

# UV-VIS LIGHT SOURCE

# COMPACT UV-VIS S2D2 FIBER LIGHT SOURCE (UV enhanced type)

## L12515

### OVERVIEW

The L12515 is a UV-visible fiber light source containing the world's smallest\* compact deuterium lamp (S2D2 lamp). Compared to conventional S2D2 lamps, the L12515 gives a higher S/N ratio by enhancing the light output in the UV region.

Despite a small and easy-to-carry size, the L12515 delivers high output, high stability, and low voltage operation, making it ideal for assembly into compact chemical analysis devices.

\* As of September 2013 by our research



\* Light guide is sold separately.

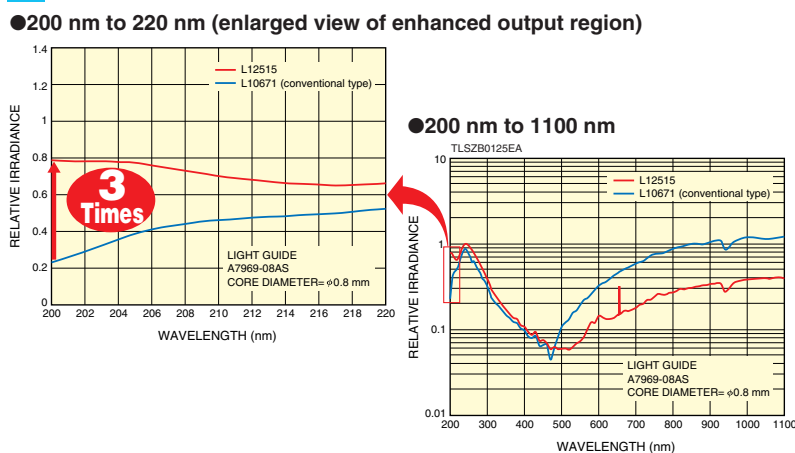
### FEATURES

- **Compact:** 74 mm × 40 mm × 110 mm
- **High stability:** Fluctuation 0.004 %p-p (Typ.) (equivalent to  $2 \times 10^{-5}$  A.U.)
- **Long service life:** 1500 hours guaranteed (compact deuterium lamp)
- **Improved S/N ratio due to enhanced output in the UV region**
- **External control**
- **Shutter function**

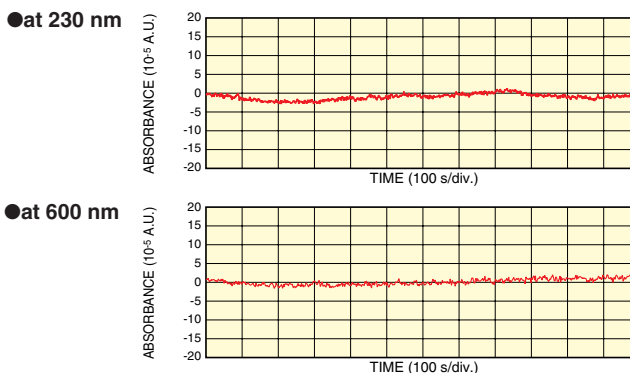
### APPLICATIONS

- Spectrophotometry
- Environmental measurement
- Absorption spectrum measurement
- Pharmaceutical testing
- High-performance liquid chromatography
- Film thickness measurement
- Biological measurement
- Semiconductor inspection
- Optical component inspection

### SPECTRAL DISTRIBUTION (TYPICAL DATA)



### LIGHT OUTPUT STABILITY



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# SPECIFICATIONS

Parameter	Description / Value
Spectral distribution	200 nm to 1600 nm
Built-in lamps	Compact deuterium lamp Tungsten lamp <sup>③</sup>
Output stability	Fluctuation (Typ.) 0.004 %p-p (Equivalent to $2 \times 10^{-5}$ A.U.)
	Drift (Max.) $\pm 0.25$ %/h
Input voltage (AC) <sup>①②</sup>	100 V to 240 V (50 Hz/60Hz)
Power consumption <sup>①</sup>	10 VA
Weight	230 g
Light guide connector	SMA905D
Shutter	Provided as standard
External control	Lamp ON / OFF
	Shutter open / Close
	Lamp ON/OFF, Main power ON/OFF, Status signal
Main unit switch	Shutter open / Close
Operating ambient temperature	0 °C to +40 °C
Operating ambient humidity	Below 80 %
Storage temperature	-10 °C to +60 °C
Storage humidity	Below 85 %

- NOTE: ① When used with AC adapter (supplied).  
 ② Input voltage to light source unit is 12 V dc (8.5 V dc to 13.2 V dc).  
 ③ Tungsten lamp light intensity can be adjusted in the range from 20 % to 100 %.

# REPLACEMENT LAMP

Type No.	Lamp	Lamp service life <sup>④</sup>
L10671D	Compact deuterium lamp	1500 h
L10671W	Tungsten lamp	1000 h

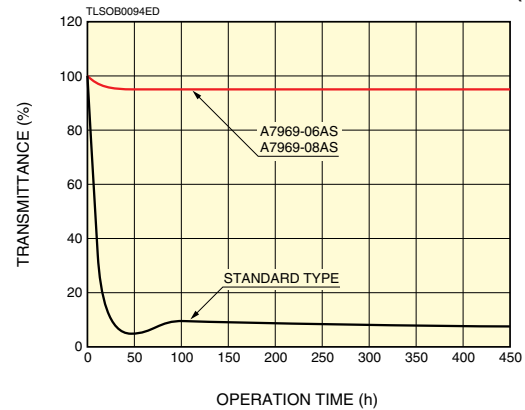
NOTE: ④ Guaranteed service life. Defined as the time when the radiant intensity falls to 50 % of its initial value or the radiant output fluctuation exceeds 0.05 %.

# LIGHT GUIDE (sold separately)

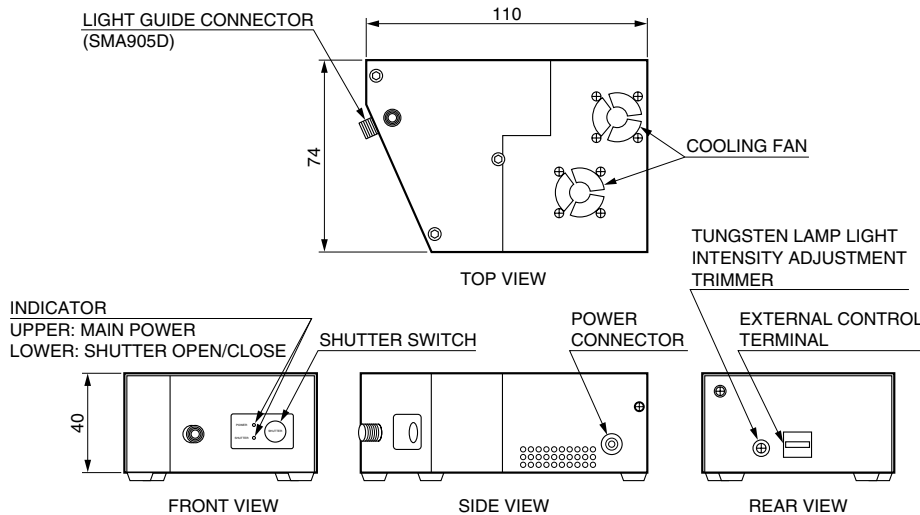
Type No.	Core diameter	Length
A7969-06AS <sup>⑤</sup>	0.6 mm	1.0 m
A7969-08AS <sup>⑤</sup>	0.8 mm	

NOTE: ⑤ UV-resistant light guide

## UV RESISTANT CHARACTERISTICS (at 215 nm)



# DIMENSIONAL OUTLINES (Unit: mm)



## ACCESSORIES (Supplied)

- AC adapter
- External control cable
- Instruction manual

## EXTERNAL CONTROL TERMINALS PINOUT

Pin No.	Signal name
1	Deuterium lamp ON/OFF
2	Tungsten lamp ON/OFF
3	Shutter open/close
4	Deuterium lamp status signal
5	Tungsten lamp status signal
6	No connection
7	Main power ON/OFF status signal
8	GND

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NOV. 2017 IP