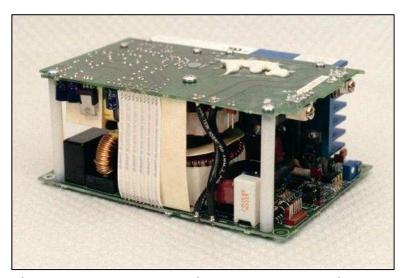


# CE260AHX, CE260BHX, and CE260CHX MERCURY-XENON POWER SUPPLY



The CE260AHX, CE260BHX, and CE260CHX power supplies are designed to run Mercury-Xenon arc lamps in a constant-power mode.

The CE260 power supply is designed to run Mercury-Xenon arc lamps in a constant-power mode. The output power has two levels, 200 W and 300 W. The unit is normally at 200 Watts until the High Power remote input is asserted true. The unit then outputs 300 Watts. This is useful for pulsed power applications. EMI line-filtering is built-in to the unit.

The CE260BHX power supply is the same as the CE260AHX model except that it does not have V-capacitors in the line filter section.

The CE260CHX power supply has smaller Y capacitors to meet the 100 µA leakage requirement of many U.S. hospitals.

# **Key Features**

- Line Input: 100 240 VAC,
   ± 10%, 47 63 Hz, 6.5 Arms max.
- Environmental: 0° C to 50° C operating.
- Altitude: -1,000 ft. to 12,000 ft. (-305 m to 3658 m) MSL.
- Weight: 2.5 lbs. (1.14 Kg).
- Dimensions: 6.50" x 4.65" x 2.80" tall

(165mm x 118mm x 71mm tall).

#### **Ignitor:**

- 25 KV ignition spike. Negativeside ignition.
- Minimum repetition rate is 10 strikes/second at all input voltages.

Ignition pulses will continue until

ignites.

• Ignitor Life: > 500,000 strikes.



# CE260AHX, CE260BHX, and CE260CHX

# MERCURY-XENON POWER SUPPLY

**Output power:** 190 - 210 Watts, or 285 - 315 Watts, constant power

**Output voltage compliance:** 20.0 to 25.0 V operating, >110 VDC during

ignition.

**Output regulation:** output power held to within ± 5% over all input, output, and environmental conditions.

Output current: 8.0 to 15.0 Adc Output ripple: <0.7 Ap-p (low power), <1.0 Ap-p (high power)\* Efficiency: >70% at 300 W output,

**Thermal protection:** ballast is disabled when temperature exceeds 90 °C. Unit will automatically restart after cooling down.

**Isolated Auxiliary output (UL-rated):** +12V fan power, 800 μA max.

# Optically Isolated Status & Control Connector (UL-rated circuit)

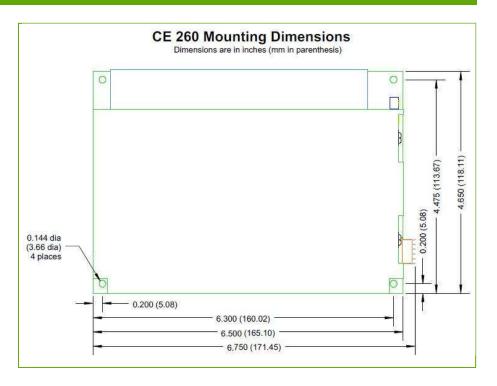
Remote Enable

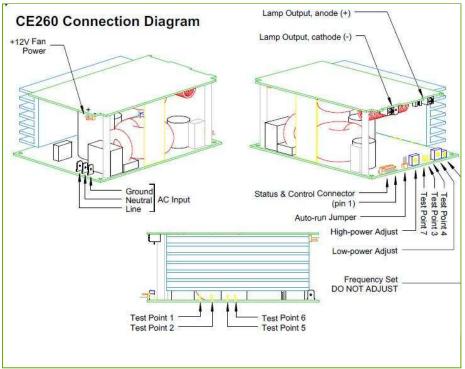
120 VAC input

- Lamp Lit Status
- High/Low Power

# **Ground Leakage:**

CE260AXE: < 300 μA</li>
 CE260BXE: < 10 μA</li>
 CE260CXE: < 100 μA</li>





<sup>\*</sup> ripple is measured in a DC to 20 MHz bandwidth

#### CE260AHX, CE260BHX, and CE260CHX

# **MERCURY-XENON POWER SUPPLY**

# **Input / Output Connections**

#### Models:

CE260AHX, CE260BHX, CE260CHE

#### **AC Input:**

- 100 240 VAC, ± 10%, 6.5 Arms maximum
- 47 63 Hz
- 0.25" faston-type connectors

# **Lamp Output:**

0.25" faston-type connectors:

- Male connector for lamp cathode (-)
- Female connector for lamp anode (+)

Screw terminal connectors (6-32 or M3 screws) are also available.

#### **Status and Control Connector:**

6-pin, 0.1" spacing, with locking ramp
Use Molex 10-11-2063 connector or equivalent

- pin 1: Lamp Lit Return
- pin 2: Lamp Lit Output
- pin 3: Enable Return
- pin 4: Enable Input
- pin 5: High/Low Lamp Intensity Return
- pin 6: High/Low Lamp Intensity Input

#### **Fan Connector:**

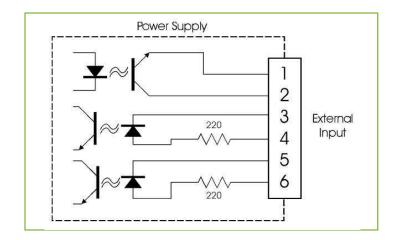
- 2-pin, 0.1" spacing, with locking ramp
- Use Molex 22-01-3027 connector or equivalent

#### **Current Sense Test Points:**

The voltage between test points TP7 and TP4 indicates the output power. The scale is 1mV/W, so 300 mV means 300 W to the lamp. Test points TP3 and TP4 are across a 0.01 ohm resistor that is in series with the output to the lamp. This can be used to monitor output current.

# **Auto-Run Jumper:**

Attaching a two-pin shorting block across this connector forces the supply to run as soon as power is applied. The state of the Enable input is ignored.



# **Using the Status and Control Connector**

The Status and Control Connector consists of two inputs and one output, each of which is optically isolated. The inputs are designed to be driven by a TTL or 5V CMOS gate. The source used must be capable of supplying 2.0 mA into a 2.1 V load. (Some TTL gates are not able to drive a 2.1 V load reliably without a pull-up resistor.)

The Enable input turns the lamp on and off. A high input to the Enable pin turns on the lamp. The auxiliary +12 V supply runs all the time, regardless of the state of the Enable input. The electrical delay of the enable input is less than 10 ms. To turn on the lamp, the delay of the Enable input must be added to the time to ignite the lamp, which is approximately 100 ms, for a total of 110 ms. Turning off the lamp takes only 10 ms.

The Lamp Intensity input sets the output power to Low Power or High Power. If a low input signal is applied (or no signal is present), the lamp output is approximately 175 Watts (130W for CE160), as set by the Low Power Adjust. When a high input is applied, the output goes to approximately 300 Watts (220W for CE160), as set by the High Power Adjust. Internally, the High Power is added to the low power setting, so changing the Low Power Adjust will also change the output power in High Power mode. Because of this interaction, the Low Power Adjust should be set first, followed by the High Power Adjust. The delay of the Lamp Intensity input is less than 10 ms.

# CE260AHX, CE260BHX, and CE260CHX

# **MERCURY-XENON POWER SUPPLY**

#### **Regulatory Compliance**

Approved to UL2601 (E177225). Complies with EN55011 Class B Emissions. CE-marked.



# **About Excelitas Technologies**

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high-performance technology needs of OEM customers.

From medical lighting to analytical instrumentation, clinical diagnostics, industrial, safety and security and aerospace and defense applications, Excelitas Technologies is committed to enabling our customers' success in their end-markets.

Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

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