

NEW

InGaAs camera C16741-40U



The C16741-40U is an InGaAs camera with sensitivity in the visible to near infrared region from 400 nm to 1700 nm. It has a USB 3.1 Gen 1 interface port which supports 12 bit image acquisition and exposure time adjustment. This makes the C16741-40U 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.

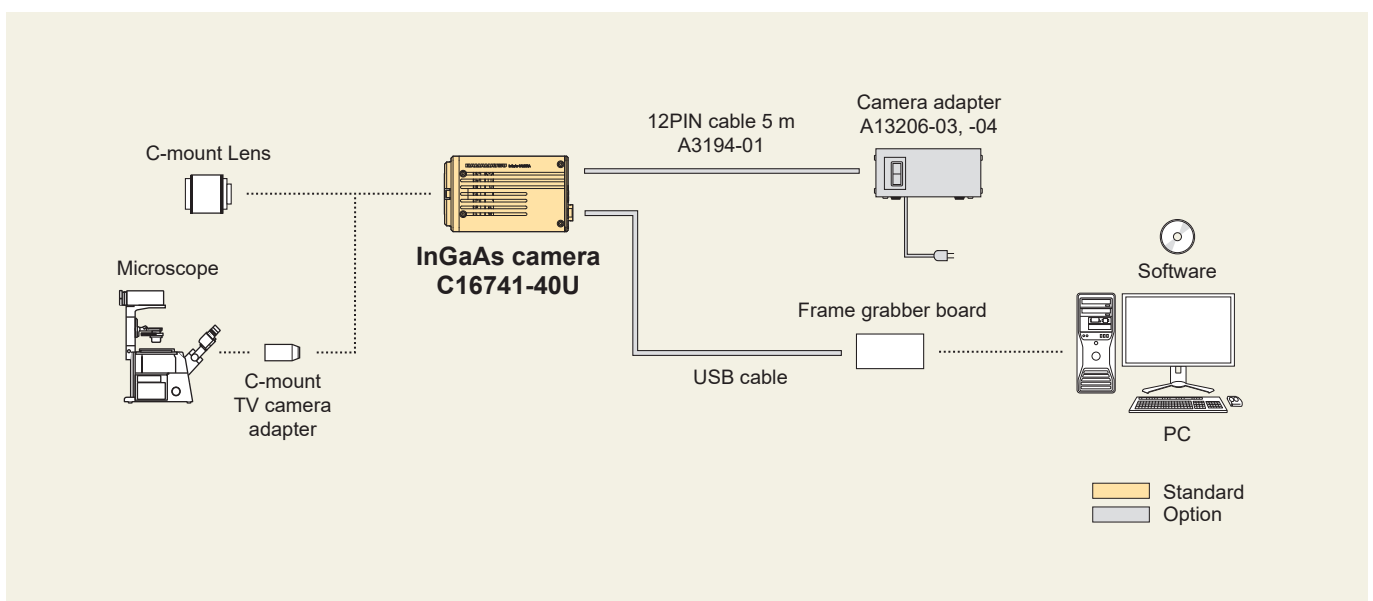
Features

- High sensitivity in the visible to near infrared region
- 1280 pixels × 1024 pixels
- Low noise and high stability with cooling
- Frame rate of 71.53 frames/s

Applications

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

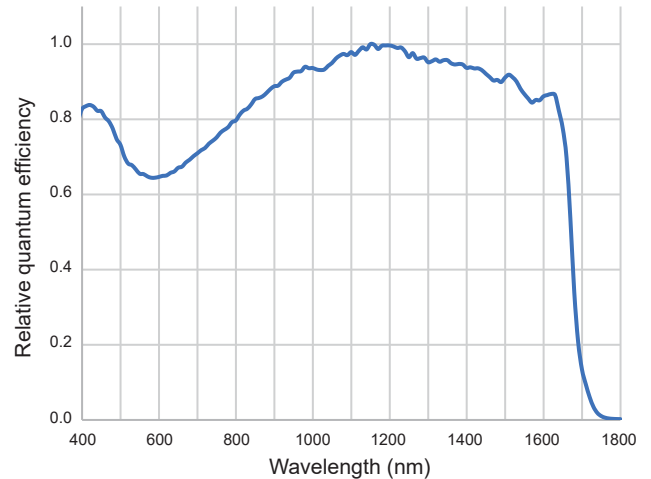
System Configuration



Specifications

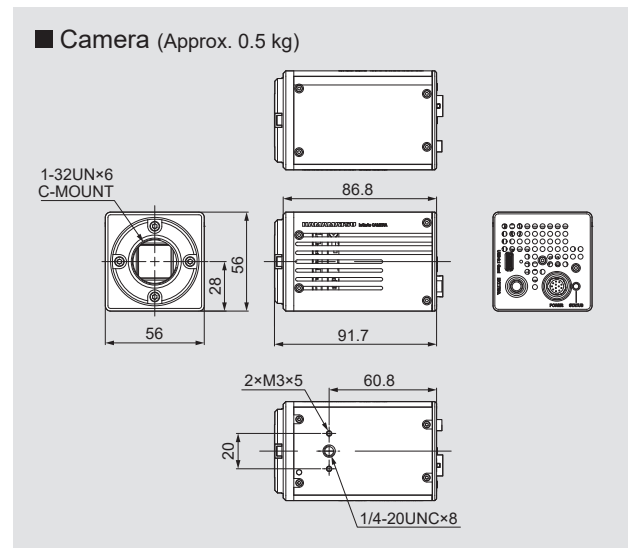
Product number	C16741-40U	
Imaging device	InGaAs sensor	
Effective number of pixels	1280 (H) × 1024 (V)	
Pixel size	5 μm (H) × 5 μm (V)	
Effective area	6.40 mm (H) × 5.12 mm (V)	
Cooling method	Peltier cooling	
Cooling temperature	Forced-air cooled	+15 °C ±0.5 °C (Ambient temperature: +25 °C ±3 °C)
	Natural-air cooled	+20 °C ±0.5 °C (Ambient temperature: +25 °C ±3 °C)
Frame rate (Full resolution)	71.53 frames/s	
Binning	2×2	
Sub-array	Yes	
Digital output	12 bit / 8 bit	
Exposure time	20.46 μs to 1 s (13.09 μs step)	
External trigger input mode	Edge trigger, Level trigger, Start trigger	
Trigger delay function	0 μs to 10 s (1 μs step)	
Trigger input connector	SMA	
Interface	USB3.1 Gen 1	
Image processing functions	Background subtraction, Shading correction	
Lens mount	C-mount	
Connector	USB Type-C	
Power supply	DC +12 V	
Power consumption	Approx. 15 W	
Ambient operating temperature	0 °C to +35 °C	
Ambient operating humidity	30 % to 80 % (with no condensation)	
Ambient storage temperature	-10 °C to +50 °C	
Recommended operating ambient temperature	+25 °C ±3 °C	
Ambient storage humidity	90 % max. (with no condensation)	

Spectral response



* Calculated based at 1150 nm.

Dimensional outlines (Unit: mm)



Options

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

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- Subject to local technical requirements and regulations, availability of products included in this brochure may vary. Please consult your local sales representative.
- The product described in this brochure is designed to meet the written specifications, when used strictly in accordance with all instructions.
- The spectral response specified in this brochure is typical value and not guaranteed.
- Specifications and external appearance are subject to change without notice.

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