

# High Voltage Power Supply and Test Equipment Catalog

Smart/Programmable High Voltage Power Supplies

DC/DC High Voltage Power Supplies

AC/DC High Voltage Power Supplies

Digital High Voltage Meter



## About Us

# DEAN TECHNOLOGY

Dean Technology, Inc. has a long and exceptional history providing world-class products, design, and

solutions for high voltage and high power markets and applications. Grown through the consolidation of many complementary brands, the full product offering can supply everything from components through complete systems. Headquartered in Dallas, Texas, with production facilities in the United States and China, as well as sales offices throughout the world, DTI is a truly modern multi national company. Our broad range of locations and capabilities, with all activities directed through a close-knit team of experienced executives, allows us to be exceptionally price competitive and flexible, while ensuring the quality and technical know how expected of a US manufacturer.

Dean Technology brings a distinctive approach to the manufacture and sale of electronics. While most manufacturers prefer the path of least resistance, seeking only new cost reducing methods and increased margins, we remain focused on providing the correct product and solution to meet each individual design. All of the engineers on our staff work directly with our customers, helping to ensure we are providing the correct technical solution and offering lower cost items whenever appropriate. We firmly believe that through this honest, involved, and direct approach we are best able to meet our customers' needs. We know that content and successful customers are what ensure our own success.

It is this unique thinking about how to work with our customers that allows DTI to bring together the most current back office technology, modern business practices, cutting edge design and proven manufacturing techniques to offer the best and newest products while maintaining support for more traditional and legacy items. We aim to discontinue only those products for which we can immediately offer a form fit and function replacement that is equal to or better than the performance, quality and reliability of its predecessor. Where other manufacturers abandon products and markets that don't show year over year quantity growth, we see and are committed to the long-term value of everything we sell. Designing with Dean Technology product ensures you will have continued support well into the future.

Dean Technology, Inc. is focused completely on providing our customers with the very best we have to offer, in every way possible. We revel in the specific details of each and every customer's needs, and given the opportunity, will work tirelessly for their success.



Addison, TX facility



Farmingdale, NJ facility



Indiana, PA facility



Lucernemines, PA facilities



Anshan, Liaoning  
China facility

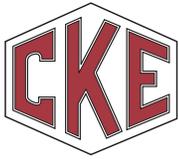
ISO 9001: 2008 CERTIFIED

Contact us, we're ready to help!

WWW.DEANTECHNOLOGY.COM

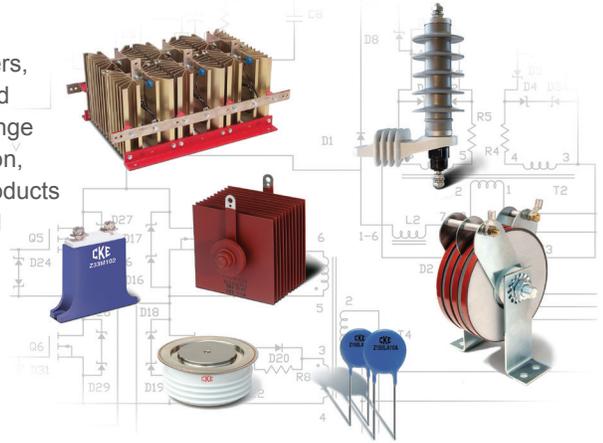
972.248.7691

## Product Line Descriptions



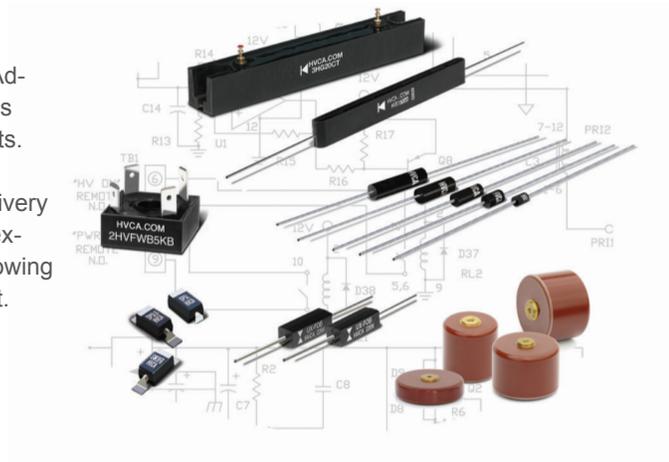
### CKE

CKE is a line of high voltage and high power silicon rectifiers, MOVs, selenium suppressors, silicon carbide varistors, and assemblies. These products are appropriate for a wide range of applications, and find a special fit in the power generation, resistance welding and RF power systems markets. All products can be customized to meet specific needs, and are offered with a wide variety of packaging, and connection options.



### HVCA

The HVCA product line centers on high voltage diodes, ceramic capacitors, bridge rectifiers and assemblies. Advanced diffusion and manufacturing techniques allow us to produce a wide range of diodes, and rectifier products. Tight control of these designs and processes allow for custom versions of any product within this line, and delivery on short lead times. Dean Technology has extensive expertise in high voltage assembly and encapsulation allowing replication of most any competitive or discontinued part.

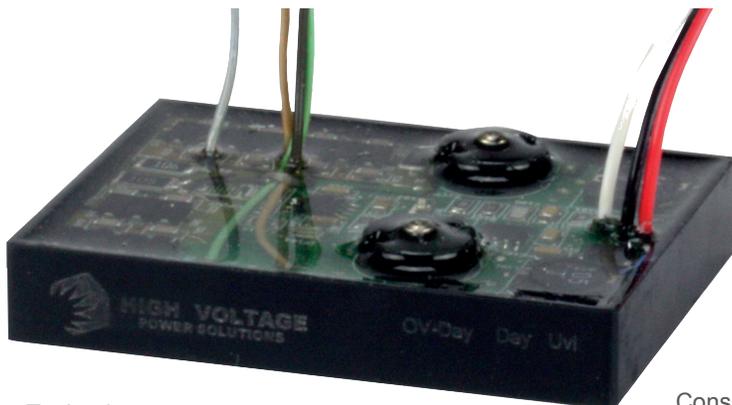


### HVPSI

The HVPSI line of products includes standard, modified standard, build to print, and custom multipliers, power supplies and test equipment. The HVPSI line is our most complex, and represents all of the best we have to offer. Many of our products are used in the production of the HVPSI line. We believe so strongly in our own products that we are one of our own biggest customers for our own components.

High voltage power supplies and multipliers are complex and delicate designs, which require many specific features depending on the exact application. Whether for electrostatic, x-ray, imaging, or any other high voltage application, the HVPSI line and exceptional design support of Dean Technology is perfectly suited. DTI is highly dedicated to this product line, and is investing heavily in developing new techniques and products that will allow us to significantly reduce the design time on custom power supplies. This is all simply a continuation of the dedication we carry through to our customers' needs on all of our offerings.

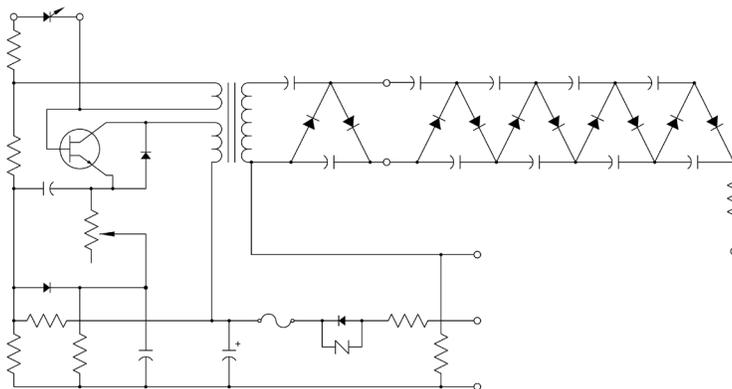




Dean Technology knows that standard products don't always meet every customer's needs. Electronics design is not a simple process; often the ability to get the exact item needed, rather than having to choose from what's already available, can mean the success of a design and save countless time and cost. In support of this, every single thing we offer can be customized. DTI can produce these custom solutions, in most cases, without the premium cost that most manufacturers require.

Specialty packages, terminal configurations, or assemblies designed to specific mechanical and electrical needs, no change or addition is too drastic. Our engineers are involved in every product recommendation we make. When we don't have a perfect offering, they are already primed and ready to help design something new. We also have all of the necessary testing facilities to aid in the development and design process, ensuring that everything we ship has been tested to meet the requirements it was designed for.

Consider this entire catalog, as well as everything listed on our website, as a capacity guide. If you would like something changed or something completely new, just ask, we'll be more than happy to work with you to meet your exact requirements.



## Disclaimer

The products represented in this catalogue are to be used strictly for lawful purposes, and not for any prohibited activity. This catalogue shall not be deemed to constitute a sale or an offer to sell any of the products described herein for any purposes other than the lawful use for which such products are intended. Unless otherwise specified, the products described in this catalogue are not to be used for military, medical or other specialized purposes. We reserve the right to release information to the proper authorities, as a result of a violation of these or other applicable standards or unlawful acts, if the information is subpoenaed and/or if we deem it necessary and/or appropriate.

Operation or use of the products in this catalogue is at the risk of the purchaser, operator or user. Neither Dean Technology, Inc. nor any of its affiliates, associated entities, officers, directors, shareholders or agents shall be liable to any party for any damages, whether direct, indirect, special, consequential, punitive or otherwise, suffered by any such purchaser, user or operator. The offer of any products in this catalogue not manufactured or produced by Dean Technology, Inc. or any of its affiliates or associated entities shall not be deemed to be

an endorsement of any such other products or the provision of any warranty for any such other products, including, without limitation, a warranty of merchantability of fitness or otherwise.

The contents of this catalogue, including any product descriptions, pictures or specifications, are protected under the copyright and other intellectual property laws of the United States and its fellow treaty signatories. Copying, reproduction, publication or other dissemination of all or any portion of the contents of this catalogue is strictly prohibited.

By purchasing any product described in this catalogue, the purchaser and any ultimate user of such product(s) hereby agrees to indemnify and hold harmless Dean Technology, Inc. and each of its affiliates, associated entities, officers, directors, shareholders and agents for any loss, cost, liability, damage or expense (including attorneys' fees, expenses and court costs) incurred by any of the foregoing persons except in cases of gross negligence or willful misconduct.



# SPL SERIES

**Features:**

- 24VDC and Universal AC Input Versions
- Up to 50W of output power
- Unlimited output arc and short-circuit protection
- Multiple Status Indicator LEDs
- Ionizer and auxiliary outputs (SPL-A Series only)
- Fixed or user-adjustable ionizer output (50% to 100% of output)
- Over-voltage, over-current, & over-temperature shutdown
- Auto reset of faults
- Available in positive or negative versions
- Software customizable performance

**SPL-A Subseries Applications:**

- Air Ionizers
- Air Cleaners
- Electrostatic Painting
- Electrostatic Precipitators

**SPL-I Subseries Applications:**

- ATE
- Cable Thumping
- Capacitor Chargers
- Cable Testers



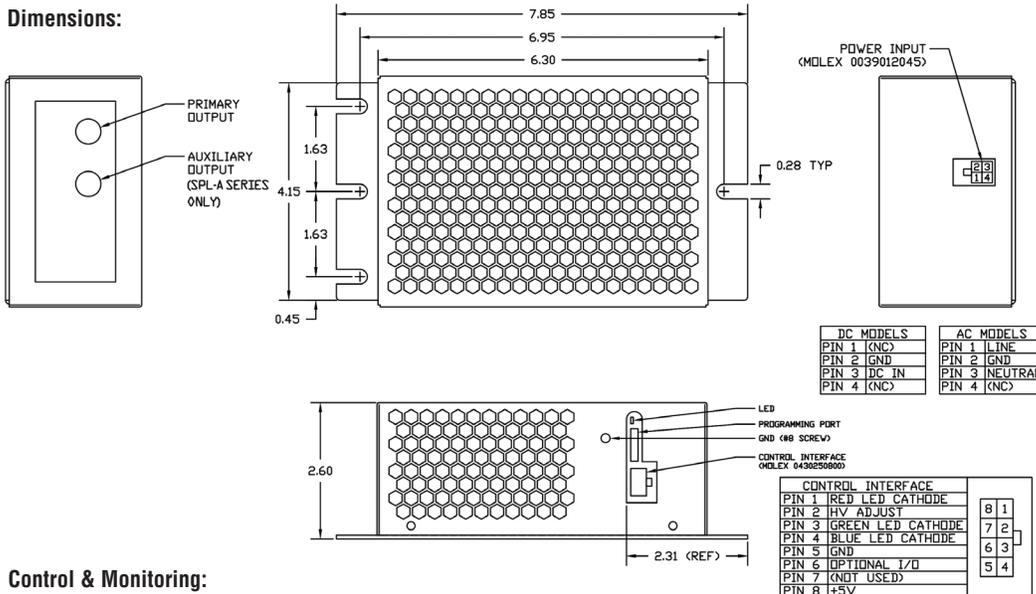
SPL-A



SPL-I

Part Number	Input Voltage	Input Power W	Output Voltage Primary kVDC max	Output Voltage Auxiliary kVDC max	Voltage Adjustment 0-5VDC Input	Output Power W	Output Current Primary mA	Output Current Auxiliary $\mu$ A	Voltage Regulation Primary VDC	Temperature Coefficient % / $^{\circ}$ C	Ripple V p-p	Line Regulation VDC	Stability Over 8hr VDC
SPL-A-AC-15P50	108 – 264 VAC	65	15	7.5	50% to Max Vo	50	3.4	300	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-A-AC-15N50	108 – 264 VAC	65	-15	-7.5	50% to Max Vo	50	3.4	300	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-A-DC-15P50	21 – 28 VDC	65	15	7.5	50% to Max Vo	50	3.4	300	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-A-DC-15N50	21 – 28 VDC	65	-15	-7.5	50% to Max Vo	50	3.4	300	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-AC-15P50	108 – 264 VAC	65	15	-	50% to Max Vo	50	3.4	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-AC-15N50	108 – 264 VAC	65	-15	-	50% to Max Vo	50	3.4	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-AC-30P50	108 – 264 VAC	65	30	-	50% to Max Vo	50	1.7	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-AC-30N50	108 – 264 VAC	65	-30	-	50% to Max Vo	50	1.7	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-DC-15P50	21 – 28 VDC	65	15	-	50% to Max Vo	50	3.4	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-DC-15N50	21 – 28 VDC	65	-15	-	50% to Max Vo	50	3.4	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-DC-30P50	21 – 28 VDC	65	30	-	50% to Max Vo	50	1.7	-	<0.2%	0.05	<3%	<0.1%	<0.2%
SPL-I-DC-30N50	21 – 28 VDC	65	-30	-	50% to Max Vo	50	1.7	-	<0.2%	0.05	<3%	<0.1%	<0.2%

**Dimensions:**



**Additional Features:**

- Fixed outputs available with Universal input
- Factory adjustable fault set points
- Factory programmable soft start options
- LED configurations factory adjustable
- Voltage step-down function on fault available
- Factory adjustable time delay on fault restarts
- Factory adjustable fault lockout counter
- Contact factory for custom requests!

**Control & Monitoring:**

Indicator	User Output
Over Voltage	Purple 10mA sink >15% over set voltage
Over Current	Red 5mA sink >10% over max current
Under Voltage	Blue 5mA sink >10% under set voltage
Over Temperature	Yellow 10mA sink >85 $^{\circ}$ C internal temperature
Normal Operation	Green 5mA sink -

Operating Temperature: 0 to +60 $^{\circ}$ C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40 $^{\circ}$ C to +85 $^{\circ}$ C (Non-Operative, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Certifications:**





# 2098 SERIES

**Features:**

- Cost effective
- Metal Case NEMA 1
- Reliable Solid-State Design
- Maintenance Free
- External Test Points (Voltage & Current)
- HV Meter on Front Panel to Monitor Output (Voltage & Current)
- Automatic Over-Current Shutdown and Recovery
- High Frequency Switch-Mode Design
- Internal Safety Interlocks
- Dual Voltage Output
- UL / CSA Recognized

**Applications:**

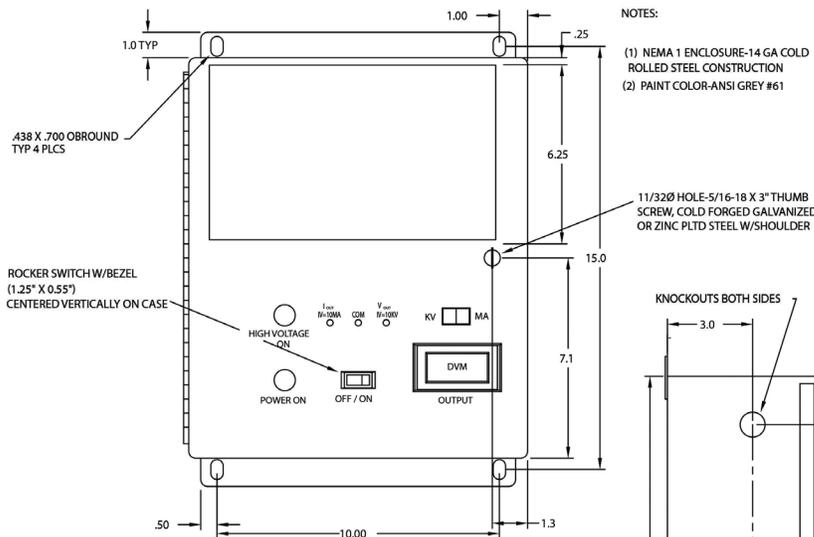
- Industrial Electrostatic Air Cleaners



Part Number	Input Voltage VAC	Input Power W	Output Voltage Primary kVDC max		Output Power W	Output Current Primary mA	Output Current Auxiliary mA	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Line Regulation VDC	Stability Over 8hr VDC
			100%	50%								
CS2098L120+14	120	500	14	7	420	35	20	<1%	0.02	<5%	<1%	<0.5%

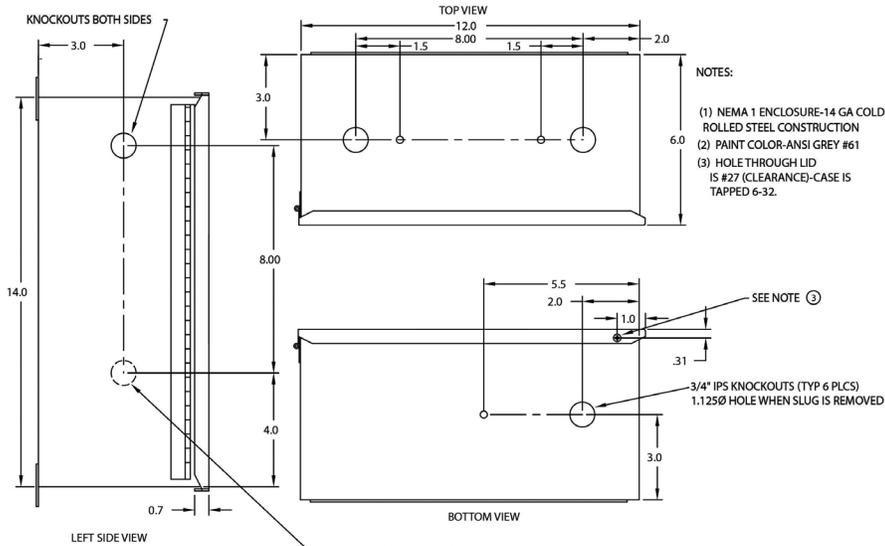
Note: The 2098 Series comes standard at 14kV output but is adjustable between 10kV and 14kV by use of an internal potentiometer. Instructions for this operation are available with each unit. Contact the factory for additional details.

**Dimensions:**



**Mechanical:**

- Input Voltage Termination: Terminal Block inside enclosure
- Output Termination: #10 studs inside enclosure
- Mounting: 4 each .438 x .700 holes for wall mounting applications via flange top and bottom
- Enclosure: Metal, NEMA 1, with hinged cover and knockouts



Operating Temperature: 0 to +50°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +85°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Certifications:**



**NOTICE: This power supply requires adequate ground connection for operation. Failure to provide ground may result in failure of the power supply and/or electrical shock.**

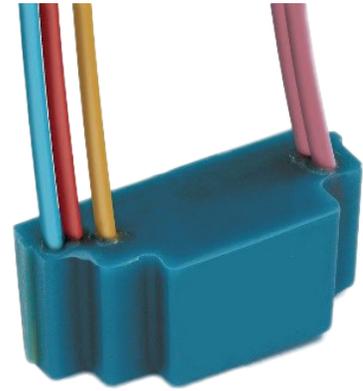
## 2132 SERIES

### Features:

- Two basic designs of 0 to 8kV or 0 to 12kV output
- Other output voltages available
- Compact and cost effective
- Reliable solid-state design
- Maintenance free
- Completely encapsulated
- UL Recognized versions available

### Applications:

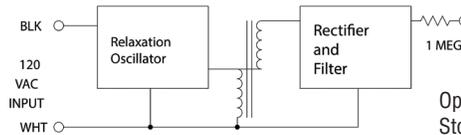
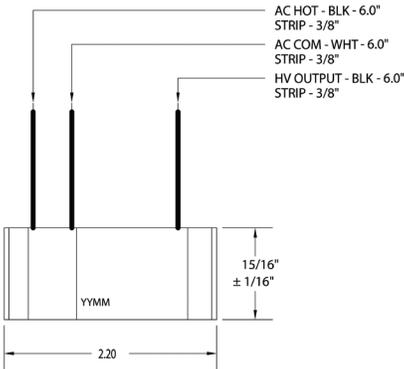
- Ionizers
- Table Top Air Cleaners
- Laser Start-up Circuits
- EOS / ESD Anti-static Equipment



Part Number	Input Voltage VAC	Input Power W	Output Voltage kVDC max	Output Power W	Input Frequency Hz	Output Current Primary $\mu$ A	Voltage Regulation VDC	Temperature Coefficient % / $^{\circ}$ C	Ripple V p-p	Stability Over 8hr VDC
ACN2132L8	120	2	-8	0.04	50/60	5	<30%	0.08	5%	<0.5%
ACP2132L8	120	2	8	0.04	50/60	5	<30%	0.08	5%	<0.5%
ACN2132L12	120	2	-12	0.06	50/60	5	<40%	0.08	5%	<0.5%
ACP2132L12	120	2	12	0.06	50/60	5	<40%	0.08	5%	<0.5%

Note: Output voltages are minimum DC @ 1 $\mu$ A. Output drops approximately 1kV for each additional  $\mu$ A of load current.

### Dimensions:



Operating Temperature: 0 to +60 $^{\circ}$ C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40 $^{\circ}$ C to +85 $^{\circ}$ C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

### Options:

- Input ground wire
- Control Wires (requires a 2W potentiometer, not supplied)
- "Power-On" indicating light
- Input to Output isolation

Custom voltages and housings are also available. Contact the factory for additional information.

### CRITICAL MATERIALS:

- ENCAPSULANT - FILLED EPOXY UL 94V0 RATED.
- PRIMARY WIRES - 22 GA, PVC, 600 V, UL STYLE 1015, 105  $^{\circ}$ C.
- HV WIRE - 22 GA, IRRAD, PVC, 15 KV, UL STYLE 3239, 105  $^{\circ}$ C.
- OUTPUT ISOLATION - THROUGH 1 MEGOHM RESISTOR.
- 21830 THERMIFILM UL APPROVED WHITE POLYESTER LABEL 0.625" X 0.875".

### NOTES:

1. ALL WIRE LENGTHS ARE  $\pm$  1/2".
2. ALL STRIP LENGTHS ARE  $\pm$  1/8".
3. PACKAGE MUST NOT BE MOUNTED TO A CONDUCTIVE SURFACE.

### Mechanical:

- Encapsulant: Filled Epoxy (UL94V-0 Rated)
- Mounting: Cable-ties, glue, epoxy, RTV, or silicon. If glued, recommend glue be applied to two surfaces.
- Primary Wires: 22AWG PVC, 600V, UL Style 1015, 105 $^{\circ}$ C, 2 wire, or 3 wire available
- High Voltage Wires: 22AWG, 15kVDC, UL Style 3239, 105 $^{\circ}$ C

### Certifications:



**NOTICE: This power supply should never be mounted directly to a metal surface.**



# 2192 SERIES

**Features:**

- Cost Effective
- Metal Case NEMA 1
- Reliable Solid-State Design
- Maintenance Free
- High Load Current Alarm Contacts
- Shutdown (Overload) Alarm Contacts
- HV Meter on Front Panel to Monitor Output (Voltage & Current)
- Automatic Over-Current Shutdown and Recovery
- High Frequency Switch-Mode Design

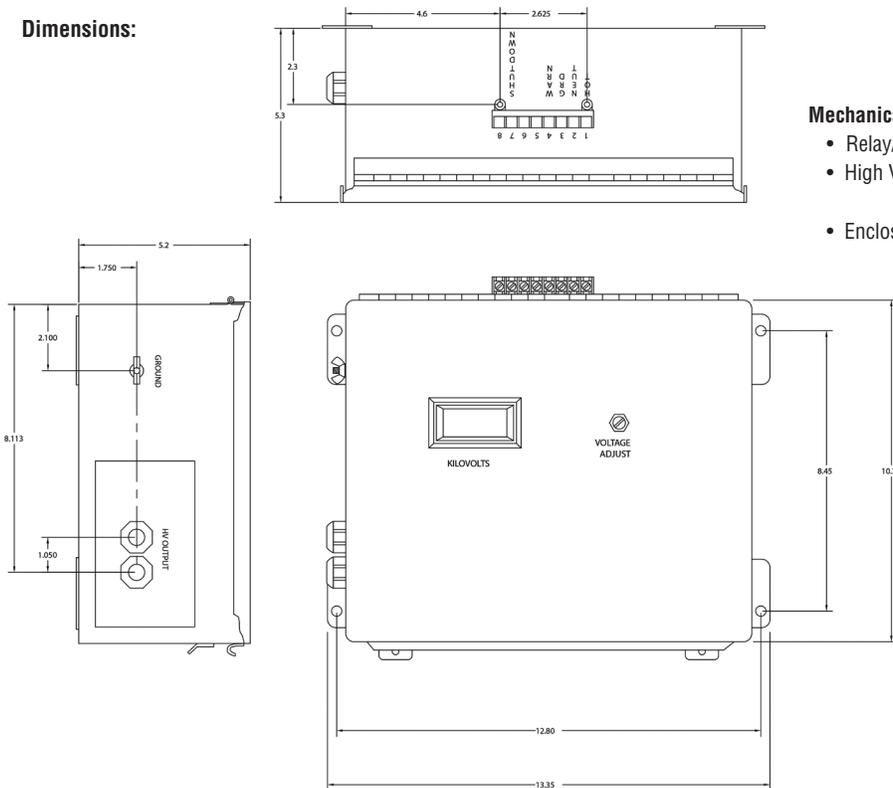
**Applications:**

- Electrostatic Paint Spray
- Electrostatic Seasoning Application
- Electrostatic Oil Spray



Part Number	Input Voltage VAC	Input Frequency Hz	Input Power W	Output Voltage kVDC max	Output Power W	Voltage Adjustment Front Panel Potentiometer	Output Current mA	Line Regulation VDC	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability Over 8hr VDC
ACN2192A100	120	50/60	25	-100	15	60% to 100%	0.175	<1%	<20%	0.06	<1%	<1%

**Dimensions:**



**Mechanical:**

- Relay/Input Termination: Terminal strip located externally on enclosure
- High Voltage Termination: Tubular connections with integral strain relief seals, external to metal case
- Enclosure: Metal, NEMA 1, with hinged cover and knockouts

Operating Temperature: 0 to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +85°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Certifications:**



**NOTICE: This power supply requires adequate ground connection for operation. Failure to provide ground may result in failure of the power supply and/or electrical shock.**

## 2234 SERIES

### Features:

- Cost Effective
- Non-Metallic Case
- Reliable Solid-State Design
- Maintenance Free
- High Efficiency
- Automatic Over-Current Shutdown and Recovery
- High Frequency Switch-Mode Design
- UL Recognized Versions Available

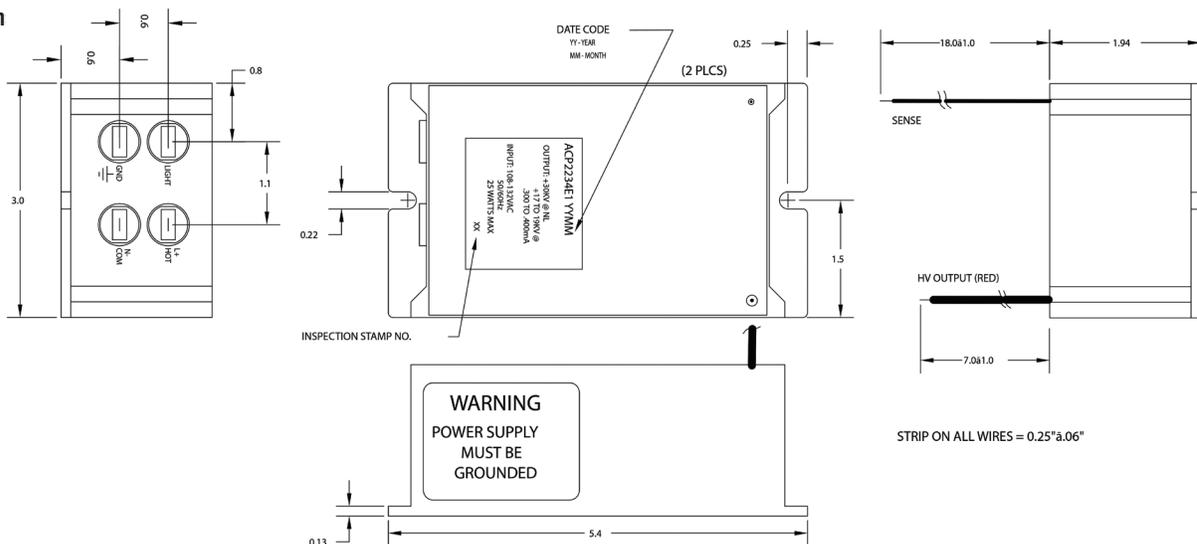
### Applications:

- Electrostatic Air Cleaners
- Electrostatic Packaging and Sealing



Part Number	Input Voltage VAC	Input Frequency Hz	Input Power W	Output Voltage kVDC max	Output Power W	Output Current Primary mA	Line Regulation At 16kV/400µA VDC	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability 25kV/200µA VDC
ACN2234L25	120	50/60	10	-25	7	0.4	<4%	<35%	0.1	<1%	<2.5%
ACP2234L25	120	50/60	10	25	7	0.4	<4%	<35%	0.1	<1%	<2.5%

### Dimension



### Mechanical:

- Case: Glass-Filled Noryl, UL 94V-1 Rated
- Encapsulant: Filled Epoxy, UL94V-0 Rated
- Input Voltage Termination: 1/4" black insulated terminals
- "HV On" Indicating Light Termination: 1/4" black insulated terminals
- High Voltage Wire: 22 AWG, 30kVDC, UL Style 3239, 105°C

Operating Temperature: 0 to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +85°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

### Certifications:



**NOTICE: This power supply requires adequate ground connection for operation. Failure to provide ground may result in failure of the power supply. Proper ground connections must be made to input terminal on non-metallic case.**



# 2322 SERIES

**Features:**

- Cost Effective
- Non-Metallic Case
- Reliable Solid-State Design
- Maintenance Free
- Automatic Over-Current Shutdown and Recovery
- High Frequency Switch-Mode Design
- UL Recognized Versions Available

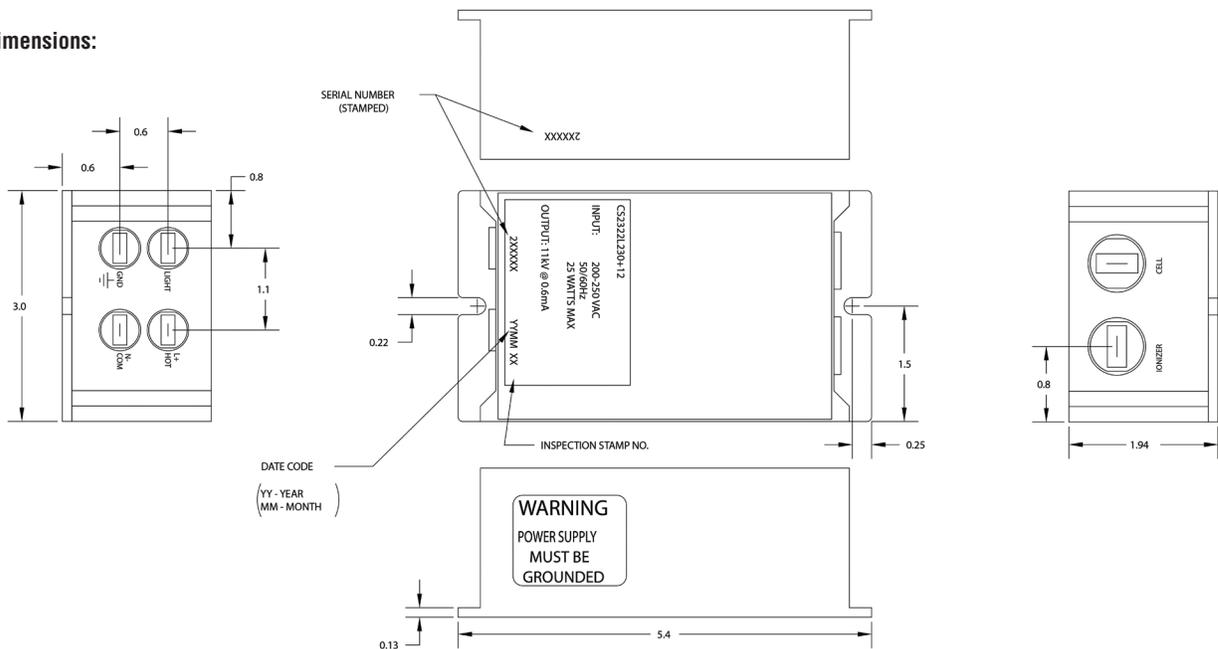
**Applications:**

- Electrostatic Air Cleaners
- Electrostatic Oil Cleaners



Part Number	Input Voltage VAC	Input Power W	Output Voltage Primary kVDC max	Output Voltage Auxiliary kVDC max	Output Power W	Output Current Primary mA	Output Current Auxiliary $\mu$ A	Line Regulation VDC	Voltage Regulation VDC	Temperature Coefficient % / $^{\circ}$ C	Ripple V p-p	Stability Over 8hr VDC
ACN2322L10	120	20	-10	-5	15	1.5	200	<4%	<15%	0.09	<6%	<0.5%
ACP2322L10	120	20	10	5	15	1.5	200	<4%	<15%	0.09	<6%	<0.5%
ACN2322L12	120	20	-12	-6	15	1	300	<3%	<4%	0.09	<5%	<2.5%
ACP2322L12	120	20	12	6	15	1	300	<3%	<4%	0.09	<5%	<2.5%

**Dimensions:**



**Mechanical:**

- Case: Glass-Filled Noryl, UL 94V-1 Rated
- Encapsulant: Filled Epoxy, UL94V-0 Rated
- Input Voltage Termination: 1/4" black insulated terminals
- "HV On" Indicating Light Termination: 1/4" black insulated terminals
- High Voltage Termination: 1/4" red insulated terminals

Operating Temperature: 0 to +60 $^{\circ}$ C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40 $^{\circ}$ C to +85 $^{\circ}$ C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Certifications:**



**NOTICE:** This power supply requires adequate ground connection for operation. Failure to provide ground may result in failure of the power supply. Proper ground connections must be made to input terminal on non-metallic case.

## 2422 SERIES

### Features:

- Cost Effective
- Metal Case
- Reliable Solid-State Design
- Maintenance Free
- Automatic Recovery, Self-Restoring
- High Frequency Switch-Mode Design
- UL Recognized Versions Available

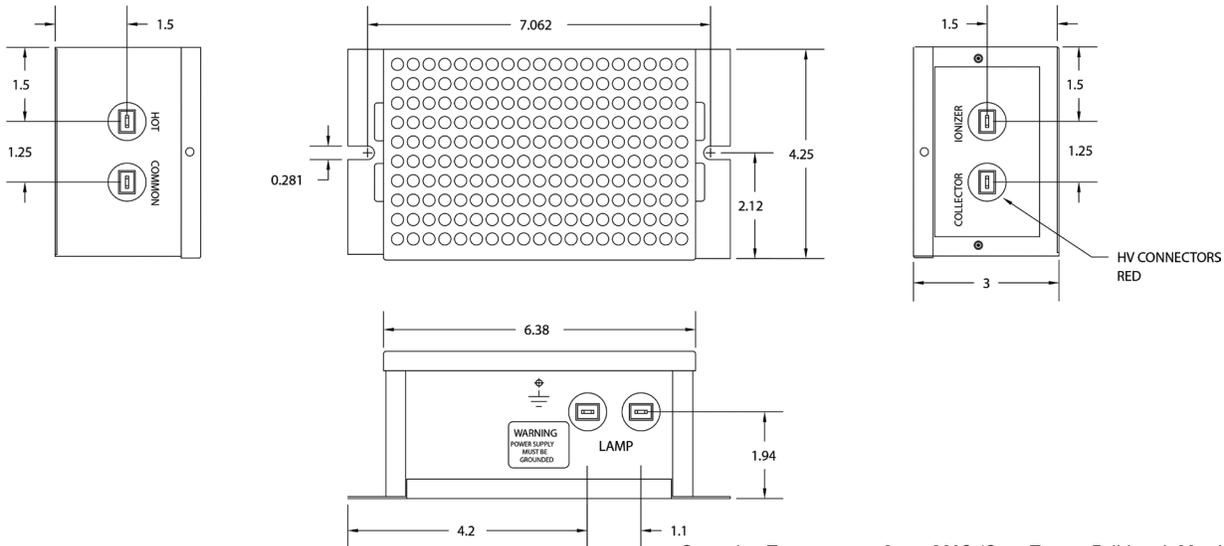
### Applications:

- Electrostatic Air Cleaners
- Electrostatic Oil Cleaners



Part Number	Input Voltage VAC	Input Frequency Hz	Input Power W	Output Voltage Primary kVDC max	Output Voltage Auxiliary kVDC max	Output Power W	Output Current Primary mA	Output Current Auxiliary $\mu$ A	Line Regulation VDC	Voltage Regulation VDC	Temperature Coefficient % / $^{\circ}$ C	Ripple V p-p	Stability Over 8hr VDC
ACN2422L10	120	50/60	50	-10	-5	35	3.5	375	<3%	<3%	0.09	<5%	<0.5%
ACP2422L10	120	50/60	50	10	5	35	3.5	375	<3%	<3%	0.09	<5%	<0.5%
ACN2422L12	120	50/60	50	-12	-6	42	3.5	375	<4%	<5%	0.09	<5%	<0.5%
ACP2422L12	120	50/60	50	12	6	42	3.5	375	<4%	<5%	0.09	<5%	<0.5%

### Dimensions:



### Mechanical:

- Case: Metal
- Input Voltage Termination: 1/4" black insulated terminals
- "HV On" Indicating Light Termination: 1/4" insulated terminals for LED
- High Voltage Termination: 1/4" red insulated terminals
- Earth Ground: #8-32 screw

Operating Temperature: 0 to +60 $^{\circ}$ C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40 $^{\circ}$ C to +85 $^{\circ}$ C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

### Certifications:



**NOTICE: This power supply requires adequate ground connection for operation. Failure to provide ground may result in failure of the power supply. Proper ground connections must be made to #8-32 ground screw on the metal case.**



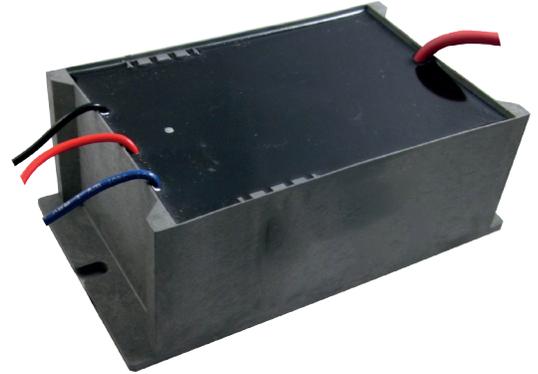
# DCH3034 SERIES

**Features:**

- Input-Output Proportional from 0 to 30kV output voltage
- 0 to 12VDC Input Voltage
- 1000:1 Feedback Voltage Divider (matches for 10MΩ)
- Zero to Full Output
- Positive and Negative Models
- Up to 50μA Output Current
- Short-circuit Protection
- Rugged, encapsulated module
- Low EMI Sine-wave topology
- Low ripple
- Mounting Flange

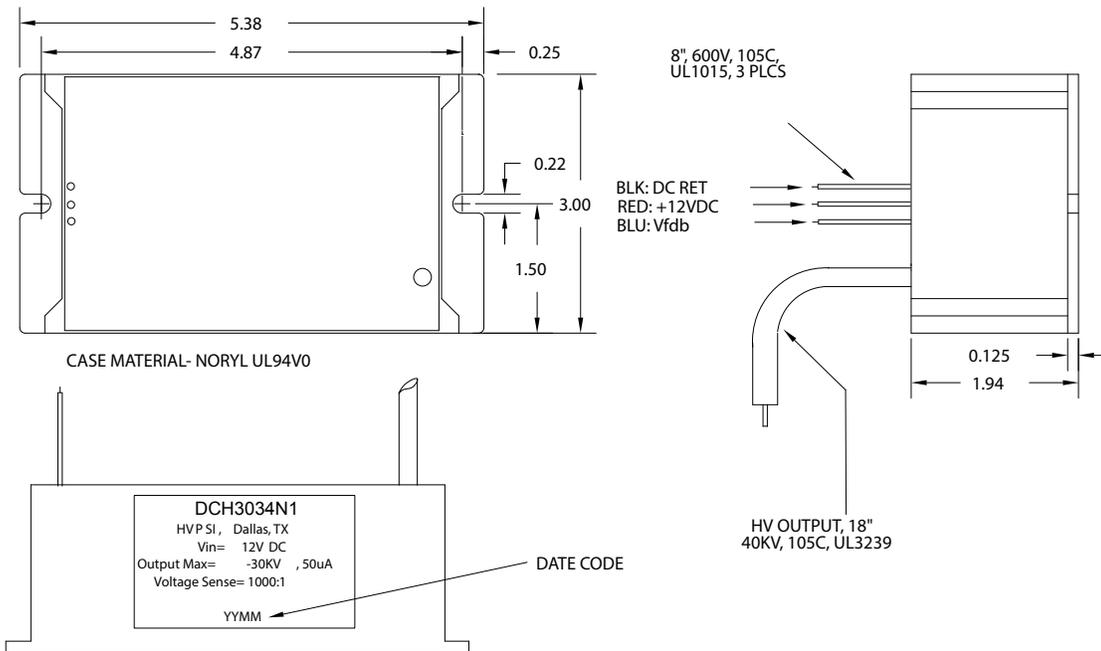
**Applications:**

- Photomultipliers
- Ionizers
- High Voltage Biasing
- CRT Grid Circuits
- Biasing
- Dielectric Testing
- Piezoelectric Drivers
- Electrostatic Chucks
- Sealing Applications
- Ink Jet Printers
- Photo Detectors



Part Number	Input Voltage VDC	Input Power W	Output Voltage kVDC max	Voltage Adjustment Proportional to Input Voltage	Output Power W	Output Current μA	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability Over 8hr VDC
DCH3034P1	12	2	30	0 to 100%	1.2	40	<18%	0.3	<1%	<0.2%
DCH3034N1	12	2	-30	0 to 100%	1.2	40	<18%	0.3	<1%	<0.2%

**Dimensions:**



Operating Temperature: 0°C to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +85°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Mechanical:**

- Dimensions: 6.5" x 1.7" x 1.325"
- Pins: 0.040" Diameter
- Weight: 14.0 Ounces

**Certifications:**



# DCH3320 SERIES

**Features:**

- 0 to 24VDC Input Voltage
- 0 to 10kV Adjustable Output Voltage
- Remote Adjust 0 to 5V (5V Reference provided)
- Output Current 0 to 2mA
- 0 to 20W Output Power
- >70% Efficiency
- Current Sense Output
- Foldback Current Limiting
- 1000:1 Voltage Sense Output
- Short-Circuit Protected
- Base-plate Mounting
- Resonant Switchmode Topology
- Aluminum Enclosure
- Low Ripple

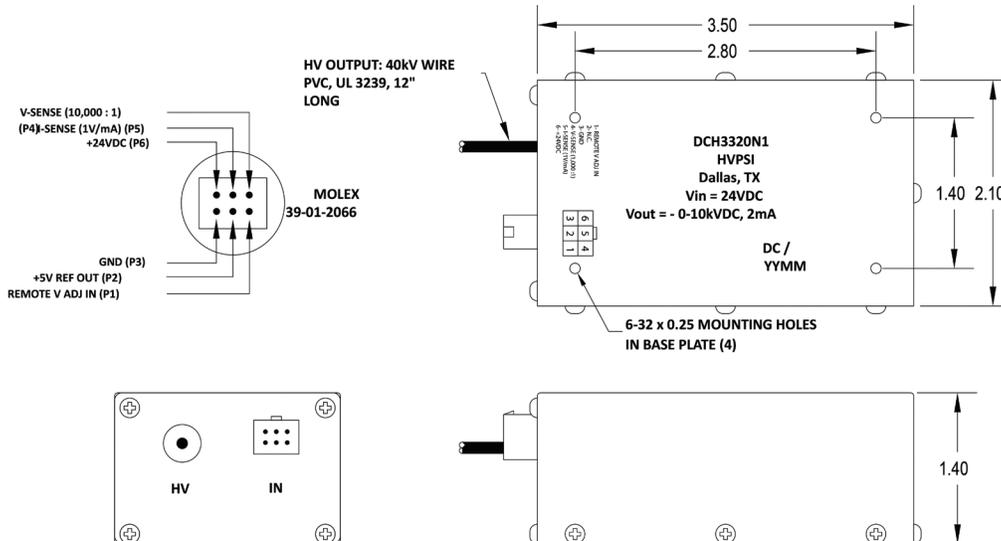
**Applications:**

- Photomultipliers
- Ionizers
- CRT Grid Circuits
- Biasing
- Dielectric Testing
- Piezoelectric Drivers
- Electrostatic Chucks
- Sealing Applications
- Ink Jet Printers
- Photo Detectors



Part Number	Input Voltage VDC	Input Power W	Output Voltage kVDC max	Voltage Adjustment 0 to 5VDC Input	Output Power W	Output Current mA	Line Regulation VDC	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability Over 8hr VDC
DCH3320P1	24	28	10	0 to 100%	20	2	<0.1%	1%	0.01	2.5%	<0.2%
DCH3320N1	24	28	-10	0 to 100%	20	2	<0.1%	1%	0.01	2.5%	<0.2%

**Dimensions:**



Operating Temperature: 0 to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +70°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Mechanical:**

- Dimensions: 5.0" x 3.0" x 2.0"
- Molex 03-06-2062 Connector
- Weight: 18.0 Ounces

**Certifications:**





# DCM12 SERIES

**Features:**

- 0 to 6kV of Output Voltage
- 0 to 12VDC Input Voltage
- Up to 3W of Output Power
- Zero to Full Output (proportional to input)
- Short-circuit Protection
- Rugged, encapsulated module
- Sine-wave topology
- Low ripple

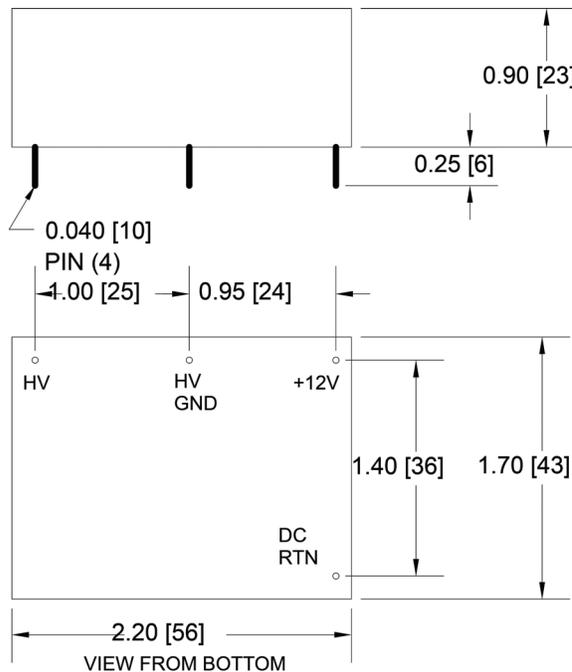
**Applications:**

- Photomultipliers
- Ionizers
- High Voltage Biasing
- CRT Grid Circuits
- Biasing
- Dielectric Testing
- Piezoelectric Drivers
- Electrostatic Chucks
- Sealing Applications
- Ink Jet Printers
- Photo Detectors



Part Number	Input Voltage VDC	Input Power W	Output Voltage kVDC max	Voltage Adjustment 0 to 5VDC Input	Output Power W	Output Current mA	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability Over 8hr VDC
DCM12-4P3	12	<5	4	0 to 100%	3	0.75	<25%	0.08	<0.5%	<0.2%
DCM12-4N3	12	<5	-4	0 to 100%	3	0.75	<25%	0.08	<0.5%	<0.2%
DCM12-6P3	12	<5	6	0 to 100%	3	0.5	<25%	0.08	<0.5%	<0.2%
DCM12-6N3	12	<5	-6	0 to 100%	3	0.5	<25%	0.08	<0.5%	<0.2%

**Dimensions:**



DIMENSIONS IN INCHES [MM]

Operating Temperature: 0 to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +70°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Mechanical:**

- Dimensions: 2.2" x 1.7" x 0.9"
- Pins: 0.40" Diameter
- Weight: 4.0 Ounces

**Certifications:**



# DCMP12HE SERIES

**Features:**

- High Efficiency >70%
- 0 to ±1kV of Output Voltage
- Up to 3W of Output Power
- 0 to 12VDC Input Voltage
- Externally Voltage Programmable
- Reference Voltage Output
- 1000:1 Voltage Sense
- 1V/mA Current Sense
- Short-Circuit Protected
- Rugged, Encapsulated Module
- PCB Mounting
- Resonant Switchmode Topology
- Low Ripple

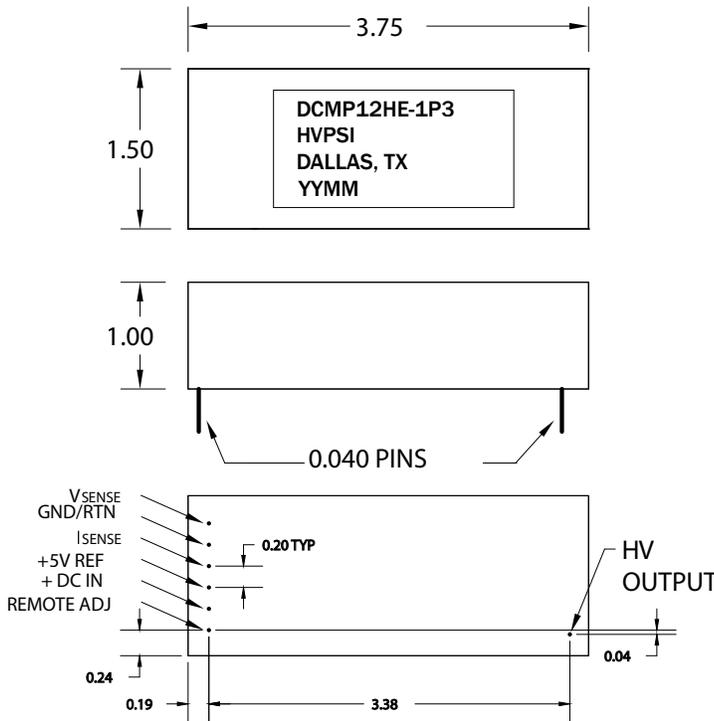
**Applications:**

- Photomultipliers
- Ionizers
- High Voltage Biasing
- CRT Grid Circuits
- Biasing
- Dielectric Testing
- Piezoelectric Drivers
- Electrostatic Chucks
- Sealing Applications
- Ink Jet Printers
- Photo Detectors



Part Number	Input Voltage VDC	Input Power W	Output Voltage kVDC max	Voltage Adjustment 0 to 5VDC Input	Output Power W	Output Current mA	Line Regulation VDC	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability Over 8hr VDC
DCMP12HE-1P3	12	<5	1	0 to 100%	3	3	<2%	<2%	0.1	<5%	<0.2%
DCMP12HE-1N3	12	<5	-1	0 to 100%	3	3	<2%	<2%	0.1	<5%	<0.2%

**Dimensions:**



Operating Temperature: 0 to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +70°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

**Mechanical:**

- Dimensions: 3.75" x 1.5" x 1.0"
- Pins: 0.040" Diameter
- Weight: 6.0 Ounces



# DCMP15 SERIES

## Features:

- 0 to 6kV of Output Voltage
- 0 to 15VDC Input Voltage
- Up to 3W of Output Power
- Zero to Full Output
- Positive and Negative Models
- Externally Voltage Programmable
- Reference Voltage Output
- Short-circuit Protection
- Rugged, encapsulated module
- Sine-wave topology
- Low ripple
- PCB Mounting
- High Efficiency

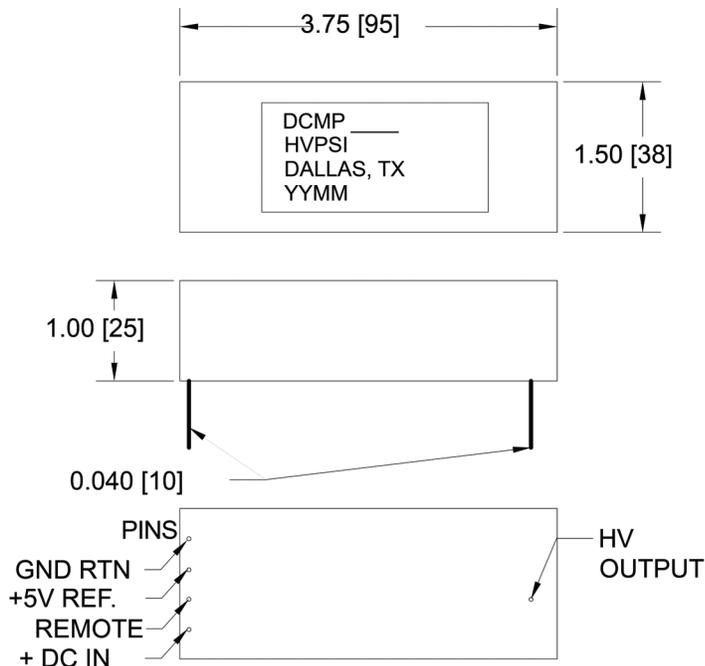
## Applications:

- Photomultipliers
- Ionizers
- High Voltage Biasing
- CRT Grid Circuits
- Biasing
- Dielectric Testing
- Piezoelectric Drivers
- Electrostatic Chucks
- Sealing Applications
- Ink Jet Printers
- Photo Detectors



Part Number	Input Voltage VDC	Input Power W	Output Voltage kVDC max	Voltage Adjustment 0 to 5VDC Input	Output Power W	Output Current mA	Line Regulation VDC	Voltage Regulation VDC	Temperature Coefficient % / °C	Ripple V p-p	Stability Over 8hr VDC
DCMP15-4P3	15	<7.5	4	10 to 100%	3	0.75	<7.5%	<5%	0.1	<0.5%	<0.2%
DCMP15-4N3	15	<7.5	-4	10 to 100%	3	0.75	<7.5%	<15%	0.1	<0.5%	<0.2%
DCMP15-6P3	15	<7.5	6	10 to 100%	3	0.5	<7.5%	<5%	0.1	<0.5%	<0.2%
DCMP15-6N3	15	<7.5	-6	10 to 100%	3	0.5	<7.5%	<15%	0.1	<0.5%	<0.2%

## Dimensions:



DIMENSIONS IN INCHES [MM]

Operating Temperature: 0 to +60°C (Case Temp., Full Load, Max Vo)  
 Storage Temperature: -40°C to +70°C (Non-Operating, Case Temp.)  
 Humidity: 0% to 95% (Non-Condensing)  
 Altitude: 0 to 10,000 Ft (Standard Operating Conditions)

## Mechanical:

- Dimensions: 3.75" x 1.5" x 1.0"
- Pins: 0.040" Diameter
- Weight: 6.0 Ounces

## Certifications:

 **RoHS**  
COMPLIANT

# HVM40B

**Features:**

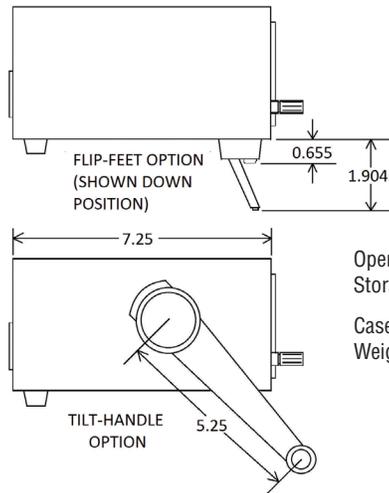
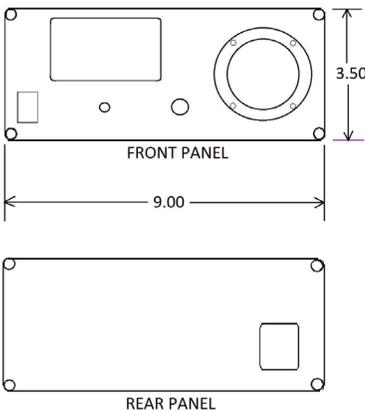
- Measures 500V to 40,000V DC
- Dual range switch provides increased resolution for measuring voltages below 20kV
- Extremely high input impedance (10GΩ) minimizes circuit loading
- Large LED display
- Advanced solid-state design
- Retractable flip feet (standard), rack mount ears (optional) and tilt handle (optional)
- CE and ETL Certifications conforming to UL and CSA standard

**Applications:**

- Laboratory Measurements
- Troubleshooting HV Circuits
- Electrostatic Air Cleaner Service & Maintenance
- Static Power Supply Monitoring



	Input Power (50-60Hz, 0.5A Max) VAC	Measured Voltage (DC Only) VDC	Input Impedance GΩ	Input HV Connector (HV-Insulated 40kV)	Input Return Connector	Accuracy (500V-2kV) %	Accuracy (2kV-40kV) %	Resolution Digits	Display	Fuse (Slow Blow) A/VAC
HVM40B	100-250	500 to 40000	10	F310RX	Binding Post	+/- 1.0	+/- 0.4	4.5	LED	0.5 / 250

**Dimensions:**

**Certifications:**


Conforms to UL standards 61010-1 & 61010-2-030. Certified to CSA standard C22.2 numbers 61010-1 & 61010-2-030 Control Number 3097531.

Operating Temperature: 0 to +50°C (0 to 80% Relative Humidity)  
Storage Temperature: -25°C to +65°C (0 to 90% Relative Humidity)

Case Dimensions in (cm): 9.0 W x 3.5 H x 7.25 D (22.86 W x 8.89 H x 18.415 D)  
Weight lbs (kg): 4 (1.8)

**Power Cord Options:**

**HVM40B-CUS**

**HVM40B-CGB**

**HVM40B-CEU**

**HVM40B-CAS**



## Diodes and Capacitors



Dean Technology also provides a wide range of high voltage components and assemblies, perfect for use with the power supplies in this catalog or in any high voltage application. As with all of our products, both standard and custom solutions are available for discrete diodes, rectifier assemblies and ceramic capacitors in many packages.

Visit [www.deantechnology.com](http://www.deantechnology.com) or call us today!



Contact us, we're ready to help!  
[WWW.DEANTECHNOLOGY.COM](http://WWW.DEANTECHNOLOGY.COM)  
**972.248.7691**



**HVPSI**



Dean Technology  
P.O. Box 700968  
Dallas, Texas 75370  
USA

Phone: +1.972.248.7691

Fax: +1.972.381.9998

[www.deantechnology.com](http://www.deantechnology.com)