

# DEUTERIUM LAMP RELATED PRODUCTS

## POWER SUPPLY C7860/OEM POWER SUPPLY M7628

#### **FEATURES**

- Compact
- **■** High Cost Performance
- Designed based on EN/UL standard (M7628)
  The C7860 designed based on EN standard only.
- **■** Constant Current Power Supply



▲ Left: C7860, Right: M7628

#### **SPECIFICATION**

Parameter			C7860	M7628	Unit
Input	Input Voltage		90 to 115 / 180 to 250 (ac)	24 ± 2.4 (dc)	V
	Input Current			A Max.	
Output	Output Voltage	With Load	80		V dc Typ.
		Without Load	160		V dc Min.
	Output Current		300	mA	
	Current Fluctuation (p-p)		0	% Max.	
	Current Drift at + 25 °C		<u>±</u> (	%/h Max.	
	Heater Voltage Output Voltage		See below		
	Heater Current Output Current		See below		
	Warm-up Time		$25\pm5$		
	Trigger Voltage		600	V peak	
Ambient Temperature Operation		0 to	°C		
Ambientie	imperature	Storage	-40 to +60		°C
Cooling	Cooling		_	20 CFM of Forced Air Cooling	_
Dimensions ( $W \times H \times D$ )			$113\times122\times220$	$100 \times 118 \times 36.2$	mm
Weight			2.7	0.17	kg

#### **HEATER VOLTAGE AND CURRENT**

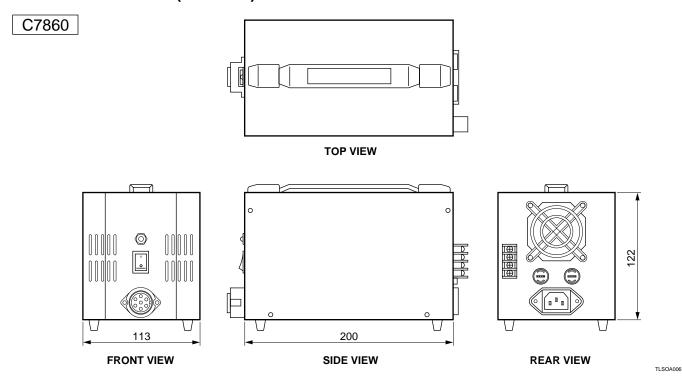
	Warm-up		Operation							
Type Number	Voltage	Current	Voltage	Current	Applicable Lamps					
	(V dc)	(A dc)	(V dc)	(A dc)						
C7860/M7628-2510	$2.5 \pm 0.15$	4	1 ± 0.05	1.8	L6565, L7293, L7303, L6999, L7307, L7174					
C7860/M7628-2517 <sup>(A)</sup>	$2.5 \pm 0.15$	4	1.7 ± 0.1	3.3	L7297, L7298, L6303, L6304, L7304, L7306					
C7860/M7628-3000 <sup>®</sup>	3 ± 0.15	5	0	0	L6566, L6305, L6306					
C7860/M7628-1035 <sup>®</sup>	$10 \pm 0.5$	0.8	$3.5 \pm 0.2$	0.3	L7291, L7294, L6307, L6308, L7292					
C7860/M7628-1070	$10 \pm 0.5$	1.2	$7 \pm 0.35$	1	L7296, L7295, L6309, L6310					
C7860/M7628-1555 <sup>A</sup>	15 ± 0.75	0.5	$5.5 \pm 0.3$	0.3	L6311, L6312					

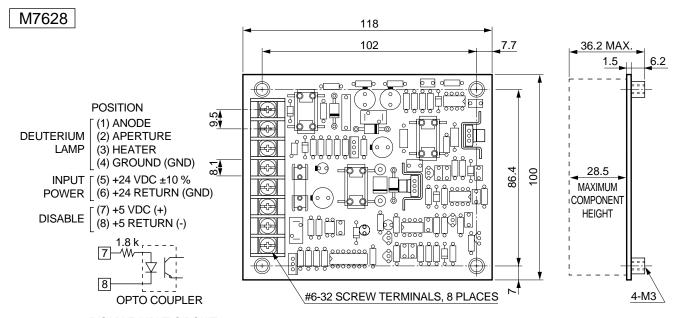
**NOTE:** (A) C7860 series are manufactured only when the order is placed.

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. © 2000 Hamamatsu Photonics K.K.

# **DEUTERIUM LAMP POWER SUPPLY C7860/M7628 SERIES**

#### **■** Dimensional Outline (Unit: mm)





DISABLE INPUT CIRCUIT

DISABLE FUNCTION

DISABLE = +5 V BETWEEN PINS 7 & 8 POLARITY AS INDICATED, LOAD = 2 mA ENABLE = 0 V BETWEEN PINS 7 & 8 OR PINS 7 & 8 OPEN

TLSOA0057EA

## **Precautions When Using Deuterium Lamps**

- 1. High voltage is used to operate the lamp. Use extreme caution to prevent electric shocks.
- 2. The guarantee period will be one year after shipment. The area of guarantee is limited to replacement of the faulty lamp. Faults resulting from natural disasters and incorrect usage will also be excluded from guarantee.

These product conforms to SAFETY/ EN61010-1 of the European Union.
The M7628 is recognized upon UL 1950 (File No.191652).

## **DEUTERIUM LAMP HOUSING E8039**

This lamp housing was designed to allow easy operation of deuterium lamps such as L2D2 lamps and provide full lamp performance. It accommodates a lamp with a flange so that no optical alignment is required. The built-in interlock and forced-air cooling functions ensure high safety. Collimating lenses and fiber guide adaptors are also available as easy-to-replace options, which easily attach to the light exit and allow obtaining the desired light beam.



#### **FEATURES**

#### **■** Compact

Compact case allows easy handling and installation.

#### **■** High Stability

Lamp housing design allows the L2D2 lamp to fully achieve its highly stable operation (fluctuation(p-p) within 0.05%).

#### ■ High Safety, Interlock Function

The interlock function turns off the lamp if the cover comes off. The surface temperature of the lamp housing is maintained below +50 °C.

#### **APPLICATIONS**

- Light sources in various experiments
- Light sources in spectrophotometry

#### ■ No Optical Alignment Required

Designed to accommodate an L2D2 lamp with a flange which eliminates arc point shift. Absolutely no optical alignment is required over the life of the lamp or when replacing the lamp.

#### **■** Easy Replacement of Optional Parts

As easy-to-replace options, collimating lenses and fiber guide adaptors that easily attach to the light exit are available, allowing you to obtain the desired light beam.

#### **SPECIFICATION**

Parameter		Description/Value	Unit
	Suitable Lamp	L2D2 L6999-51	_
	Lamp Power Consumption	Approx. 30	W
Lamp	Spectral Distribution	185 to 400	nm
	Anode Current	80	V dc Typ.
	Tube Drop Voltage	300	mA dc
	Material	Fused Silica	_
Output Window	Dimension	φ10	mm
	Optical Axis Height	72 (include feet height)	mm
Cooling Function		Forced Air Cooling (Built-in cooling fan)	_
Operating Ambient Temperature		0 to +40	°C
Recommended Operating Temperature		+5 to +35	°C
Operating Humidity		30 to 90	%
Dimensions ( $W \times H \times D$ )		120 × 107 × 140 (exclude projection part)	mm
Weight		Approx. 2.3	kg
Suitable Power Supply Type No.		C7860-2510 <sup>(A)</sup>	_

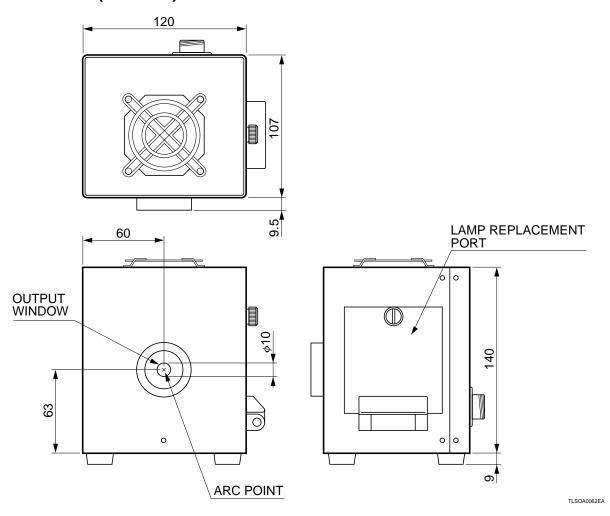
NOTE: A 8087 cable should be necessary for connection between C7860 series and E8039.

Optional Parts SMA Fiber Guide Adaptor with Lens (for thin diameter fiber)

Collimating Lens (Material: Fused Silica, Dimension:  $\phi$ 10 mm, Focal Point: 20 mm, Light output: collimating)

Power Supply C7860 series, Connection cable A8087 and Lamp L6999-51 are optional.

#### **■** Dimensional Outlines (Unit: mm)



## **Precautions When Using Deuterium Lamps**

- 1. High voltage is used to operate the lamp. Use extreme caution to prevent electric shocks.
- 2. The guarantee period will be one year after shipment. The area of guarantee is limited to replacement of the faulty lamp. Faults resulting from natural disasters and incorrect usage will also be excluded from guarantee.

# **HAMAMATSU**

HOMEPAGE 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: info@hamamatsu.fr

United Kingdom: Hamamatsu Photonics United: 2 Howard Court, 10 Tewin Road Welwyn Garden City Hertfordshire AL7 1BW, United Kingdom: Telephone: 44-(0)1707-29488, 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 81 731, Fax: (39)02-935 81 741 E-mail: info@hamamatsu.it

TLSO1036E03

OCT. 2000 IP Printed in Japan (1000)