

# InGaAs camera C12741-03



## FEATURES

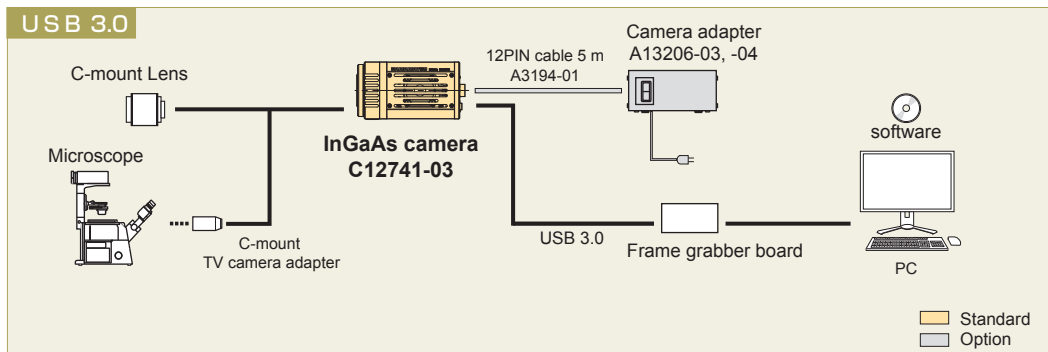
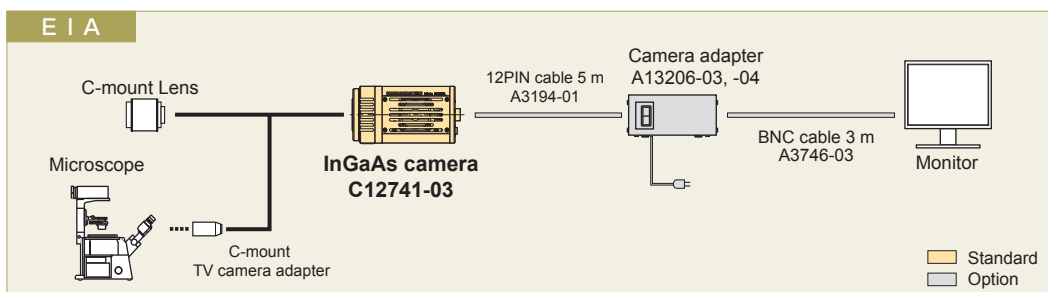
- High sensitivity in the near infrared region from 950 nm to 1700 nm
- 640 × 512 pixels
- Low noise and high stability with cooling
- Simultaneous output from two interfaces: analog (EIA) port and USB 3.0 port
- Frame rate of 60 frames/s

## APPLICATIONS

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

The C12741-03 is an InGaAs camera with high sensitivity in the near infrared region from 950 nm to 1700 nm. It has an analog output (EIA) and a USB 3.0 interface port which supports 14-bit image acquisition and exposure time adjustment. This makes the C12741-03 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

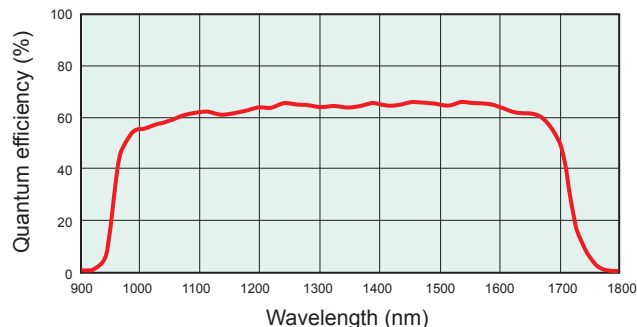


## SPECIFICATIONS

Type number	C12741-03	
Imaging device	InGaAs sensor	
Effective number of pixels	640 (H) × 512 (V)	
Pixel size	20 μm (H) × 20 μm (V)	
Effective area	12.8 mm (H) × 10.24 mm (V)	
Cooling method	Peltier cooling	
Cooling temperature	Passive-air cooled (Ambient temperature: +25 °C)	+10 °C
Frame rate	59.774 frames/s	
Digital output	14 bit	
Exposure time (Internal mode) *1	16.7 ms to 53.3 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	EIA, 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 *1	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)	

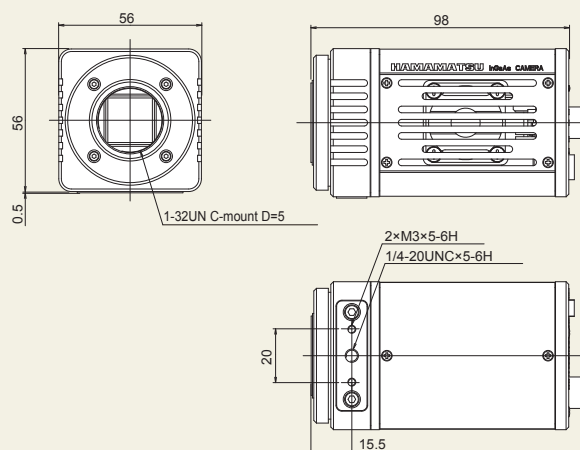
\*1: Depend on the exposure time or ambient temperature, brighter or darker pixels than surrounding area or uneven pattern may appear in the image.  
It comes from the characteristics of InGaAs sensor and not the defects or failure of the camera.

## SPECTRAL RESPONSE



## DIMENSIONAL OUTLINES (Unit : mm)

### ● Camera (Approx. 0.52 kg)



## OPTIONS

- Camera adapter: A13206-03 (for US)  
: A13206-04 (for EU)
- 12PIN cable 5 m: A3194-01
- BNC cable 3 m: A3746-03

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