

InGaAs camera C12741-03



FEATURES

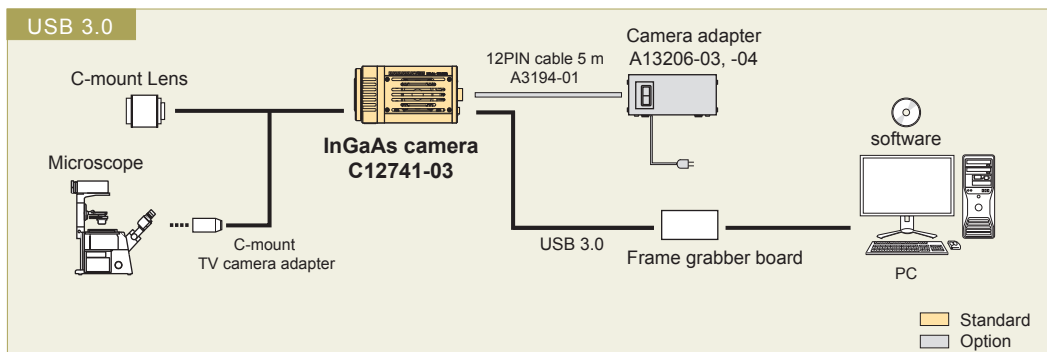
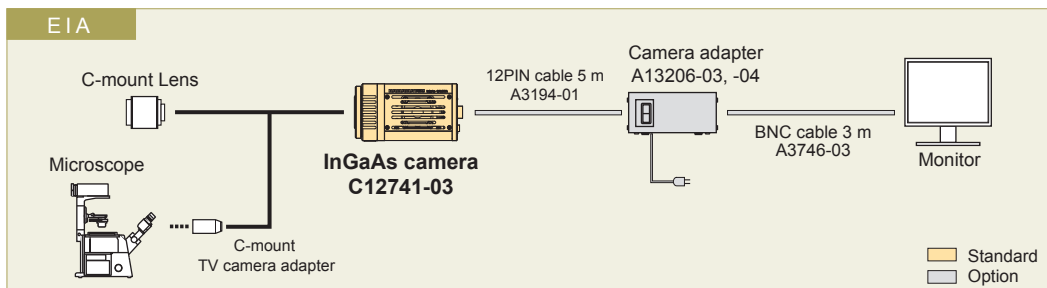
- High sensitivity in the near infrared region from 950 nm to 1700 nm
- 640 × 512 pixels
- Low noise and high stability with cooling
- Simultaneous output from two interfaces: analog (EIA) port and USB 3.0 port
- Frame rate of 60 frames/s

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

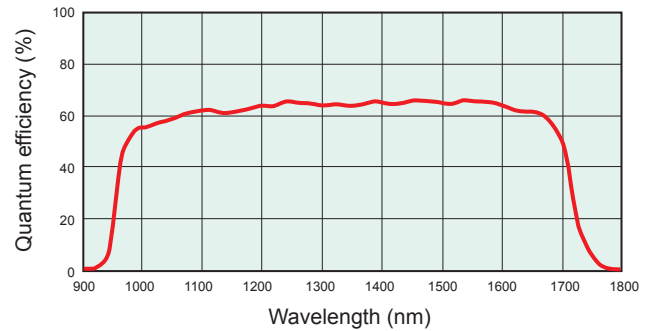


SPECIFICATIONS

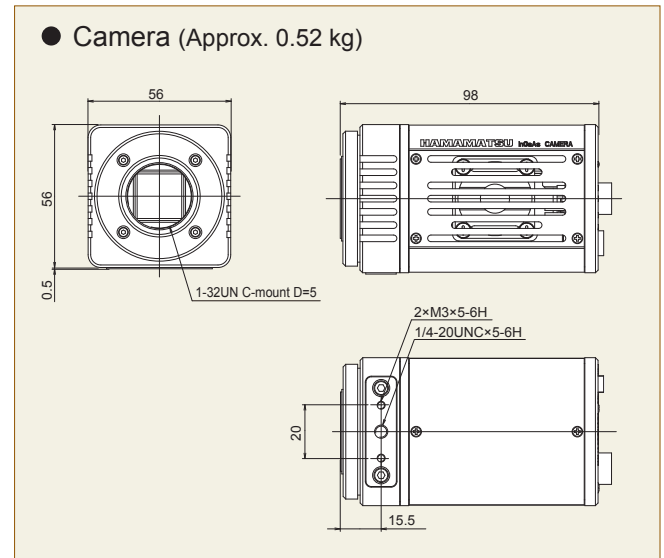
Type number	C12741-03
Imaging device	InGaAs sensor
Effective number of pixels	640 (H) × 512 (V)
Pixel size	20 μm (H) × 20 μm (V)
Effective area	12.8 mm (H) × 10.24 mm (V)
Cooling method	Peltier cooling
Cooling temperature	Forced-air cooled (Ambient temperature: +25 °C)
	+10 °C
Frame rate	59.774 frames/s
Digital output	14 bit
Exposure time *1	16.7 ms to 1 s
External trigger input mode	Edge trigger, Level trigger, Start trigger
Trigger delay function	0 s 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)



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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HAMAMATSU PHOTONICS K.K., Systems Division

812 Joko-cho, Higashi-ku, Hamamatsu City, 431-3196, Japan, Telephone: (81)53-431-0124, Fax: (81)53-433-8031, E-mail: export@sys.hpk.co.jp

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, Bridgewater, NJ 08807, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: usa@hamamatsu.com

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-265-8 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10 E-mail: infos@hamamatsu.fr

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, UK, Telephone: (44)1707-294888, Fax: (44)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB: Torshamnsgatan 35 16440 Kista, Sweden, Telephone: (46)8-509 031 01, Fax: (46)8-509 031 01 E-mail: info@hamamatsu.se

Italy: Hamamatsu Photonics Italia S.r.l.: Strada della Moia, 1 int. 6, 20020 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: info@hamamatsu.it

China: Hamamatsu Photonics (China) Co., Ltd.: 1201 Tower B, Jiaming Center, 27 Dongsanhuan Beilu, Chaoyang District, 100020 Beijing, China, Telephone: (86)10-6586-6006, Fax: (86)10-6586-2866 E-mail: hpc@hamamatsu.com.cn

Taiwan: Hamamatsu Photonics Taiwan Co., Ltd.: 8F-3, No.158, Section2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)03-659-0080, Fax: (886)03-659-0081 E-mail: info@hamamatsu.com.tw

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