CEP301 Series
300 Watt Xenon Power Supplies

CERMAX

Key Features

- Line input 100 – 240VAC $\pm$ 10%, 50–60Hz, 5.3 Arms max.
- Environmental: 0°C to 50°C operating
- Weight: 2.7lbs (1.2kg)
- Dimensions: 6.50" x 4.55" x 2.25" (165mm x 116mm x 57mm)
- Includes lamp igniter: $\pm$ 15kV bilateral ignition pulse
- Ignition time out; approx. 6 seconds. Can be disabled via jumper configuration.
- Igniter Life > 80,000 strikes
- High reliability

Applications

- For OEM use / integration into parent system. Not intended for standalone or bench top operation.
- Intended for use by electrical technicians / engineer only after reading operation manual.
- For use with Cermax™ xenon lamps
- Can be configured for use with several lamp types: quartz xenon, mercury, metal halide (may require special order).
- Medical Applications: Surgical Head Lamp, Endoscopic Imaging Illuminators
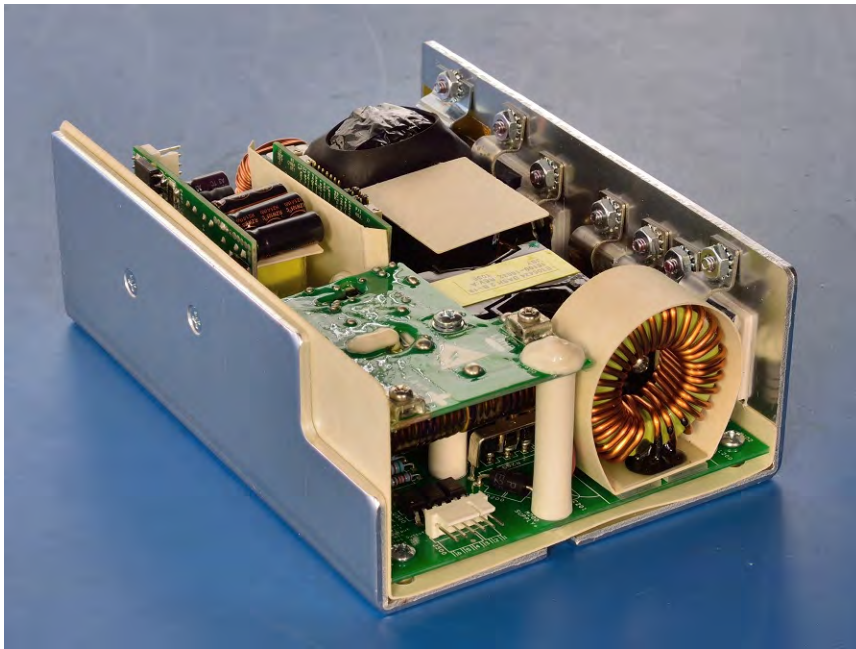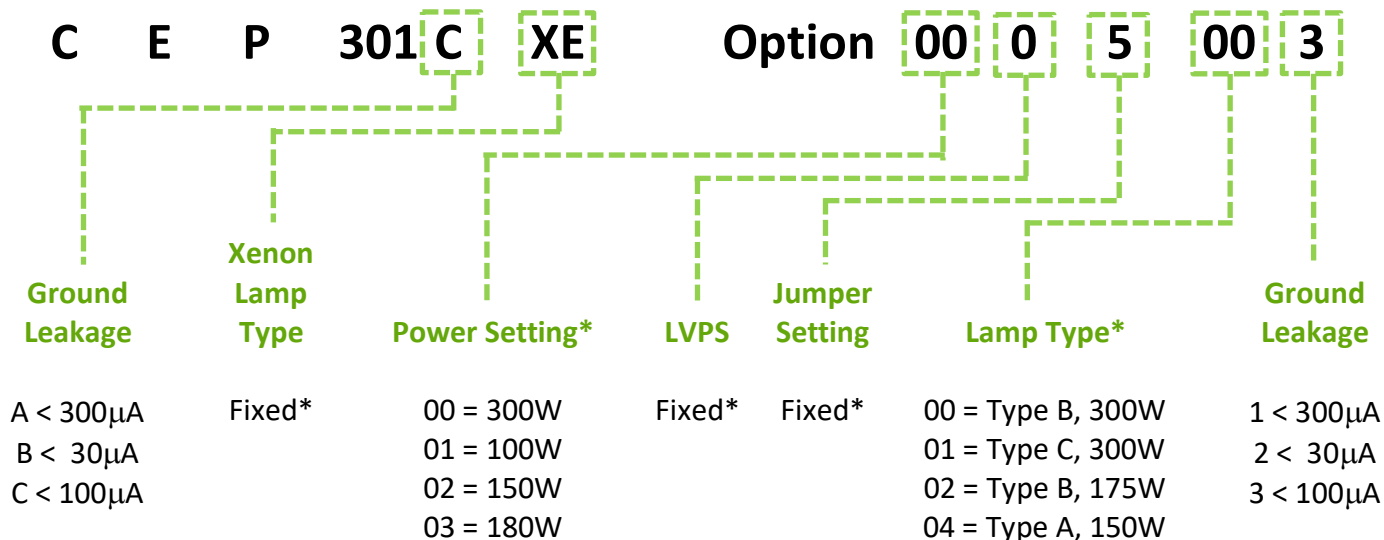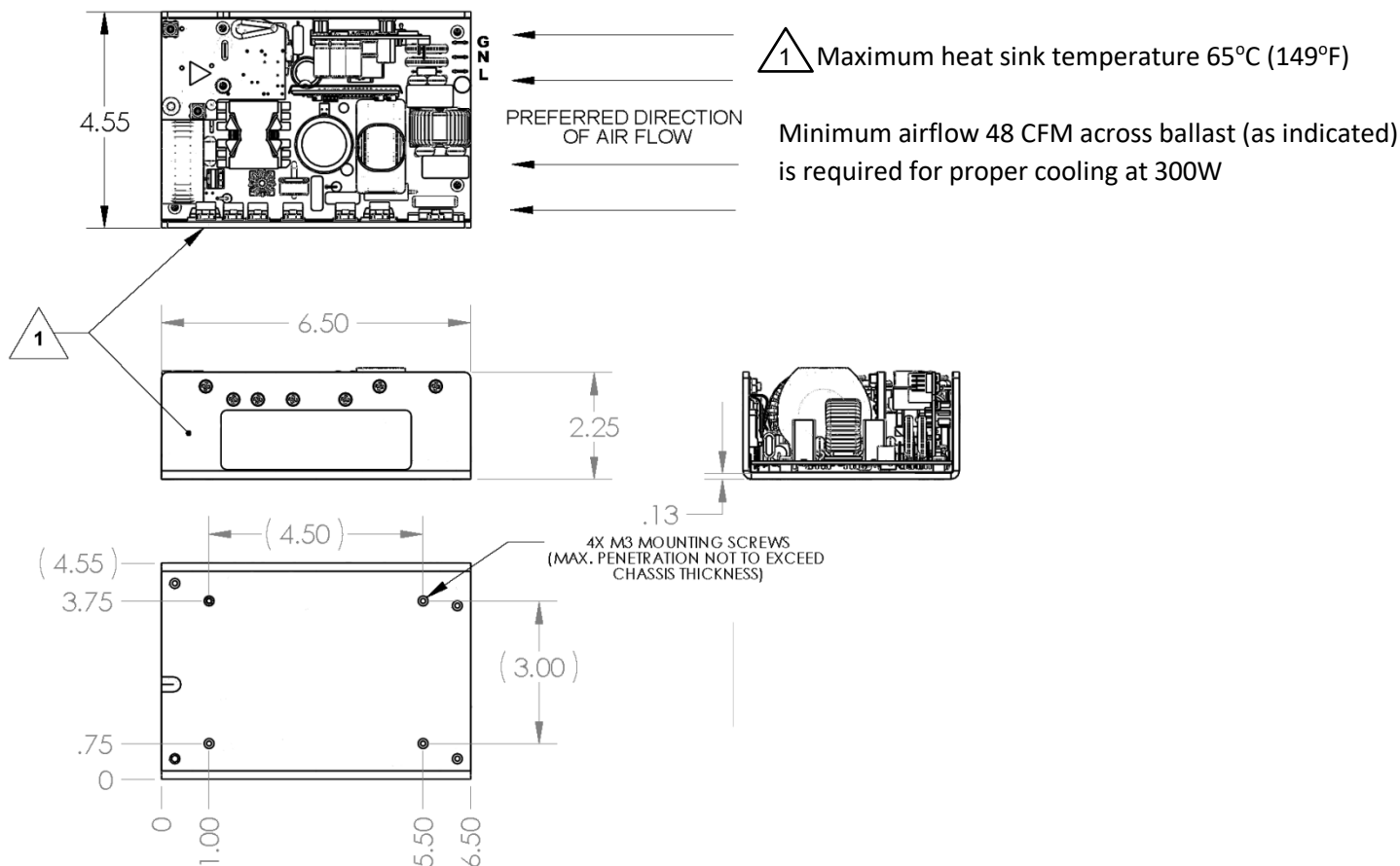
The **CEP301** power supply family is designed to run Cermax™ xenon arc lamps (default) or other xenon, mercury and metal halide lamps (by factory request only) in a constant-power mode (default) or constant current mode (by factory request only). The output power is adjustable from 100 to 300 Watts in power mode with a built-in potentiometer. EMI line-filtering is built-in to the unit. The supply includes an isolated +12V output for powering external fans or electronics and an isolated +5V for powering CMOS level circuitry. Active Power Factor Correction meets EMC limits for harmonic current emissions, and limitations of voltage fluctuations and flicker.

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Options / Part Numbering

C E P 301 **C** **XE** Option **00** **0** **5** **00** **3**

Ground Leakage	Xenon Lamp Type	Power Setting*	LVPS	Jumper Setting	Lamp Type*	Ground Leakage
A < 300µA	Fixed*	00 = 300W	Fixed*	Fixed*	00 = Type B, 300W	1 < 300µA
B < 30µA		01 = 100W			01 = Type C, 300W	2 < 30µA
C < 100µA		02 = 150W			02 = Type B, 175W	3 < 100µA
		03 = 180W			04 = Type A, 150W	

Additional options may be available. Special order from factory required.

Dimensional Information

4.55

PREFERRED DIRECTION OF AIR FLOW

G N L

⚠1 Maximum heat sink temperature 65°C (149°F)

Minimum airflow 48 CFM across ballast (as indicated) is required for proper cooling at 300W

6.50

2.25

.13

4X M3 MOUNTING SCREWS
(MAX. PENETRATION NOT TO EXCEED CHASSIS THICKNESS)

(4.50)

(4.55)
3.75

(3.00)

.75
0

0 1.00 5.50 6.50

Specifications

Line input voltage	Line input 100 – 240VAC $\pm$ 10%, 50–60Hz, 5.3 Arms max.
Output power	100 – 300 Watts, constant power
Output regulation	Output power to be held within $\pm$ 5%
Output voltage compliance	10 to 25 V operating
Output current	9.0 to 22.0 ADC
Output ripple	< 5% @ 300W (measured in a DC to 20MHz bandwidth)
Efficiency	80% at 300 W output, 120VAC input
Igniter	$\pm$ 15kV nominal ($\pm$ 3kV) > 110 V during boost (pre-ignition) cycle Minimum repetition rate is 4 strikes / second ($\pm$ 2 strikes) Ignition timer: pulses continue for 6 ± 1 seconds[1] (feature may be disabled via jumper). Igniter Life > 80,000 strikes [1]*Ignition Timer is a limited feature which detects lamps that do not start at all. See OM12-1 for full description of this feature*
Auxiliary Outputs	+12VDC $\pm$ 5%, 2.5A max. (SELV rated) +5VDC $\pm$ 5%, 0.5A max. (SELV rated)
Signal I/O	Optically isolated connector (SELV rated): • Remote enable input • Lamp ON indicator • Lamp over / under voltage indicator
Thermal Protection	Ballast is disabled when heat-sink temperature exceeds 90°C Unit will restart upon cool down and power reset
Ground Leakage	CEP301AXE < 300µA @120Vac CEP301BXE < 30µA @120Vac CEP301CXE < 100µA @120Vac
Regulatory compliance	Approved to UL 60601-1 3rd Edition (excluding EMC and Biocompatibility) UL File No. E177225 Complies with EN55011 Class B Emissions with appropriate system design Meets EN 61000-3-2 and EN61000-3-3 CE-marked

NOTE: All values are nominal; specifications subject to change without notice.

02/13/18

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