

NEW

AIR-COOLED VUV LIGHT SOURCE UNIT L8998

Equipped with vacuum flange (ICF70)



Left: Power supply, Right: Light source

OVER VIEW

Hamamatsu now introduces a vacuum ultraviolet (VUV) light source that combines a 30 watt head-on type deuterium lamp with a vacuum flange. Its compact size and air-cooled configuration allow easy handling and operation. The deuterium lamp uses an MgF_2 (magnesium fluoride) window to efficiently transmit VUV radiation down to 115 nm.

The vacuum flange (ICF70), assembled as a standard feature, connects easily to most vacuum chambers.

A metal connector on the lamp housing permits easy connection to a dedicated power supply also available from Hamamatsu.

FEATURES

- High VUV radiation output intensity
- Air-cooled (no cooling water required)
- Equipped with vacuum flange (ICF70)

APPLICATIONS

- VUV spectrophotometers
- Optical vapor phase growth
- VUV lithography
- Excitation light sources
- Light chemical reaction
- Experiment and study using VUV light

HAMAMATSU

SPECIFICATIONS

●GENERAL RATINGS

Parameter	Description/Value	Unit
Spectral Distribution	115 to 400	nm
Window Material	MgF ₂	—
Aperture Size	φ 1.0	mm
Cooling Method	Air-cooled	—
Operating Temperature Range	10 to 35	°C
Operating Humidity Range *	20 to 85	% RH

* Without moisture condensation

●RECOMMENDED OPERATING CONDITIONS AND CHARACTERISTICS (at 25 °C)

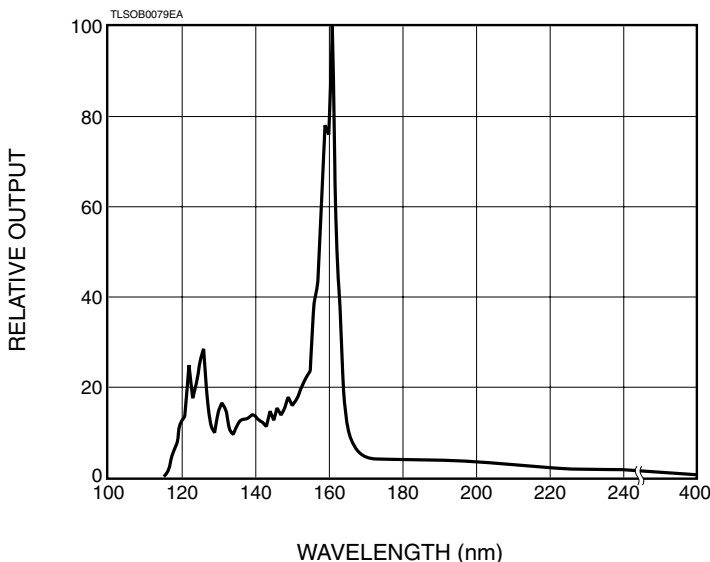
Parameter	Description/Value	Unit
Warm-up Time	30	s
Discharge Starting Voltage (DC)	400	V Min.
Anode Current (DC)	300	mA
Tube Drop Voltage (DC)	80	V Typ.
Output Stability	Drift	±1.0
	Fluctuation (p-p)	0.05
Light Source Estimated Life (at 160 nm)	300	h
Input Voltage (AC)	90 to 115 / 180 to 250 (Auto)	V
Power Consumption	140	VA

●VACUUM FLANGE

Parameter	Description
Flange Standard	ICF70 (P.C.D. 58.7 mm - 6 holes)
Hermetic Seal Method	Gasket
Sealing Force Retention	$5 \times 10^{-6} \text{ Pa} \cdot \text{m}^3 \cdot \text{s}^{-1}$ or less

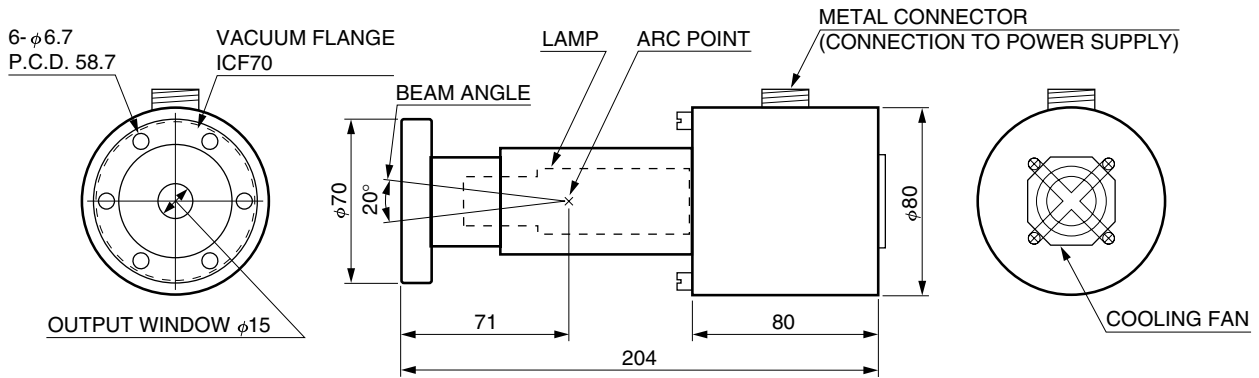
SPECTRAL DISTRIBUTION

(VUV region; reference data)



DIMENSIONAL OUTLINES (Unit: mm)

LIGHT SOURCE (Weight: Approx. 2.7 Kg)

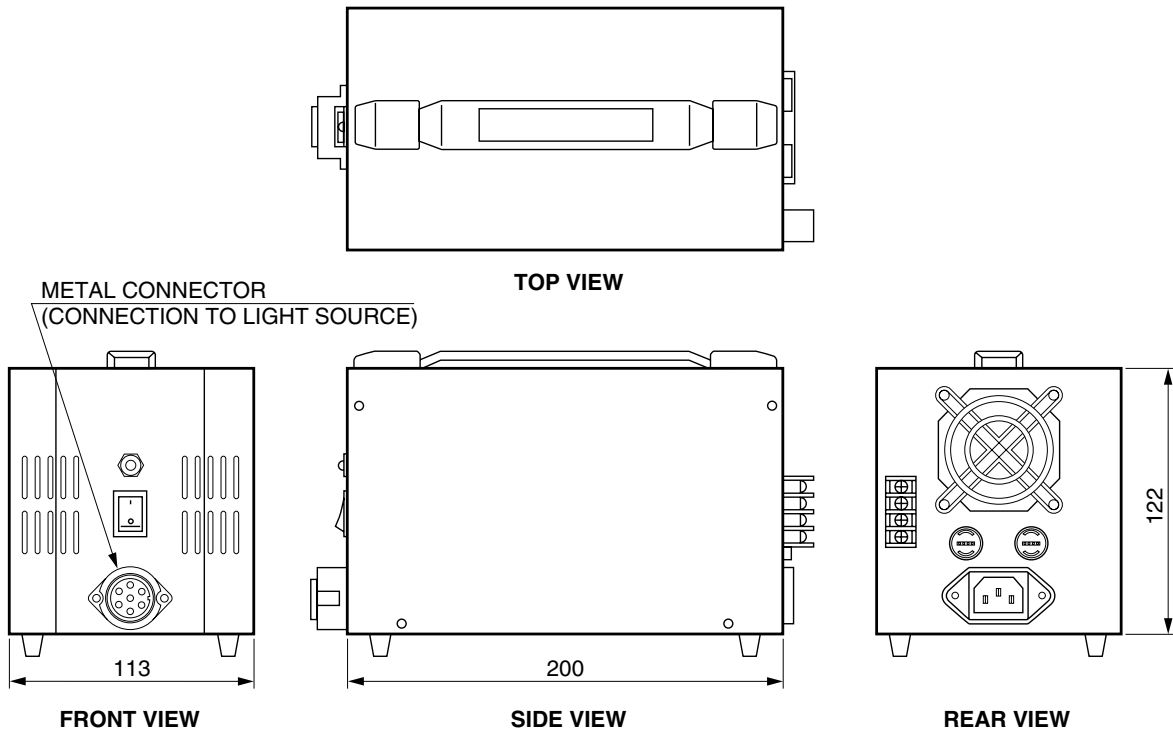


* Replace light source L9026 is available.

CABLE LENGTH: 1800±50
* Cable is included.

TLSOA0060EB

POWER SUPPLY (Weight: Approx. 3 Kg)



TLSOA0061EA

Precautions during use

1. Lamps emit strong UV radiation which is harmful to the eyes and skin. Do not look directly into the lamp or allow UV radiation to directly strike the skin. Always wear protective goggles or other protective gear when working with an operating lamp.
2. A high voltage is used to operate lamps. Take sufficient caution to prevent electrical shocks.

Warranty period

Hamamatsu lamps come with a warranty valid for one year from the date of delivery. The warranty is limited to replacement of the lamp. The warranty shall not apply, even within this one year period, to cases where the operating time of the lamp exceeded the guaranteed life, or in cases where trouble or failure occurred as a result of natural calamity, accident, or misuse.

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. ©2002 Hamamatsu Photonics K.K.

HAMAMATSU

HOME PAGE URL <http://www.hamamatsu.com>

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

TLSO1037E03

APR. 2002 IP

Printed in Japan (1000)