

MICROFOCUS X-RAY SOURCE SERIES

SEALED TYPE

90 kV L9421-02



100 kV L10101, L10321



110 kV L9631



130 kV L9181-02



150 kV L12161-07



NEW

110 kV L12531



OPEN TYPE

160 kV L11091



160 kV L10711-03



230 kV L10801



Please access website and see individual catalogs when you need more information.
<www.hamamatsu.com/jp/en/product/category/1001/3028/index.html>

FEATURES

- **World finest level resolution: 0.25 μm (Open type L10711-03)
2 μm (Sealed type L12531)**
- **Geometric magnification: 1000 times or higher (Open type L10711-03)**
- **High output: 200 W (Open type L10801) / 75 W (Sealed type L12161-07)**
- **High stability X-ray output (Sealed type L9631)**
- **No high voltage cable connection required**
High voltage power supply is integrated with the main unit.
- **External control via RS-232C interface**

APPLICATIONS

- **Non-destructive inspection**
- **X-ray CT**
- **In-line X-ray inspection**

[Applicable objects]

- **Electronic component**
- **Battery**
- **Medicine & drug**
- **Bioproduct**
- **Printed circuit board**
- **Plastic component**
- **Metal component**

SPECIFICATIONS

● Sealed type

Type No.	Tube voltage operational range (kV)	Tube current operational range (μA)	Maximum output (W)	X-ray focal spot size (Min.) (μm)	X-ray beam angle Approx. (degree)	FOD ^② Approx. (mm)
L9421-02	20 to 90	10 to 200	8	5	39	9.5
L10101	40 to 100		20		42	6.8
L10321					118	7.3
L9631	40 to 110	10 to 800	50	15	62	16.8
L9181-02	40 to 130	10 to 300	39	5	45	13
L12161-07	40 to 150	10 to 500	75		43	17
L12531	40 to 110	10 to 200	16		2 ^③	120

● Open type

Type No.	Tube voltage operational range (kV)	Tube current operational range (μA)	Maximum output (W)	Resolution (Min.) (μm)	X-ray beam angle Approx. (degree)	FOD ^② Approx. (mm)
L11091	20 to 160	0 to 200	8	1	120	0.5
L10711-03				0.25 ^④	140	
L10801	20 to 230	0 to 1000	200	4	40	5

① Nominal value

② Focus to object distance

③ Minimum resolution when X-ray chart is used.

④ Suitable measurement conditions (environment and equipments) are necessary.

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. ©2018 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

HAMAMATSU PHOTONICS K.K., 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: Torshamnsgatan 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, 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

TXPR1007E04
APR. 2018 IP