

# TRIPLE OUTPUT AUX SERIES

## High Voltage Biasing Supply

The AUX Series accessory provides second and third adjustable positive HV outputs in addition to the adjustable main positive high-voltage power supply output. The AUX outputs are set for a specific voltage range at the factory. One output is referred to as the Focus, one as the Grid. The AUX is achieved by adding a daughter board inside the 10A-35A high-voltage power supply. This AUX board is encapsulated with the main high-voltage power supply in a special taller enclosure to accommodate the height of the adjust pots. Typical applications are: CRT Raster Display, X-Y CRT Display, and E Beam Bias.



- Adds Focus and Grid outputs
- Encapsulated within 10A-35A Series
- Adjustable regulated outputs
- Creates a 6.5 in<sup>3</sup> triple output supply

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

### HIGH VOLTAGE AUX OUTPUTS

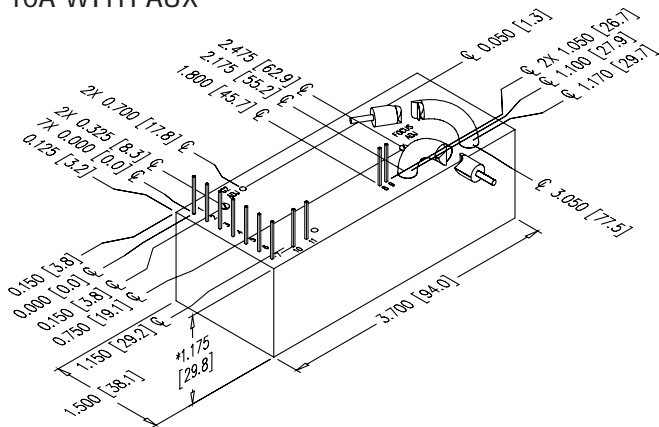
The AUX outputs are non-isolated, positive, unipolar outputs. Full capability is available over an input range of 12 to 15VDC  $\pm 10\%$  for 4W units and 24 to 28VDC  $\pm 5\%$  for 15W/30W units. The Focus AUX output voltage is fully functional when the main output is within the range specified on the ordering information table. The manufactured tolerance on the output voltage range provided is  $\pm 5\%$ . Line regulation error is  $< 0.1\%$ . Load regulation error is 0.5V per  $\mu A$ . The outputs have a temperature co-efficient of  $+0.11\%$  per  $^{\circ}C$ . Each AUX output has a current capability of 0 to  $\pm 25\mu A$ , contact factory for higher current. Each AUX output can be adjusted using an internal single-turn potentiometer. The potentiometer adjusts from a factory-set voltage down to 450VDC lower.

Specific outputs available are:

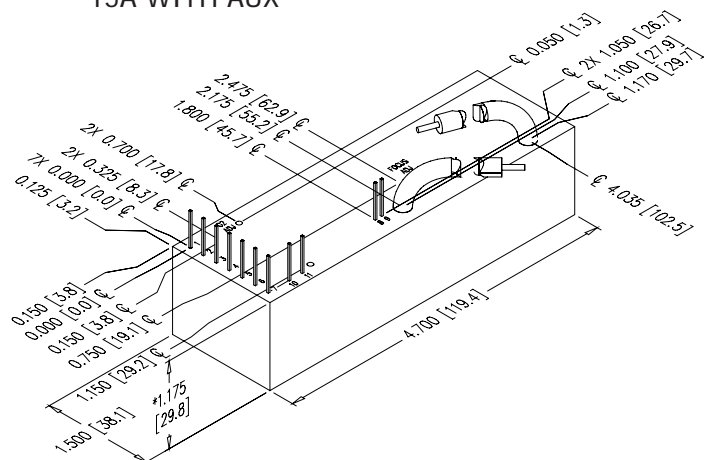
Standard TC:	Compensated TC:
300V	500V $\pm$ 200PPM
450V	650V $\pm$ 408PPM
600V	800V $\pm$ 537PPM
750V	950V $\pm$ 626PPM
900V	1100V $\pm$ 690PPM
1050V	

The AUX Grid HV output is via pin 10 on an additional pair of standard .025in (0.635mm) square IDC pins. These pins can be used for PCB mounting or direct wiring. The AUX Focus HV output is via an 18" long flying lead. High voltage connector and cable options are available.

10A WITH AUX



15A WITH AUX



Specifications subject to change without notice.



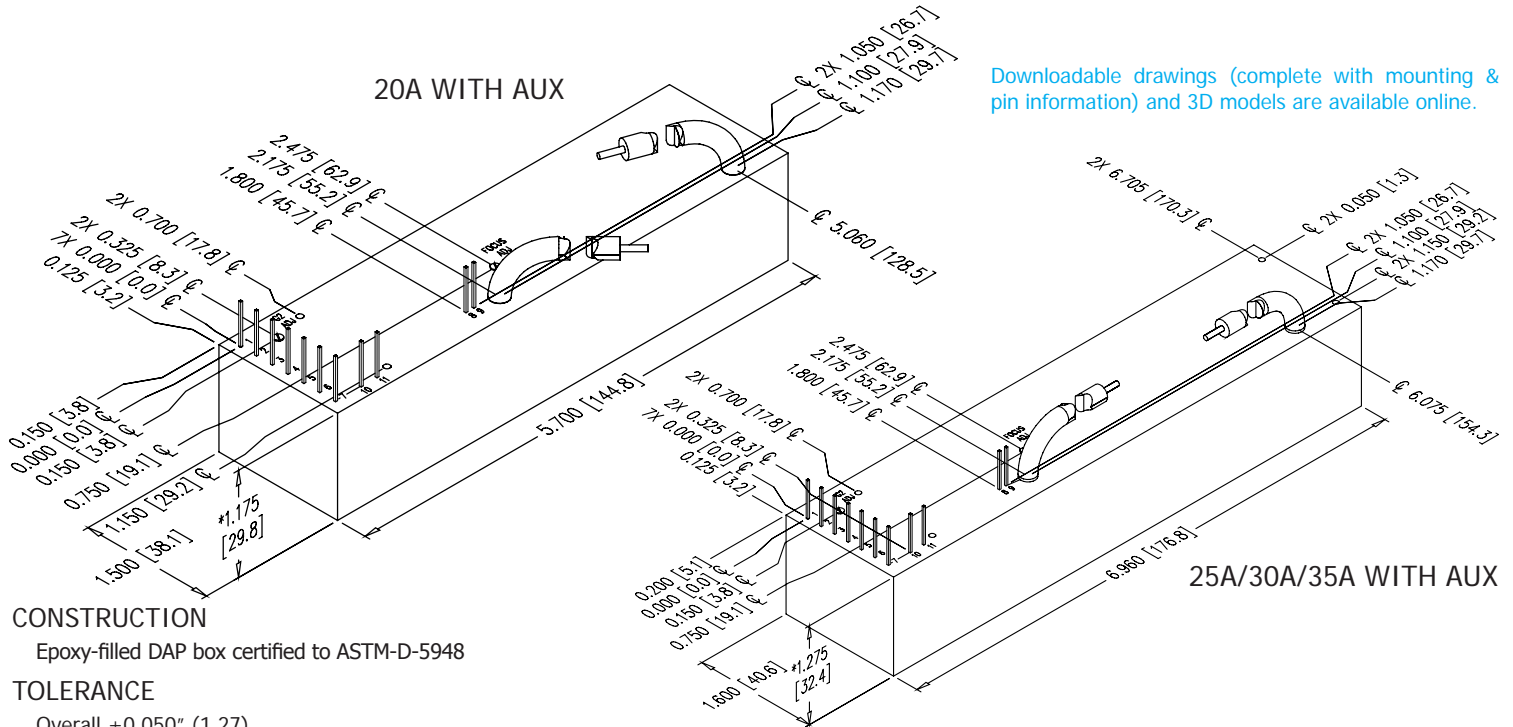
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Higher Service, Higher Performance, Higher Reliability

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## High Voltage Biasing Supply



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

### CONSTRUCTION

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

### TOLERANCE

- Overall  $\pm 0.050"$  (1.27)
- Pin to Pin  $\pm 0.015"$  (0.38)
- Mounting hole location  $\pm 0.025"$  (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.



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

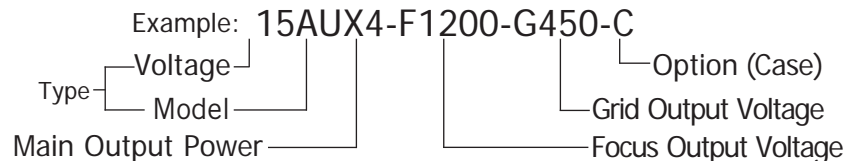
Rev. M 9/11

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	Eout Monitor
10	AUX Grid HV Output
11	Spare

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 (15W and above), -M-C, -M-E, and -M-H configurations which are 0 $\Omega$ .

ORDERING INFORMATION		
Type	0 to 10.7kVDC Main Output (Focus AUX Operational 8kV to 10.7kV)	10AUX
	0 to 16.1kVDC Main Output (Focus AUX Operational 11kV to 16.1kV)	15AUX
	0 to 21.5kVDC Main Output (Focus AUX Operational 16kV to 21.5kV)	20AUX
	0 to 26.8kVDC Main Output (Focus AUX Operational 21.5kV to 26.8kV)	25AUX
	0 to 32.2kVDC Main Output (Focus AUX Operational 26.8kV to 32.2kV)	30AUX
	0 to 37.6kVDC Main Output (Focus AUX Operational 28.2kV to 37.6kV)	35AUX
Focus Output	See Table on Pg. 1	-Fvv
Grid Output	See Table on Pg. 1	-Gvv
Power	Temperature Compensated AUX	-TC
	Watts Output (12 V Only)	4
	Watts Output (24 V Only)	20
Case	Watts Output (24 V Only)	30
	Plastic Case - Diallyl Phthalate	(Standard)
	RF Tight Aluminum Case	-C
Heat Sink	'Eared' Heatsink Plate (Plastic Case)	-E
	.400" High (sized to fit case)	-H
Shield	Six-sided Mu-Metal Shield	-M
Wire Options	Anode Flying Lead Terminated with Connector	-ATxx
	Anode Flying Lead Shielded	-AS
	Anode Flying Lead Protected	-AP
	Focus Flying Lead Terminated with Connector	-FTxx

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



Popular accessories ordered with this product include CONN-KIT-F and BR-6 mounting bracket kit.



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