

# InGaAs camera C12741-03



## FEATURES

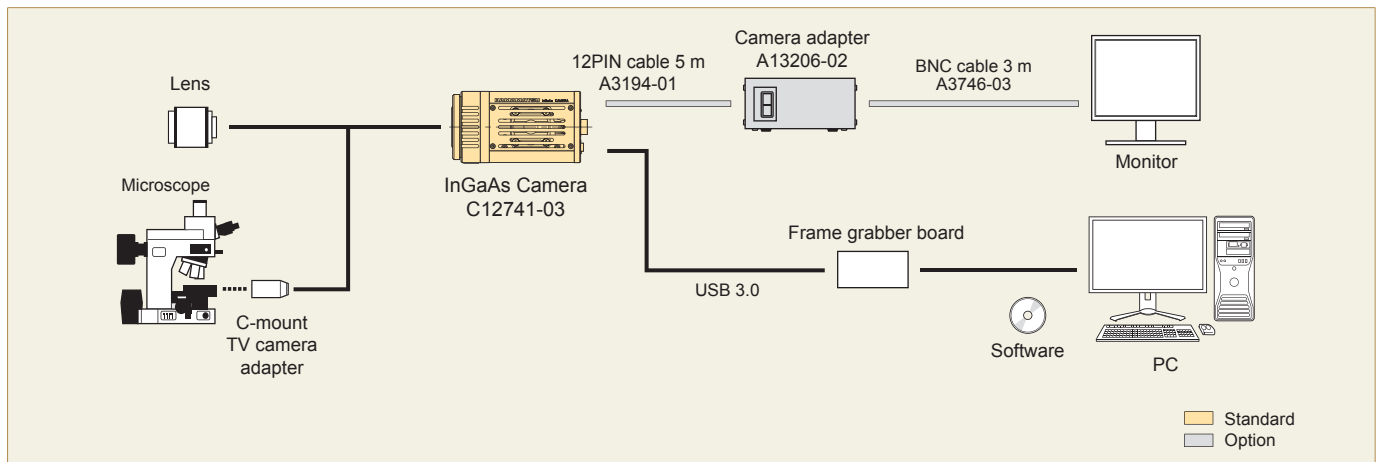
- High sensitivity in the near infrared region from 950 nm to 1700 nm
- 640 × 512 pixels
- Low noise and high stability by cooling
- Simultaneous output from two interfaces: one analog (EIA) port and one USB 3.0 port
- Frame rate of 60 frames /s

## APPLICATIONS

- Internal inspections of silicon wafers and devices
- Evaluation of solar cells
- Experiments, 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) port, and also a USB 3.0 interface port that supports 14-bit image acquisition and exposure time adjustment. Compared to the currently available InGaAs camera (C10633-13), the C12741-03 offers 4 times the number of pixels to improve the accuracy for detecting patterned silicon wafers and for capturing a wider area image. The C12741-03 can be used in a wide range of applications including internal inspections of silicon wafers and devices, laser beam alignment, and evaluation of solar cells.

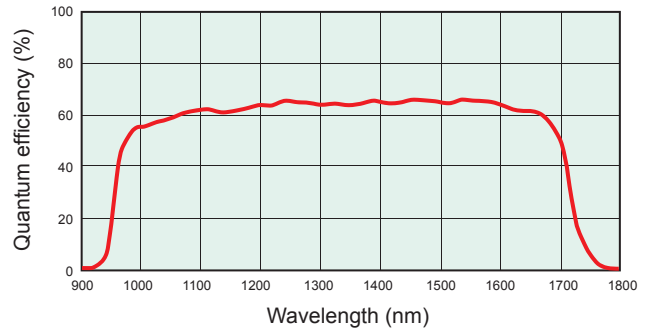
## SYSTEM CONFIGURATION



## 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 imaging area	12.8 mm (H) × 10.24 mm (V)
Cooling temperature	+10 °C (Ambient temperature: +25 °C)
Exposure time	16.7 ms to 1 s
Readout speed	Approx. 60 frames/s
Digital output	14 bit
External trigger mode	Edge trigger, level trigger, start trigger
External trigger input connector	SMA connector
Image correction	Shading correction, background subtraction
Output	USB 3.0/EIA (Simultaneous output from USB/EIA ports is possible.)
Lens mount	C-mount
Power requirement	DC +12 V
Power consumption	16 W
Recommended operating ambient temperature	+25 °C ±3 °C
Ambient operating temperature	0 °C to +40 °C
Ambient storage temperature	-10 °C to +50 °C
Ambient operating humidity	30 % to 80 % (No condensation)

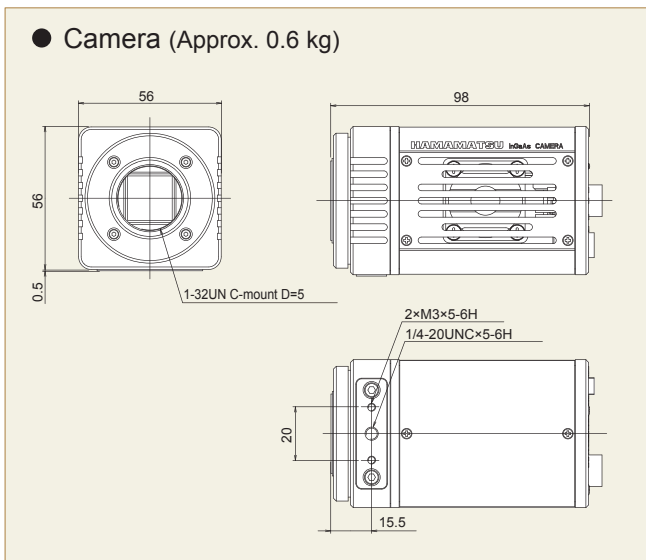
## SPECTRAL RESPONSE



This spectral response characteristic graph shows the results measured by the sensor itself.

## DIMENSIONAL OUTLINES (Unit : mm)

### ● Camera (Approx. 0.6 kg)



## OPTIONS

- Camera adapter: A13206-02
- 12PIN cable 5 m: A3194-01
- BNC cable 3 m: A3746-03

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