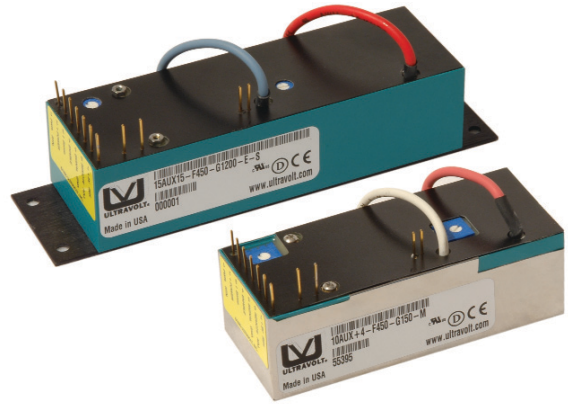


TRIPLE OUTPUT "AUX" SERIES

HIGH VOLTAGE POWER SUPPLY

- Adds Focus and Grid outputs
- Encapsulated within "10A → 35A" Series
- Adjustable regulated outputs
- Creates a 6.5 in³ triple output supply
- Fixed-frequency, low-stored-energy design
- High power density
- Indefinite output short-circuit protection
- UL, cUL, IEC-60950-1, and Demko Recognized



GENERAL INFORMATION:

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, E Beam Bias.

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 μA . 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 .025" 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.

COMPATIBILITY:

The "AUX" Series matches the standard "10A → 35A" Series for design methodology, remote control, enable/disable, reference, shock, and vibration. Designed and built utilizing a state-of-the-art power-conversion topology, these units feature surface-mount technology and encapsulation techniques providing high reliability and low cost. Base power supply output current rating remains at full value. Nominal input voltage should be used for maximum efficiency. Output current monitor is rescaled to accommodate the "AUX" current.

SHIELDING:

All models are available with optional six-sided, wrap-around Mu-Metal Shielding. This shielding attenuates magnetic and electrostatic emissions, while shielding internal circuitry from outside noise. The high-voltage power supply dimensions change by only 0.010".

PACKAGING:

Since the Auxiliary board is designed to fit inside the "10A → 35A" footprint, the width and length remain unchanged. To accommodate the adjust pots, all 4W units are 1.175" ± 0.050 " high, 15W and 30W units are 1.235" ± 0.050 " high. Standard packaging is our plastic PCB-mountable box. As always, optional six-sided Mu-Metal shielding, chassis mounting brackets and mounting plates are available.

ENVIRONMENT:

The "AUX" Series meets the same environmental specifications for temperature, shock, and vibration as the "10A → 35A" Series. All units receive a 24-hour burn-in prior to final test. Extended temperature range is available along with other enhanced capabilities. Please contact the factory.



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TRIPLE OUTPUT "AUX" SERIES

HIGH VOLTAGE POWER SUPPLY

Downloadable AutoCAD drawings (complete with mounting & pin information), Interactive Product Viewer, and 3D models are available online at: www.ultravolt.com/drawings.htm

PLASTIC CASE

CONSTRUCTION:

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

TOLERANCE:

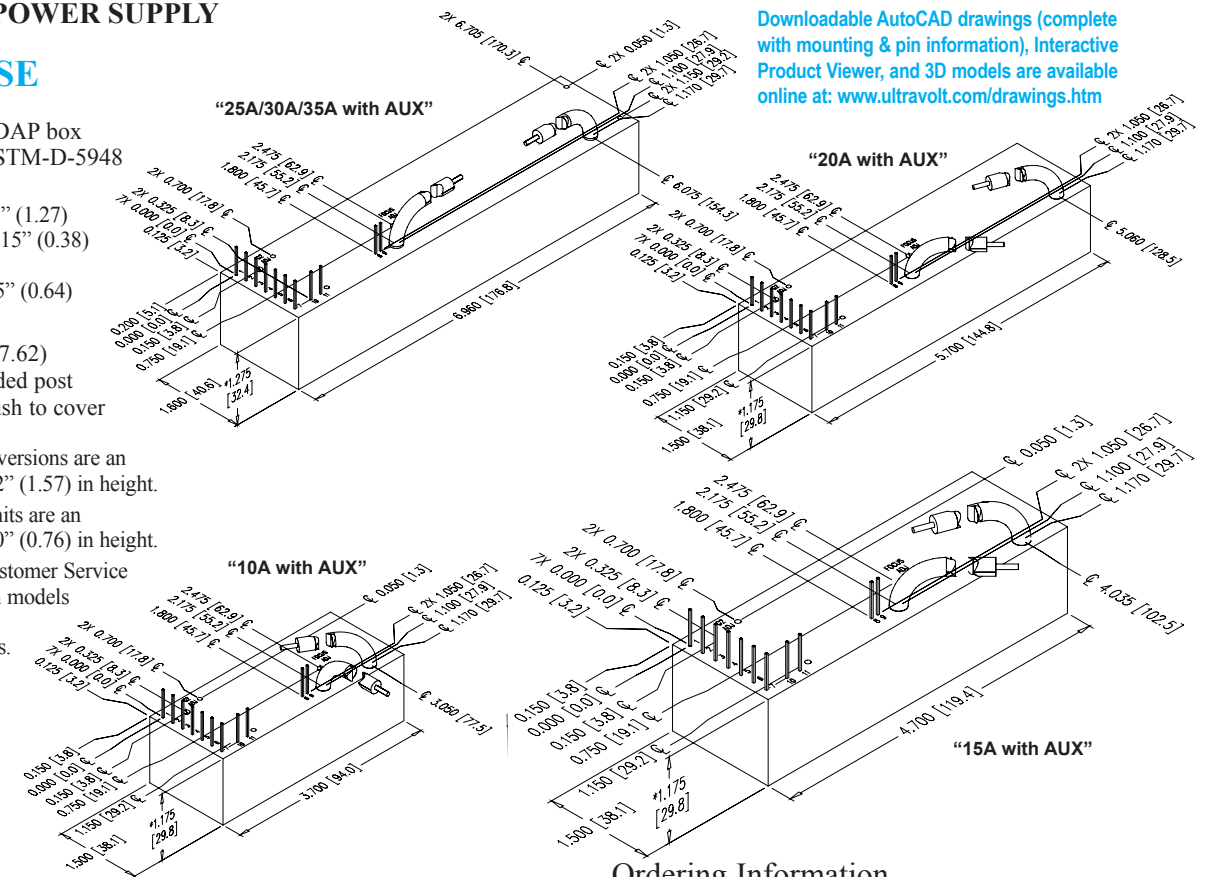
Overall ± 0.050 " (1.27)
Pin to Pin ± 0.015 " (0.38)
Mounting hole location ± 0.025 " (0.64)

MOUNTING:

#2-56 x 0.30 (7.62)
2 places threaded post may not be flush to cover

NOTE:

20W and 30W versions are an additional 0.062" (1.57) in height.
-M equipped units are an additional 0.030" (0.76) in height.
Contact UV Customer Service for drawings on models equipped with -E or -H options.



Connections

1 - Input Power Ground Return
2 - Positive Power Input
3 - Iout Monitor
4 - Enable/Disable
5 - Signal Ground Return
6 - Remote Adjust Input
7 - +5V Reference Output
8 - HV Ground Return
9 - Eout Monitor
10 - AUX Grid HV Output
11 - Spare

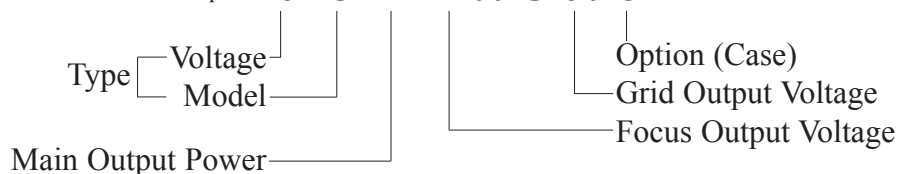
All grounds joined internally. Power-supply mounting points isolated from internal grounds by >100k Ω , .01 μ F / 50V (Max) on all models except -M, -C and -M-E configurations, which are 0 Ω .

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	-FvVV
Grid Output:	See Table on Pg. 1	-GvVV
	Temperature Compensated AUX	-TC
Power:	Watts Output (12V Only)	4
	Watts Output (24V Only)	20
	Watts Output (24V Only)	30
Case:	Plastic Case - Diallyl Phthalate	STD
	RF Tight Aluminum Case	-C
	"Eared" Heatsink Plate (Pastic Case)	-E
Heatsink:	.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



Example: 15AUX4-F1200-G450-C



Specifications subject to change without notice

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"Making High Voltage Easier!"

www.ultravolt.com

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