DC12-24V(±10%)2A	DC12-24V(±10%) 2.0A	DC12-24V±10% 2A	DC12-24V(±10%)2A
Power Dissipation	12.0 W	15.0 W	14.6 W	12.7 W	16.0 W
Dimensions (W*H*D)(mm)	99.0x 99.0 x 73.0	76.0x 76.0 x 53.0	99.0x 99.0 x 73.0	99.0x 99.0 x 73.0	990x99.0x73.0
Operating Temperature	0-55℃	0-65℃	0-55℃	0-55℃	0-55℃
Storage Temperature	-20-75℃				