

# UV-VIS LIGHT SOURCE

# UV-VIS FIBER LIGHT SOURCE L7893 SERIES

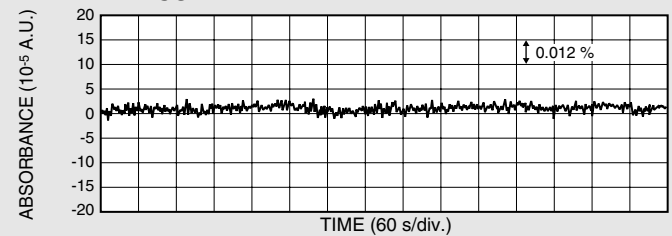
PATENT PENDING



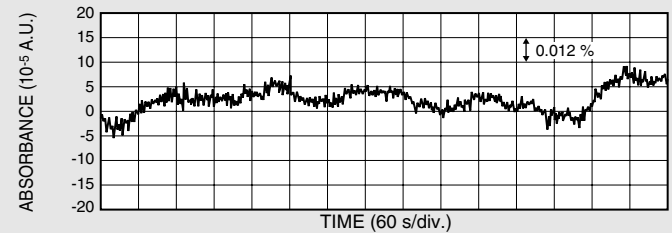
▲Fiber is sold separately.

## Comparison of light output stability (Over light volume) (250 nm)

### ■HAMAMATSU



### ■Others manufacturer



TLSOB0059EB

## OVER VIEW

This light source L7893 incorporates a highly stable Deuterium lamp and a Tungsten lamp into a single compact housing with an optical fiber light guide. The combination of these two lamps covers a wide spectral range from 200 nm to 1100 nm, yet offers highly stable light output and long service life. This light source L7893 series is ideal for a compact analytical equipment such as miniature grating units, portable spectrophotometers and reflection meters.

## FEATURES

- High Stability
- Long Life: 2000 h  
(Deuterium lamp guaranteed life time)
- Compact
- Designed based on EN standard

## APPLICATIONS

- Portable Spectrophotometers
- MTP Readers
- Environment Measurement
- Absorption Spectrum Measurement
- Pharmaceuticals Inspection

# HAMAMATSU

# GENERAL CHARACTERISTICS

Parameter	L7893	L7893-01
Spectral Distribution	200 nm to 1100 nm	200 nm to 400 nm
Light Source	30 W Deuterium Lamp and 5 W Tungsten Halogen Lamp	30 W Deuterium Lamp
Output Stability	Fluctuation (p-p)	0.004 % Typ. (Equivalent to $2 \times 10^{-5}$ A.U. [at 250 nm])
	Drift <sup>(A)</sup>	0.3 %/h Typ.
Power Consumption	Approx. 45 VA	Approx. 40 VA
Input Voltage <sup>(B)</sup> (AC)	100 V to 120 V or 200 V to 240 V	
Weight	Approx. 3 kg	
Dimensional Outline <sup>(C)</sup>	162 mm(W) × 129 mm(H) × 260 mm(D)	
Fiber Connector	SMA 905	

**NOTE:** (A) Measured 30 minutes after lamp turn on.  
 (B) AC input voltage should be selected before shipment.  
 (C) These dimensions don't include projection parts.

# REPLACEMENT LAMP

Type Number	Lamp	Lamp Life Time
L6999-51	30 W Deuterium Lamp	2000 h <sup>(D)</sup>
L7894	5 W Tungsten Halogen Lamp	2000 h <sup>(E)</sup>

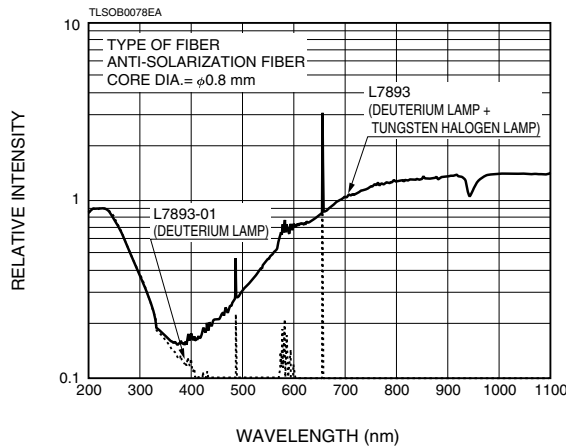
**NOTE:** (D) The guaranteed life is defined as the time when the radiant intensity falls to 50 % of its initial value.  
 (E) Typical life.

# FIBER<sup>(F)</sup> (OPTION)

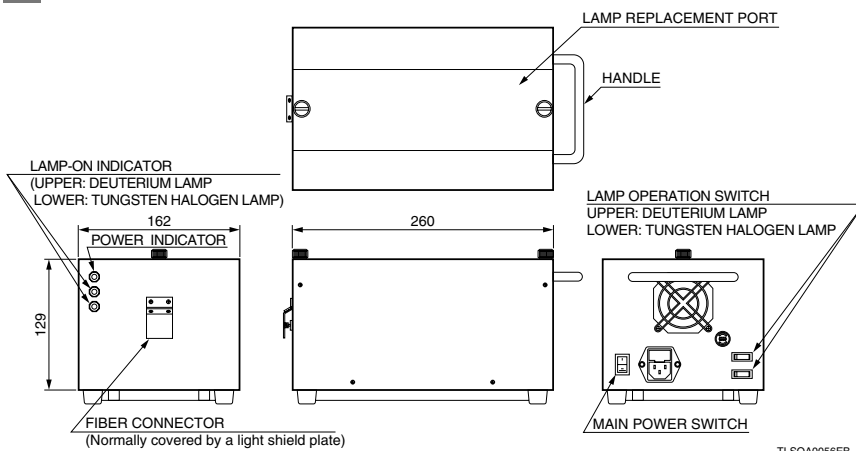
Type Number	Core Diameter	Length
A7969-02	0.2 mm	1.0 m
A7969-04	0.4 mm	
A7969-06	0.6 mm	
A7969-08	0.8 mm	

**NOTE:** (F) Other shape, combination, and anti-solarization fiber for less than 215 nm are available upon your request.

# SPECTRAL DISTRIBUTION (TYPICAL VALUE)



# DIMENSIONAL OUTLINES (Unit: mm)



## CAUTION

- These light sources radiate strong UV rays which are harmful to the eyes and skin. Do not look directly into the lamp or allow the light rays to directly strike the skin. Always wear protective glasses or other protective gear when operation.
- High voltage is used to operate the lamp. Use extreme caution to prevent electric shocks.

## WARRANTY

The guarantee period will be one year shipment or specified life time comes first. The area of guarantee is limited to replacement of the faulty instrument. Faults resulting from natural disasters and incorrect usage will also be excluded from guarantee.

This product is based upon EMC/EN55011, EN50082-2 and SAFETY/EN61010-1.  
 PATENT PENDING

# 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](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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](mailto:info@hamamatsu.it)

TLSO1034E06  
 APR. 2002 IP