

NEW

90 kV MICROFOCUS X-RAY SOURCE L8601-01



FEATURES

- **Focal Spot Size: 5 μm (at 4 W)**
Providing 5 μm focal spot size, for the sealed-off type X-ray source with built-in power supply. It gives a clear clairvoyance image despite of higher magnification ratio.
- **Easy Handling**
Convenient handling (with no high voltage wiring) since the air cooled X-ray source and the high voltage power supply are in one package.
- **Continuous Operation**
It allows continuous maximum output operation.
- **Built-in External Control Function**
It is automatically operable from external control since it has a built-in RS-232C interface.

APPLICATIONS

- **X-ray Non-destructive Test**
 - Printed Circuits
 - Semiconductor Devices
 - Soldered Parts
 - Combined Materials
 - New materials
 - Electronic Components
 - Ceramics
 - Rubbers
 - Plastics
 - Die casting
- **Multilayer Printed Circuit Board X-ray Inspection**
- **Drilling Instrument**
- **Industrial On-line Process Control and Measurement**
- **Industrial X-ray Computer Tomography System**

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SPECIFICATIONS

●GENERAL

| Parameter | Value/Description | Unit |
|----------------------------------|-----------------------|------------|
| Target Voltage | 20 to 90 | kV |
| Target Current | 0 to 250 ^① | μA |
| Maximum Output Power | 10 (isowatts) | W |
| Focal Spot Size | 7 (5 μm at 4 W) | μm |
| Beam Angle | 39 | degree |
| Minimum Distance Focus/Object | 9.5 | mm |
| Environmental X-ray Dose Leakage | 1 | mSv/h Max. |
| Operation | Continuous | — |

NOTE: ① In the range of output (= Tube voltage × Tube current) less than 10 W

■X-RAY TUBE UNIT

| Parameter | Description |
|--------------------------------|-----------------------------|
| X-ray Tube | Sealed Type |
| Cooling Method | Convection Cooling |
| Window Material | Beryllium (150 μmt) |
| Target Material | Tungsten |
| Cathode Material | Dispenser Cathode |
| Window Position | End-window |
| High Voltage Power Supply | Built-in Type |
| Operation /Storage Temperature | +10 to +40 °C / 0 to +50 °C |
| Operation/Storage Humidity | 85 % RH Max. ^① |
| Weight | Approx. 6 kg |

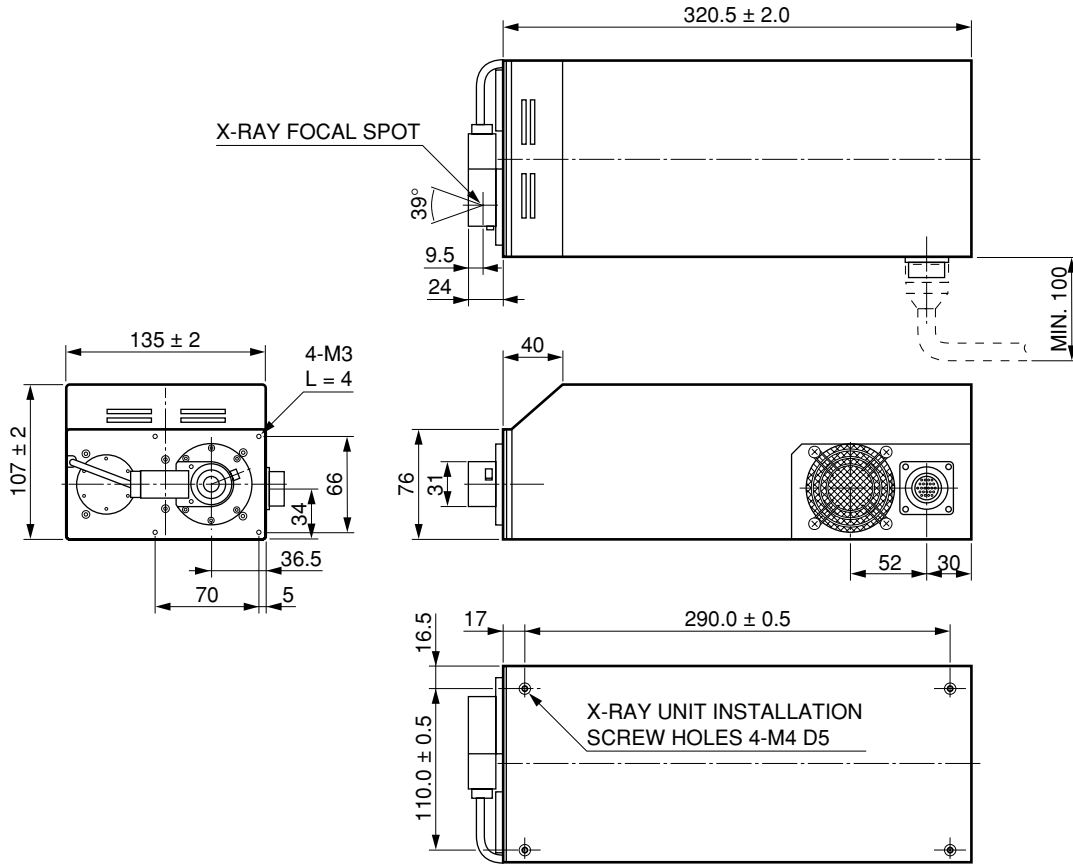
NOTE: ① Without moisture condensation.

■X-RAY CONTROL UNIT

| Parameter | Description |
|--------------------------------|---|
| Function | Target Voltage/Current Pre-set, Auto Warm-up |
| Protection | Safety Interlock |
| External Control | RS-232C |
| Operation /Storage Temperature | 0 to +40 °C |
| Operation/Storage Humidity | 85 % RH Max. ^① |
| Power Consumption | 200 W Max. |
| Input Voltage | 24 Vdc |
| Installation Method | Designed for both bench-top and rack mounting |
| Weight | Approx. 5 kg |

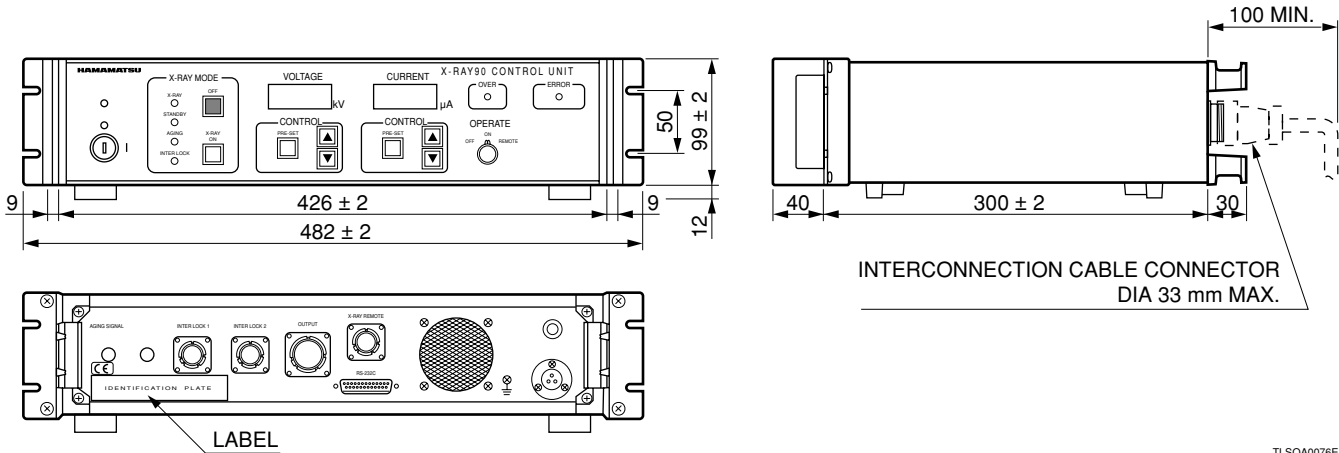
DIMENSIONAL OUTLINE (Unit: mm)

X-RAY TUBE UNIT



TLSOA0063EA

X-RAY CONTROL UNIT



TLSOA0076EA

RELATED PRODUCTS

X-RAY IMAGE INTENSIFIER CAMERA UNIT C7716, C7716-10

The C7716 series X-ray image intensifier (I. I.) camera unit now offers greatly improved X-ray detection efficiency even at low energy levels. This improvement stems primarily from a built-in X-ray image intensifier having an extremely thin aluminum input window. Its thickness is only 0.3mm or less, virtually at the limit of present technology providing excellent X-ray transmittance and low scattering.

The results are sharp, clear, high-quality images taken at low energy X-ray levels down to several keV which penetrate plastic (PET) materials.



X-RAY IMAGE INTENSIFIER CAMERA UNIT C7876, C7876-10

The C7876 is an X-ray image intensifier camera unit ideal for non-destructive inspection of light-element materials and radiation imaging at low-energy X-ray levels.

The C7876 remarkably improves X-ray transmittance at low-energy X-ray levels by using a beryllium window instead of the aluminum window currently used for most X-ray image intensifiers.

The result is a sharp and clear, high-contrast image taken in real time even at low energy X-ray levels down to a few keV.



⚠ PRE-CAUTION TO USE

1. X-ray emitted from this device is harmful for human body. And it should be necessary for the operator to protect himself/herself from it.
2. During an operation, the X-ray tube unit should be installed in the X-ray shielded cabinet in order to avoid any X-ray leakage. Also the safety interlock system in X-ray control unit should be always used in order to avoid any misoperation.

WARRANTY PERIOD

This device is guaranteed for one year from data of purchase or 3000 hours of operation, whichever comes first.

The warranty extends only to replacement of the products. The warranty does not cover damage due to misuse or natural calamity.

* **CE** This product(s) conforms to the EMC directive (89/336/EEC) of the European Union.

* To meet FDA standards, the Interlock-1 circuit incorporates a relay that shuts off the X-ray generation power supply circuit if the circuit is open.

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HAMAMATSU PHOTONICS K.K., Electron Tube Center

314-5, Shimokanzo, Toyooka-village, Iwata-gun, Shizuoka-ken, 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P. O. Box 6910, Bridgewater, N.J. 08807-0910, 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)8152-2658 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 8, 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, United Kingdom, Telephone: 44-(0)1707-294888, Fax: 44(0)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171-41 SOLNA, 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/E, 20020 Arese, (Milano), Italy, Telephone: (39)02-935 81 733, Fax: (39)02-935 81 741 E-mail: info@hamamatsu.it