

X-RAY CAMERA

DX-CUBE™ COMPACT X-RAY CMOS CAMERA H8953-30

OVERVIEW

DX-CUBE: H8953-30 is a compact X-ray CMOS camera for non-destructive inspection, which uses a consumer CMOS camera in combination with our high-sensitivity CsI scintillator.



FEATURES

- Compact (palm size)
- Uses high sensitivity CsI scintillator
- Low power consumption

APPLICATIONS

- X-ray drilling
- X-ray non-destructive inspection

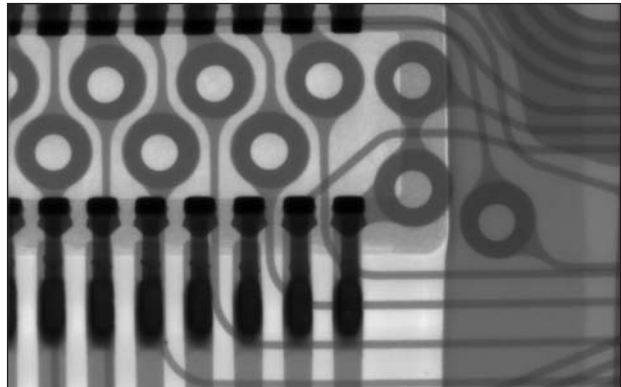
X-RAY IMAGE EXAMPLES

Lithium-ion battery and protection circuit



X-ray tube voltage: 100 kV
Geometric magnification: 1.4 times

Flexible printed circuit board

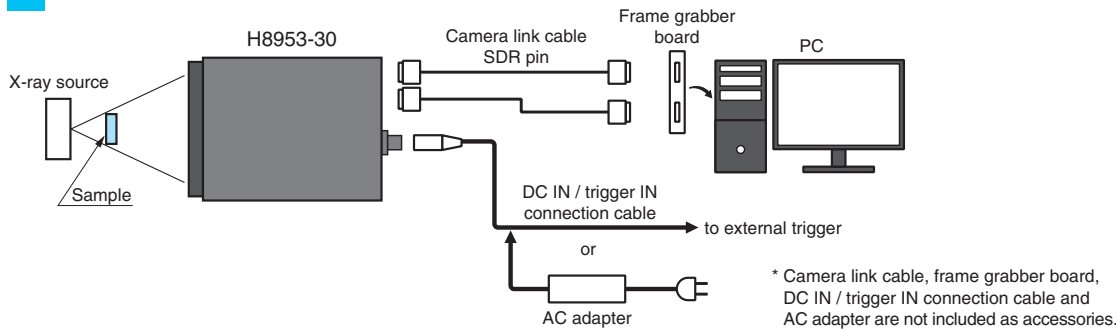


X-ray tube voltage: 100 kV
Geometric magnification: 3.1 times

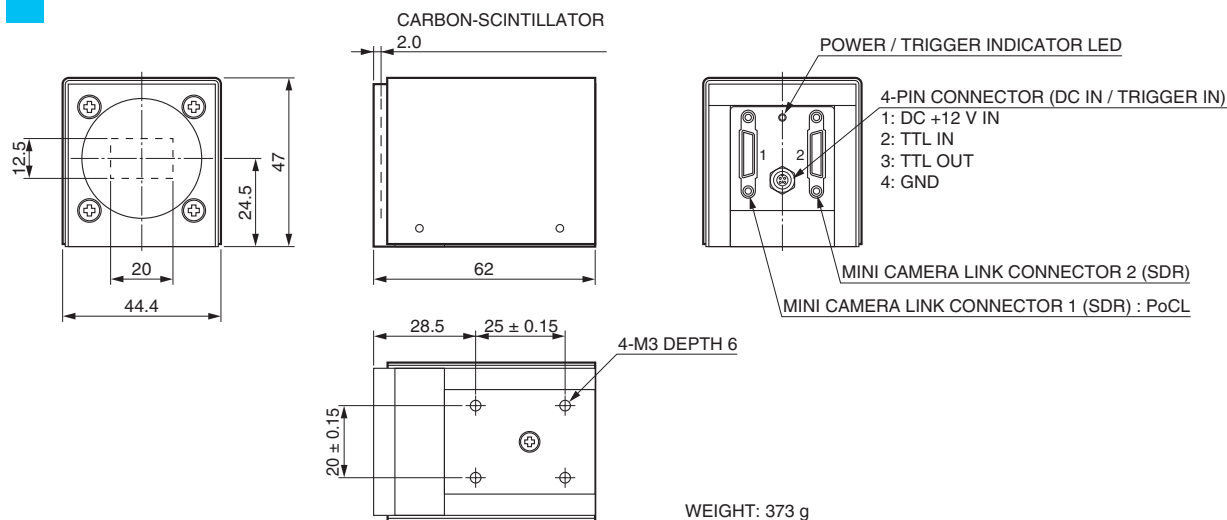
SPECIFICATIONS

Parameter	Description / Value	Unit
Input window	Carbon (CFRP)	—
X-ray sensing surface	CsI	—
Effective field of view (H × V)	20 × 12.5	mm
Resolution	typ. 20	Lp/mm
Image sensor	CMOS image sensor with 2.35 M pixels 1/1.2 type global shutter	—
Pixel size (H × V)	5.86 × 5.86	μm
Effective number of pixels (H × V)	1936 × 1216	—
Binning	1 × 2, 2 × 2, 2 × 1	—
Video signal output	8 / 10 / 12	bit
Partial readout	Single ROI mode, multi ROI mode	—
Power supply	PoCL (Power over Camera Link) or 4-pin connector	—
Power supply voltage (DC)	PoCL: 12 ± 10 % (2.76 W 12 V input) 4 pin: 12 to 24 ± 10 % (2.76 W 12 V input)	V
Video processing functions	Scratch correction, gamma correction, etc.	—
Auto level control	79 μs to 8 s (10 bit)	—
Frame rate	Max.165.5	frames/sec
Operating ambient temperature	+10 to +40	°C
Storage ambient temperature	0 to +40	°C
Operating / storage ambient humidity	Below 60 (no condensation)	%
CMOS camera	Product by JAI, GO-2400M-PMCL	—

CONNECTION EXAMPLE



DIMENSIONAL OUTLINES (Unit: mm)



Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office. Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2021 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

Electron Tube Division

314-5, Shimokanzo, Iwata City, Shizuoka Pref., 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

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: Torshammsgatan 35 16440 Kista, Sweden, Telephone: (46)8-509 031 00, 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, P.R. 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, Section 2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)3-659-0080, Fax: (886)3-659-0081 E-mail: info@hamamatsu.com.tw

TXPR1035E01
FEB. 2021 IP