

DUAL OUTPUT AUX SERIES

High Voltage Biasing Supply



The AUX Series accessory provides a second fixed HV output in addition to the adjustable main high-voltage power-supply output. This second output is set for a specific fixed voltage at the factory. The AUX output is achieved by adding a daughter board inside either 1/16A to 6A or 1/16C to 6C high-voltage power supplies.

This AUX board is encapsulated with the main high voltage power supply. All of the advantages of the base power supply remain. Typical applications include the following: Bipolar outputs, ionization/strike, trigger coils, pulse generator or amplifiers, tube elements such as G1, G2, cathode, and spark gap initiator.

- Adds a second + or - HV output
- Fixed regulated output
- Encapsulated with A or C Series HVPS
- Creates a 4.9 in³ dual-output supply

- Fixed-frequency, low-stored-energy design
- High power density
- Output short-circuit protected
- UL, cUL, CE, IEC-60950-1, and Demko Recognized

HIGH VOLTAGE AUX OUTPUT

The AUX output is a non-isolated, unipolar output. Positive or negative output must be specified. The polarity of this AUX is not dependent on the polarity of the base HVPS.

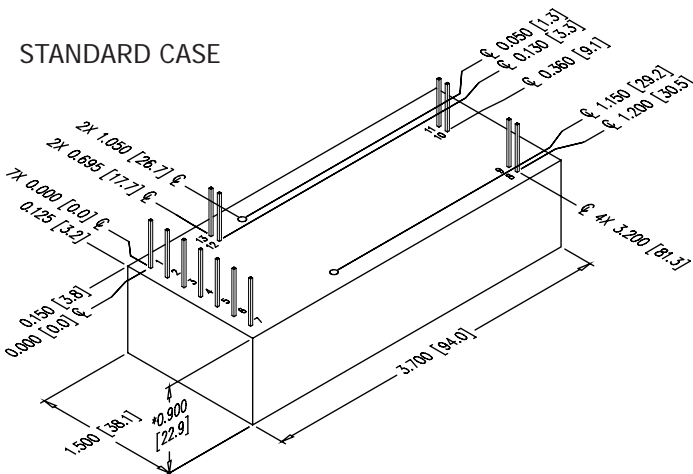
Full capability is available over an input range of 12 to 15VDC $\pm 10\%$ for 4W units and 24 to 28VDC $\pm 5\%$ for 20W/30W units. The AUX fixed output is fully functional when the main output voltage is adjusted from 100% to 75%. As the main output is adjusted from 75% to 50% the AUX output current is reduced from 100% to 0%. The manufactured tolerance on the fixed output is $\pm 5\%$. Line regulation error is $< 0.1\%$; load regulation error is $< 0.1\%$ per 100uA. The output has a temperature co-efficient of $\pm 0.11\%$ per $^{\circ}\text{C}$.

Fixed outputs available are:

47V @ 2mA	450V @ 1mA
94V @ 2mA	600V @ 1mA
141V @ 2mA	750V @ 1mA
188V @ 2mA	900V @ 1mA
235V @ 2mA	1050V @ 1mA
282V @ 2mA	
329V @ 2mA	

Note: Specified AUX output should be $< 40\%$ of the main output.

The AUX HV output connection is via an additional pair of standard .025in (0.635mm) square IDC pins. These pins can be used for PCB mounting or direct wiring. High voltage connector and cable options are available.



CONSTRUCTION

- Epoxy-filled DAP box, certified to ASTM-D-5948
- Plastic box

TOLERANCE

- Overall ± 0.050 " (1.27)
- Pin to Pin ± 0.015 " (0.38)
- Mounting hole location ± 0.025 " (0.64)

NOTES

- 20W and 30W versions are an additional 0.062" (1.57) in height.
- M equipped units are an additional 0.030" (0.76) for each dimension.
- Contact UltraVolt's Customer Service Department for drawings of models equipped with -E or -H options.

Specifications subject to change without notice.



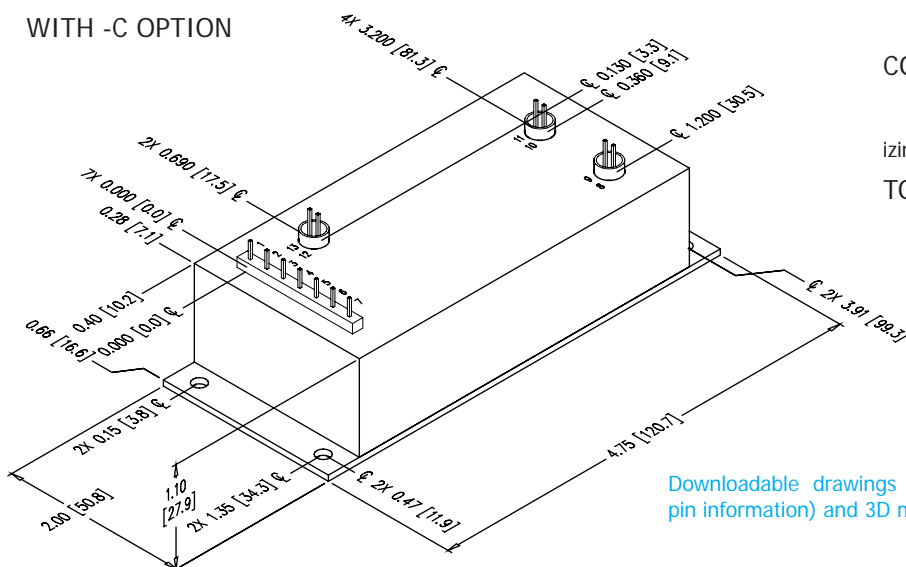
Making High Voltage Easier!®

Higher Service, Higher Performance, Higher Reliability
©2011, UltraVolt Inc. All rights reserved.

DUAL OUTPUT AUX SERIES

High Voltage Biasing Supply

WITH -C OPTION



Downloadable drawings (complete with mounting & pin information) and 3D models are available online.

CONSTRUCTION

Epoxy-filled DAP box, certified to ASTM-D-5948
Aluminum box, Chem film per MIL-A-8625 Type II (Anodizing)

TOLERANCE

Overall $\pm 0.025''$ (0.64)
Pin to Pin $\pm 0.015''$ (0.38)
Mounting hole location $\pm 0.025''$ (0.64)



IEC-60950-1
Non-RoHS compliant units are available. Please contact the factory for more information.



CONNECTIONS

PIN	FUNCTION
1	Input-Power Ground Return
2	Positive Power Input
3	Iout Monitor
4	Enable/Disable
5	Signal Ground Return
6	Remote Adjust Input
7	+5VDC Reference Output
8	HV Ground Return
9	HV Ground Return or Eout Monitor (-Y5 only)
10 & 11	HV Output
12 & 13	AUX HV Output

All grounds joined internally. Power-supply mounting points isolated from internal grounds by $>100k\Omega$, $.01\mu F / 50V$ (Max) on all models except -M (20W and above), -M-E, -M-C, and -M-H configurations which are 0Ω .

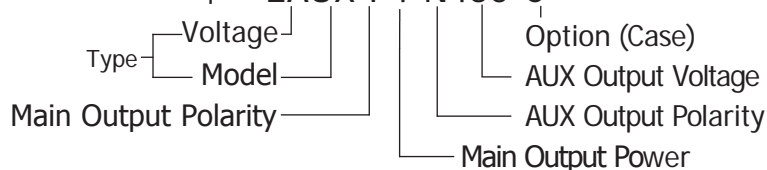
Rev. M 9/11

ORDERING INFORMATION

Type	0 to 62 VDC Main Output	1/16AUX or 1/16CAUX
	0 to 125 VDC Main Output	1/8AUX or 1/8CAUX
	0 to 250 VDC Main Output	1/4AUX or 1/4CAUX
	0 to 500 VDC Main Output	1/2AUX or 1/2CAUX
	0 to 1,000 VDC Main Output	1AUX or 1CAUX
	0 to 2,000 VDC Main Output	2AUX or 2CAUX
	0 to 4,000 VDC Main Output	4AUX or 4CAUX
	0 to 6,000 VDC Main Output	6AUX or 6CAUX
AUX Output	2mA @ 47, 94, 141, 188, 235, 282, 329	-VVV
	1mA @ 450, 600, 750, 900, 1050	
Polarity	Positive Output	-P
	Negative Output	-N
Power	Watts Output (12 V Only)	4
	Watts Output (24 V Only)	20
	Watts Output (24 V Only)	30
Case	Plastic Case - Diallyl Phthalate	(Standard)
	'Eared' Heatsink Plate (plastic case)	-E
	RF-Tight Aluminum Case	-C
Heat Sink	.400" High (sized to fit case)	-H
Shield	Six-sided Mu-Metal Shield	-M
Voltage Monitor	Optional Eout Monitor (A Series only)	-Y5

*Optional boosted current monitor available. Contact the factory for more details.

Example: 2AUX-P4-N450-C



Popular accessories ordered with this product include CONN-KIT-F and BR-1 mounting bracket kit.



Making High Voltage Easier!®

1800 Ocean Avenue, Ronkonkoma, NY 11779
Phone: 1-631-471-4444 Fax: 1-631-471-4696 www.ultravolt.com