

InGaAs camera C14041-10U



FEATURES

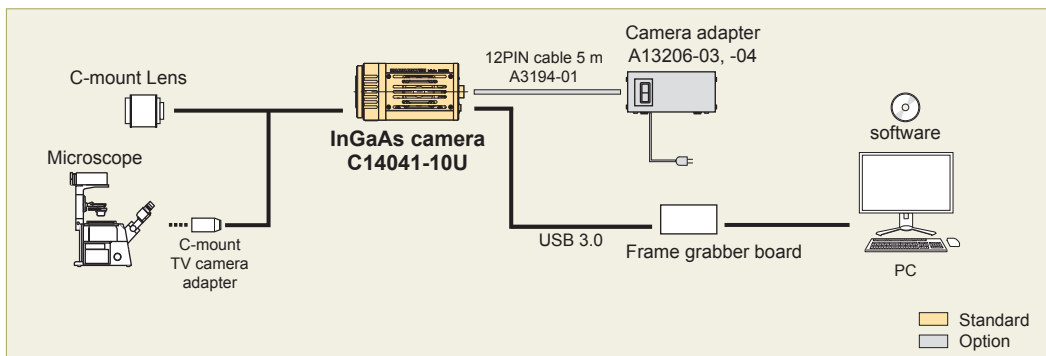
- High sensitivity in the near infrared region from 950 nm to 1700 nm
- 320 × 256 pixels
- Low noise and high stability with cooling
- High-image quality rolling shutter mode and the global shutter mode capable of simultaneous exposure to the entire screen mounted
- Frame rate of approx. 216 frames/s (rolling shutter mode)

APPLICATIONS

- Internal inspections of silicon wafers and devices
- Evaluation of solar cells
- Evaluation and analysis of optical communication devices
- EL/PL image acquisition

The C14041-10U is an InGaAs camera with high sensitivity in the near infrared region from 950 nm to 1700 nm. It has a USB 3.0 interface port which supports 14 bit image acquisition and exposure time adjustment. This makes the C14041-10U ideal for use in a wide range of applications including internal inspection of silicon wafers and devices, laser beam alignment and evaluation of solar cells.

SYSTEM CONFIGURATION

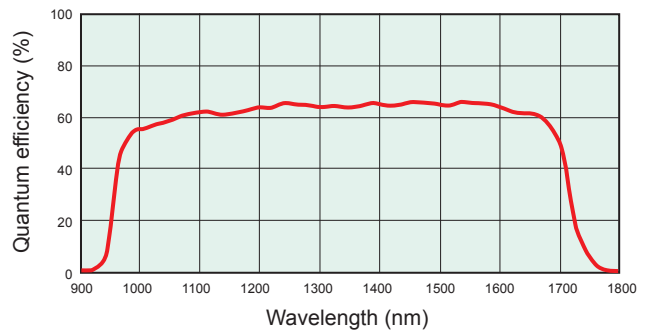


SPECIFICATIONS

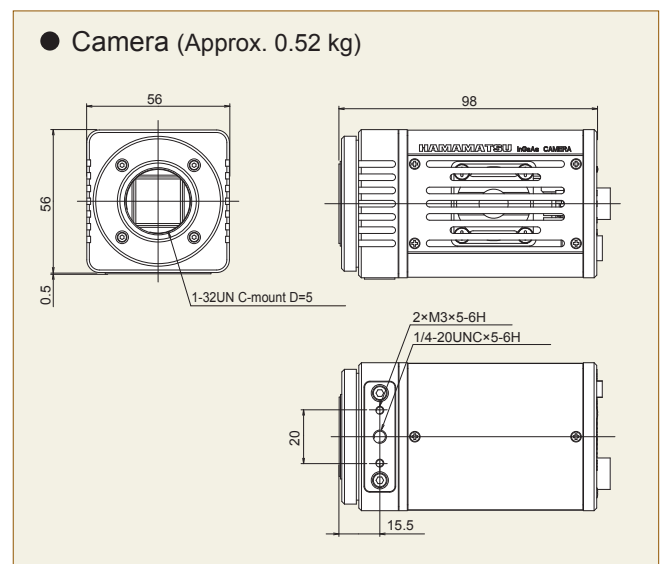
Type number	C14041-10U	
Imaging device	InGaAs sensor	
Effective number of pixels	320 (H) × 256 (V)	
Pixel size	20 μm (H) × 20 μm (V)	
Effective area	6.4 mm (H) × 5.12 mm (V)	
Cooling method	Peltier cooling	
Cooling temperature	Passive-air cooled (Ambient temperature: +25 °C)	+10 °C
Frame rate	Rolling shutter mode	216.6 frames/s
	Global shutter mode	214.3 frames/s
Digital output	14 bit	
Exposure time *1	Rolling shutter mode	4.6 ms to 33.3 ms
	Global shutter mode	100 μs to 33.3 ms
External trigger input mode	Edge trigger, Level trigger, Start trigger	
Trigger delay function	0 to 1 s (in 10 μs steps)	
Trigger input connector	SMA	
Interface	USB 3.0	
Image processing functions	Background subtraction, Shading correction	
Lens mount	C-mount	
Connector	USB 3.0 microB type	
Power supply	DC +12 V	
Power consumption	Approx. 16 W	
Ambient operating temperature	0 °C to +40 °C	
Ambient operating humidity	30 % to 80 % (with no condensation)	
Ambient storage temperature	-10 °C to +50 °C	
Ambient storage humidity	90 % max. (with no condensation)	

*1: Depend on the exposure time, uneven pattern may appear in the image. It can be improved by retaking the correction data.

SPECTRAL RESPONSE



DIMENSIONAL OUTLINES (Unit : mm)



OPTIONS

- Camera adapter: A13206-03 (for US)
: A13206-04 (for EU)
- 12PIN cable 5 m: A3194-01

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