

NEW

FLASH LIGHT SOURCES **LF1**

LIGHTNINGFLASH™

L10211, L10212

High-power strobe light sources with high stability

OVERVIEW

This flash light source, called "LF1", consists of a xenon flash lamp, power supply and control circuit, all integrated into one package. Selecting the desired optical system components such as the lightguide allows the LF1 to emit a variety of different types of light. Light emission is highly intense for a period of microseconds, making the LF1 ideal for strobe light sources. The LF1 is also easy to use and handle, offering features such as programmable light emission, flash count and control from a PC.

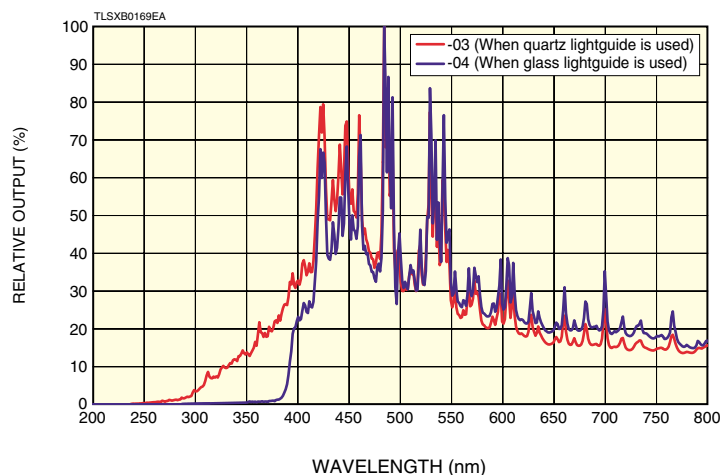


Left: Rear panel lightguide type L10211, Right: Front panel lightguide type L10212
(Light guide is sold separately)

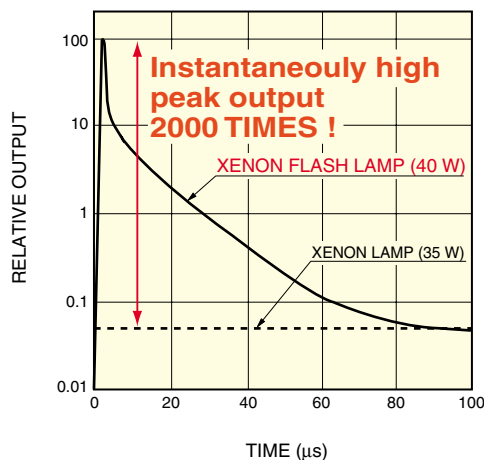
FEATURES

- High stability: $\pm 5\%$
- Long service life: 5×10^7 flashes
- Cassette type lamp simplifies lamp replacement and eliminates optical axis alignment
- Programmable light emission
- Conforms to CE EMC directives and CISPR Class A
- Continuous line spectrum from ultraviolet to infrared
- Allows light emission by external trigger and synchronization with CCD camera

SPECTRAL RADIANT DISTRIBUTION



EMISSION PULSE WAVEFORM

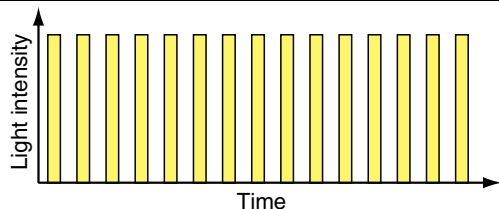


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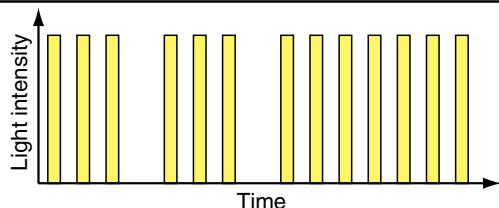
PROGRAMMED LIGHT EMISSION

5 types of 16 flashes programs

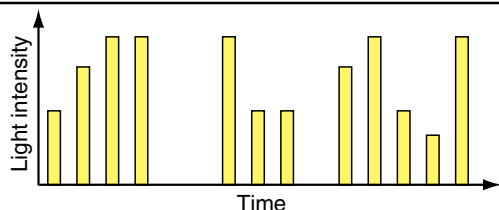
Normal mode: Light flashes at a constant emission frequency.



Program mode: Allows setting the desired flash intervals.



External control mode: Allows setting the desired flash intervals and light output.



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SPECIFICATIONS

Parameters	Description/Value	Unit
Maximum lamp input power	40	W
Maximum lamp input energy (per flash) [Ⓐ]	1.28	J
Maximum emission frequency [Ⓑ]	70	Hz
Flash duration (FWHM)	2 to 4	μs
Light output stability [Ⓒ]	±5	%
Spectral distribution	-03	290 to 1600 nm
	-04	385 to 1600 nm
Lamp supply voltage	300 to 1000	V
Lamp service life [Ⓒ]	5 × 10 ⁷	Flash
Internal capacitor [Ⓓ]	1 μF, 2 μF, 4 μF	—
Light emission control	Light emission by internal trigger or external trigger	—
Input voltage (AC)	100 to 240	V
Power consumption (Max.)	150	VA
Weight	Approx. 6.1	kg
Dimensions (WxHxD) [Ⓔ]	120 × 230 × 300	mm
External control terminal	RS-232C, D-sub 25-pin connector	—
Applicable standards	EN61326 : CLASS A	—

Ⓐ Input energy $E = CV^2 \cdot 1/2$

E: energy (J), C: main discharge capacitor (F), V: lamp supply voltage (Vdc)

Ⓑ At 1 μF

Ⓒ Measured with lamp supply voltage of 800 V, main discharge capacitor of 4 μF, and emission frequency of 30 Hz (at 40 W input).

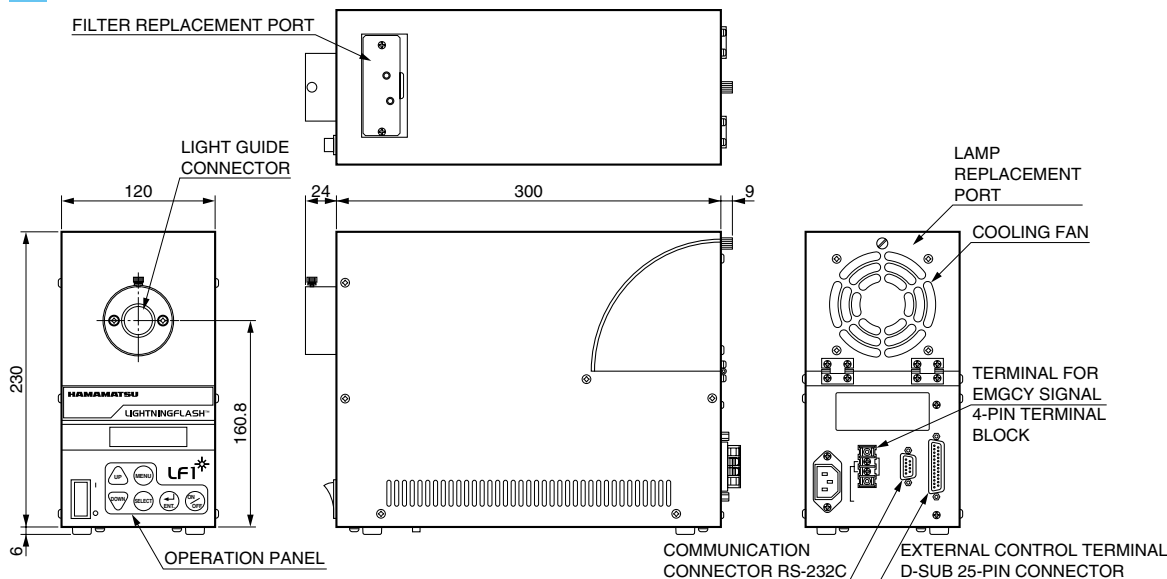
Ⓓ Specified capacitor is installed at the factory prior to shipping

Ⓔ Excluding projecting parts

DIMENSIONAL OUTLINES

(Unit: mm)

[L10212: Front panel lightguide type]



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PATENT PENDING: JAPAN 5

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WEB SITE 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, 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.: 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 01 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

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