

UC SERIES

UNREGULATED DC/DC HIGH VOLTAGE MODULES

Low-cost, fully encapsulated 24 VDC-input modules whose high voltage output is proportional to the applied input voltage. High-frequency sinusoidal conversion keeps operation acoustically inaudible while maintaining low stored energy.


3-30 kV

STANDARD OUTPUTS

5 W

MAXIMUM POWER

24 VDC

NOMINAL INPUT

>30 kHz

CONVERSION

KEY CAPABILITIES

- Output proportional to DC input
- Arc-over, short-circuit, and overload protection
- Acoustically inaudible operation above 30 kHz
- Vacuum-encapsulated high voltage section
- Compact metal enclosure
- Low stored energy

TYPICAL APPLICATIONS

- CRT displays
- Image intensifiers
- Photomultiplier bias
- Electrostatic systems
- Control-grid bias and ionization chambers

STANDARD MODEL GUIDE

Model	Output voltage	Output current
UC5-3	0-3 kV	1.6 mA
UC5-5	0-5 kV	1 mA
UC5-10	0-10 kV	500 μ A
UC5-15	0-15 kV	333 μ A
UC5-20	0-20 kV	250 μ A
UC5-25	0-25 kV	200 μ A
UC5-30	0-30 kV	166 μ A

Select the model for the required output voltage and add P or N for output polarity. Reversible-polarity versions are available at 3, 5, and 10 kV.



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3-30 kV | UP TO 5 W

HIGH VOLTAGE SOLUTIONS

UC SERIES | 02

ELECTRICAL CHARACTERISTICS

Input	+24 VDC +/-10%
Input current	400 mA maximum
Output voltage	Adjusted from zero to rated output by varying DC input
Output current	Per model; 5 W maximum
Load regulation	20% maximum from half load to full load
Conversion	High-frequency sinusoidal, above 30 kHz
Protection	Arc-over, short-circuit, and overload protected

INTEGRATION AND CONTROL

- Connect the +24 VDC source to the input terminals using two 16 AWG leads
- Ground the negative input at the source or module
- Connect the high voltage lead to the load
- Use additional high voltage sleeving over the lead where appropriate
- Mount with four 6-32 screws; do not exceed 0.25 in engagement

PHYSICAL AND ENVIRONMENTAL

Enclosure dimensions	UC5-3 through UC5-15: 2.70 W x 4.50 L x 1.58 H in; UC5-20 and UC5-25: 3.49 W x 5.11 L x 1.56 H in; UC5-30: 3.83 W x 6.33 L x 2.78 H in. See drawings for details.
Weight	1.5 lb through 15 kV; 2.5 lb for 20-30 kV
Packaging	Vacuum-encapsulated high voltage section in a metal case with threaded base inserts
DC input	Two terminal posts; connect with two 16 AWG leads
HV output	12 in flying lead
Mounting	Four 6-32 inserts; maximum screw engagement 0.25 in
Operating temp.	0 to 50 deg C

CONFIGURATION NOTES

- Positive or negative output polarity available on all models; add P or N suffix
- Reversible-polarity versions available at 3, 5, and 10 kV
- RoHS-compliant version available

MODEL NUMBER FORMAT

UC5-[Voltage][Polarity]

EXAMPLE

UC5-10P 10 kV | Positive | 5 W

P = positive N = negative Reversible versions: 3, 5, and 10 kV

HIGH VOLTAGE SOLUTIONS

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Get in touch

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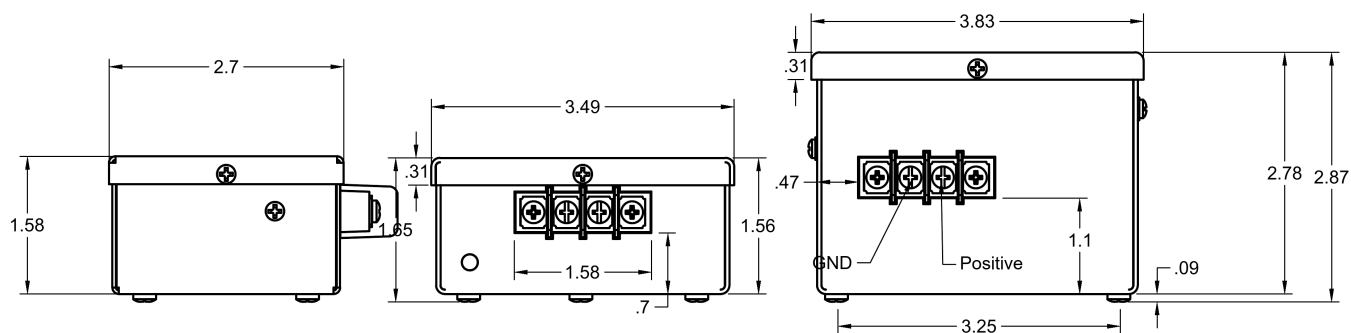
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MECHANICAL DRAWINGS

Corresponding compact, intermediate, and larger UC enclosure views are grouped below by orientation. Dimensions are in inches. UC5-3 through UC5-15 use the compact enclosure; UC5-20 and UC5-25 use the intermediate enclosure; UC5-30 uses the largest enclosure.

FRONT / END VIEWS

COMPACT - 3 TO 15 KV | INTERMEDIATE - 20 TO 25 KV | LARGE - 30 KV



SIDE VIEWS

COMPACT - 3 TO 15 KV | INTERMEDIATE - 20 TO 25 KV | LARGE - 30 KV

