

HAMAMATSU

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 | | 2 | A Max. |
| Output | Output Voltage | With Load | 80 | V dc Typ. |
| | | Without Load | 160 | V dc Min. |
| | Output Current | 300 ± 15 | mA | |
| | Current Fluctuation (p-p) | 0.5 | % Max. | |
| | Current Drift at + 25 °C | ±0.1 | %/h Max. | |
| | Heater Voltage | Output Voltage | See below | — |
| | Heater Current | Output Current | See below | — |
| | Warm-up Time | | 25 ± 5 | s |
| | Trigger Voltage | 600 ± 50 | V peak | |
| Ambient Temperature | Operation | 0 to +40 | °C | |
| | Storage | -40 to +60 | °C | |
| Cooling | | — | 20 CFM of Forced Air Cooling | — |
| Dimensions (W × H × D) | | 113 × 122 × 220 | 100 × 118 × 36.2 | mm |
| Weight | | 2.7 | 0.17 | kg |

HEATER VOLTAGE AND CURRENT

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

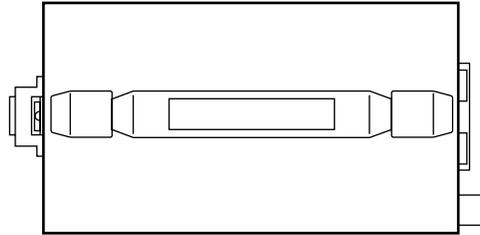
NOTE: (A) C7860 series are manufactured only when the order is placed.



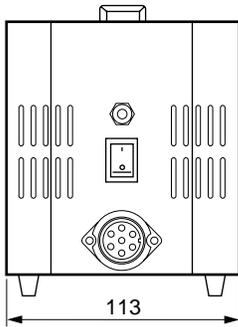
DEUTERIUM LAMP POWER SUPPLY C7860/M7628 SERIES

■ Dimensional Outline (Unit: mm)

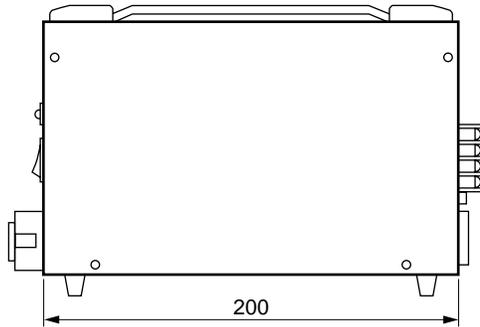
C7860



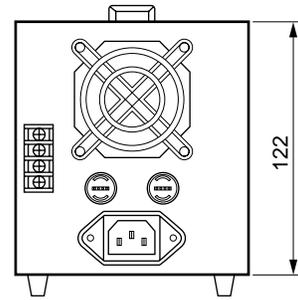
TOP VIEW



FRONT VIEW



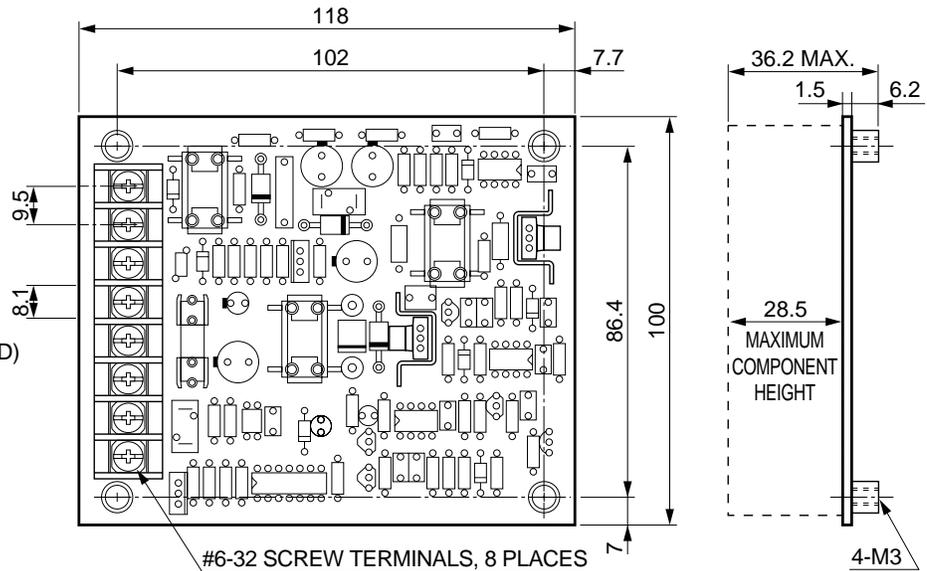
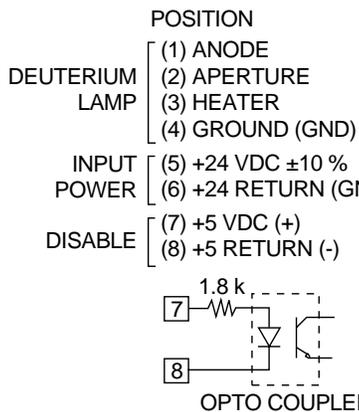
SIDE VIEW



REAR VIEW

TL50A0061EA

M7628



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

TL50A0057EA

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.

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.

■ 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.

APPLICATIONS

■ Light sources in various experiments

■ Light sources in spectrophotometry

SPECIFICATION

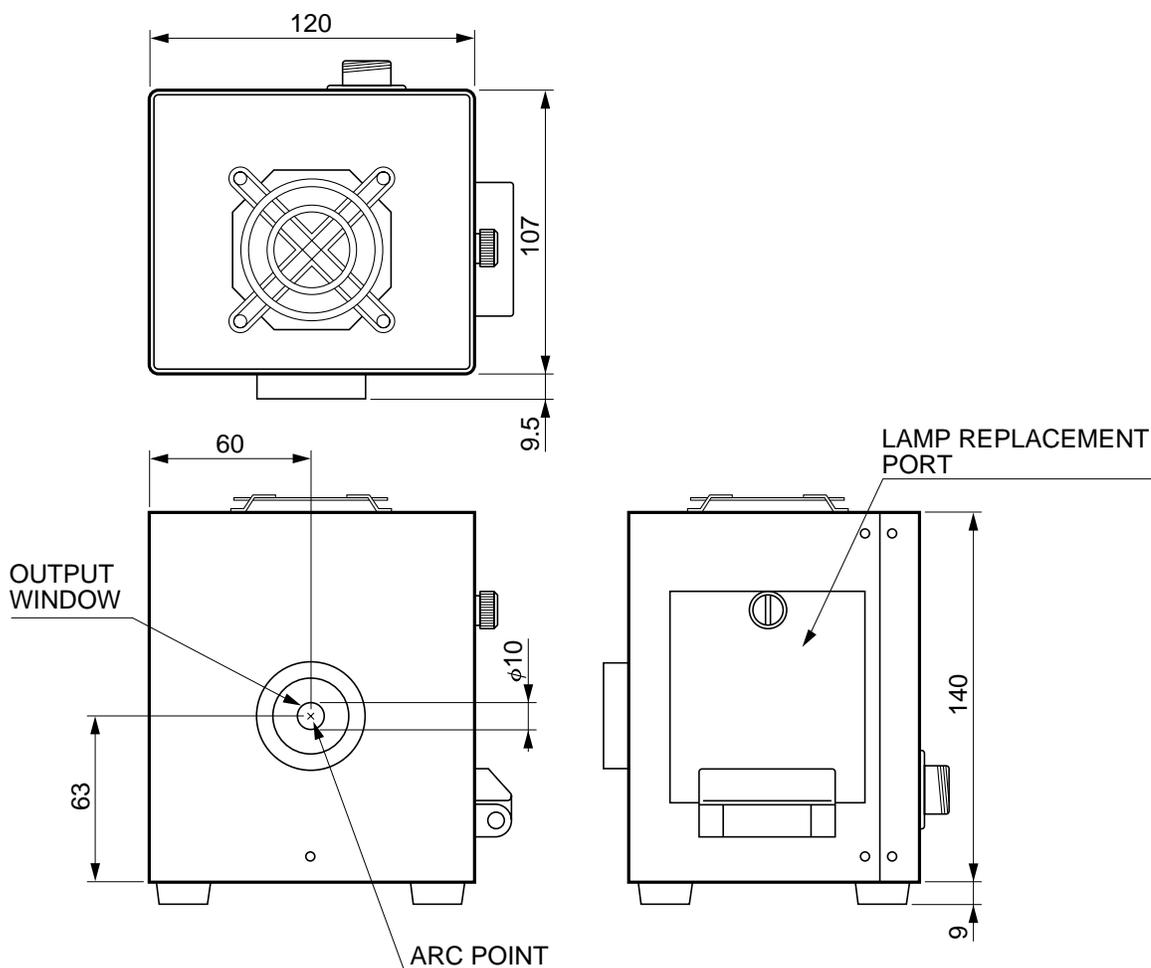
| | Parameter | Description/Value | Unit |
|-----------------------------------|------------------------|---|-----------|
| Lamp | Suitable Lamp | L2D2 L6999-51 | — |
| | Lamp Power Consumption | Approx. 30 | W |
| | Spectral Distribution | 185 to 400 | nm |
| | Anode Current | 80 | V dc Typ. |
| | Tube Drop Voltage | 300 | mA dc |
| Output Window | Material | Fused Silica | — |
| | Dimension | φ 10 | 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 × H × D) | | 120 × 107 × 140 (exclude projection part) | mm |
| Weight | | Approx. 2.3 | kg |
| Suitable Power Supply Type No. | | C7860-2510 (A) | — |

NOTE: (A) A8087 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: φ10 mm, Focal Point: 20 mm, Light output: collimating)

DEUTERIUM LAMP HOUSING E8039

■ Dimensional Outlines (Unit: mm)



TLS0A0062EA

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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

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