

CEP301AHG, CEP301BHG, CEP301CHG 300 Watt Mercury Arc Lamp Power Supplies



The **CEP301** power supply is designed to run Mercury arc lamps (in a constant-power mode (default) or constant current mode (by factory request only). The output power is adjustable from 100 Watts (default) or from 100 to 300 Watts (by factory request only) in power mode with a built-in potentiometer. EMI line-filtering is built-in to the unit. The supply includes an isolated +24V 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.



Key Features

- Line input 100 240VAC + 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: <u>+</u> 15kV bilateral ignition pulse
- Ignition time out; approx. 6 seconds. Can be disabled via jumper configuration.
- Igniter Life > 80,000 strikes
- High reliability

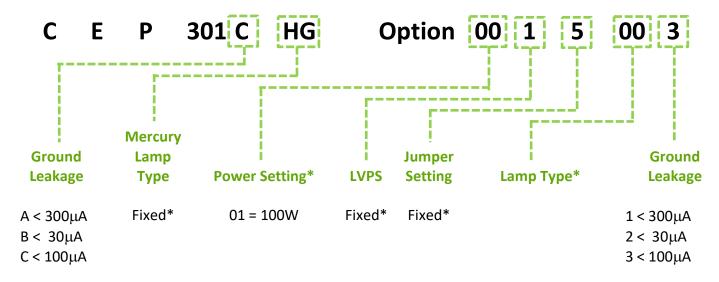
Applications

- 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 Mercury arc lamps



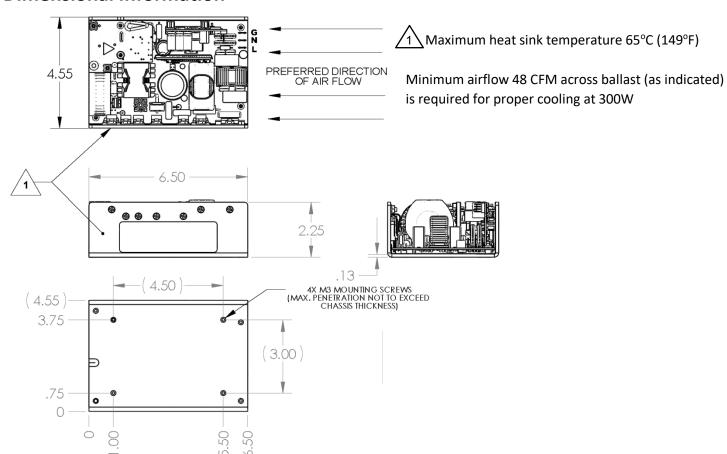
300 Watt Mercury Arc Lamp Power Supplies

Options / Part Numbering



^{*} Additional options may be available. Special order from factory required.

Dimensional Information



300 Watt Mercury Arc Lamp Power Supplies

Specifications

Line input voltage

Line input 100 – 240VAC + 10%, 50–60Hz, 5.3 Arms max.

Output power

100 – 300 Watts, constant power

Output regulation

Output power to be held within + 5%

Output voltage compliance

10 to 40 V operating

Output current

4.0 to 10.0 ADC

Output ripple

< 5% @ 300W (measured in a DC to 20MHz bandwidth)

Efficiency

80% at 300 W output, 120VAC input

Igniter

+ 15kV nominal (+ 3kV)

> 110 V during boost (pre-ignition) cycle

Minimum repetition rate is 4 strikes / second (± 2 strikes)

Ignition timer: pulses continue for 6 ± 1 seconds¹ (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

+24VDC <u>+</u> 5%, 1.25A max. (SELV rated)

+5VDC <u>+</u> 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

CEP301AHG < 300μA @120Vac

CEP301BHG < 30μA @120Vac

CEP301CHG < 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.

Excelitas Technologies 35 Congress Street Salem, Massachusetts 01970 USA Telephone: (+1) 978.745.3200

Toll free: (+1) 800.950.3441

Fax: (+1) 978.745.0894

Excelitas Technologies LED Solutions, Inc. 160 E. Marquardt Drive Wheeling, Illinois 60090 USA Telephone: (+1) 847.537.4277

Fax: (+1) 847.537.4785

Excelitas Technologies Illumination, Inc. 44370 Christy Street Fremont, California 94538-3180 USA Telephone: (+1) 510.979.6500 Toll-free: (+1) 800.775.6786 Fax: (+1) 510.687.1140

Excelitas Technologies Elcos GmbH Luitpoldstrasse 6 Pfaffenhofen, 85276 Germany Telephone: (+49) 8441.8917.0

Fax: (+49) 8441.7191.0

Excelitas Technologies Shenzhen Co., Ltd.
Wearnes Technology Center
No. 10 Kefa Road, Science & Industry Park
Nanshan District,
Shenzhen, Guangdong
P.R. of China 518057
Telephone: +86 2655 3861
Fax: +86 755 2661 7311

For a complete listing of our global offices, visit www.excelitas.com/ContactUs

© 2011 Excelitas Technologies Corp. All rights reserved. The Excelitas logo and design are registered trademarks of Excelitas Technologies Corp. All other trademarks not owned by Excelitas Technologies or its subsidiaries that are depicted herein are the property of their respective owners. Excelitas reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.

