HV RACK® CONFIGURABLE SERIES

Rack Mount High Voltage Power System

The HV Rack Configurable power system is a fully featured, configurable chassis, enabling end users to select and to specify the UltraVolt high-voltage power supply (HVPS) operating in each channel from UltraVolt's catalog of more than 600 models. This combination provides accurate control and measurement of high-voltage power supply and HV system performance.

- 1 to 4 configurable high-voltage output channels
- Voltage ranges from 0 to 62VDC through 40kV
- 4 to 1000 watts per channel, up to 1000 watts total
- Independent control & monitoring of each channel
- Voltage and Current meters for each channel
- Constant current / Constant voltage auto-crossover
- Pre-set before & during bias capability
- PLC Analog/Digital Remote operation capability

PARAMETER	CONDITIONS	MODELS			
AC INPUT		**HV RACK X-250**	**HV RACK X-500**	**HV RACK X-750**	**HV RACK X-1000**
Voltage	Full Power, Autoswitching	115/230VAC, 50/60Hz	115/230VAC, 50/60Hz	230VAC, 50/60Hz	230VAC, 50/60Hz
Power	120VAC, Max Eout , Full Load	375W	750W	N/A	N/A
Power	240VAC, Max Eout , Full Load	375W	750W	1125W	1500W
REMOTE CONTROL		**ALL MODELS**			
Enable	All Channels	TTL high to enable, low to disable (DEFAULT IS DISABLE)			
V Control	All Channels	0V to 4.64V = 0V to 100% HV out (5V = 108% HV out)			
HV Monitor	All Channels	0V to 4.64V = 0V out to 100% V out (5V = 108% V out)			
I Control	All Channels	0V to 4.64V = 0A to 100% Io (5V = 108% Io)			
I Monitor	All Channels	0V to 4.64V = 0A to 100% Io (5V = 108% Io)			
Reference Out	All Channels	5V precision voltage reference returned to signal ground			
LVPS Out	One Signal, PTC Fused	+15V±10%, 0 to 100mA			
Power Ground	One Signal	Return of LVPS Out			
Global Disable	One Signal	TTL signal disables all Channels, low to enable, high to disable (DEFAULT IS ENABLE)			
OUTPUT METERS		**TYPE OF CHANNEL**		**TOLERANCE**	
Voltage	4½ Digit Red LED	All		1% Full Scale	
Current	3½ Digit Blue LED	All		1% Full Scale	
TEMPERATURE		**ALL MODELS**			
Operating	Full Load, Max Eout, Case Temp.	+10°C to +45°C			
Storage	Non-Operating, Case Temp.	-40°C to +85°C			
		Extended temperature operation is available, please contact the factory.			
ALTITUDE		**ALL MODELS**			
Operating	Standard Package	0 to 10,000 ft			
Storage	Standard Package	0 to 50,000 ft			
HUMIDITY		**ALL MODELS**			
Operating	Standard Package	0 to 95% non-condensing			
Storage	Standard Package	0 to 95% non-condensing			
PACKAGING		**ALL MODELS**			
Chassis Length	Not including mounting feet	18.5in (469.9mm)			
Chassis Width	Not including mounting feet	17.0in (431.8mm)			
Chassis Height	Not including mounting feet	5.0in (127.0mm)			
Front Panel Length	Not including handles or controls	19.0in (482.6mm)			
Front Panel Width	Not including handles or controls	0.125in (3.18mm)			
Front Panel Height	Not including handles or controls	5.25in (3U or 133.35mm)			
Weight	Overall (configuration dependent)	~ 30 lbs (11.2kg)			
Weight	Shipping (configuration dependent)	~ 40 lbs (14.93kg)			

Specifications subject to change without notice.

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FIGURE A:

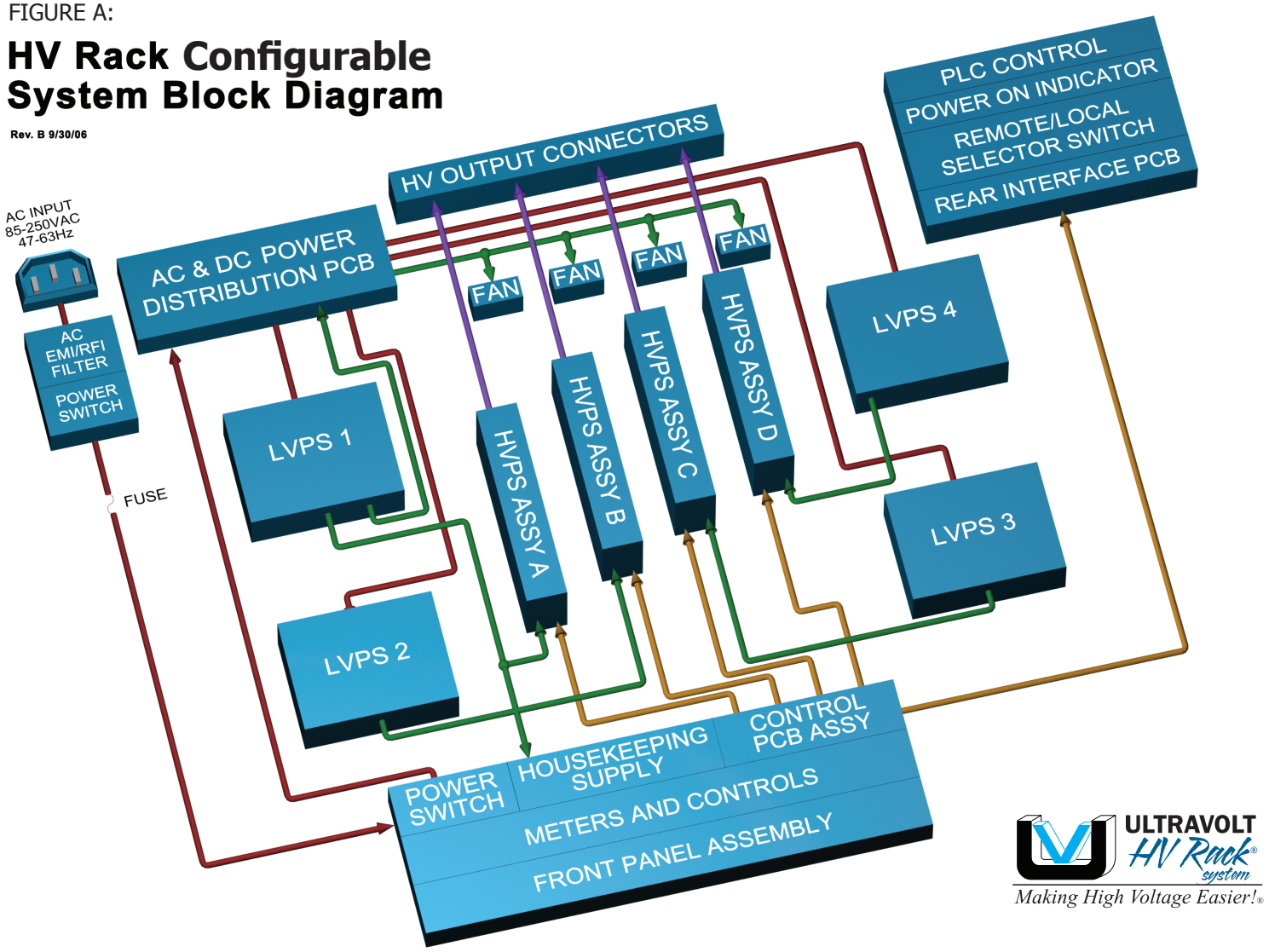

FIGURE B: FRONT PANEL

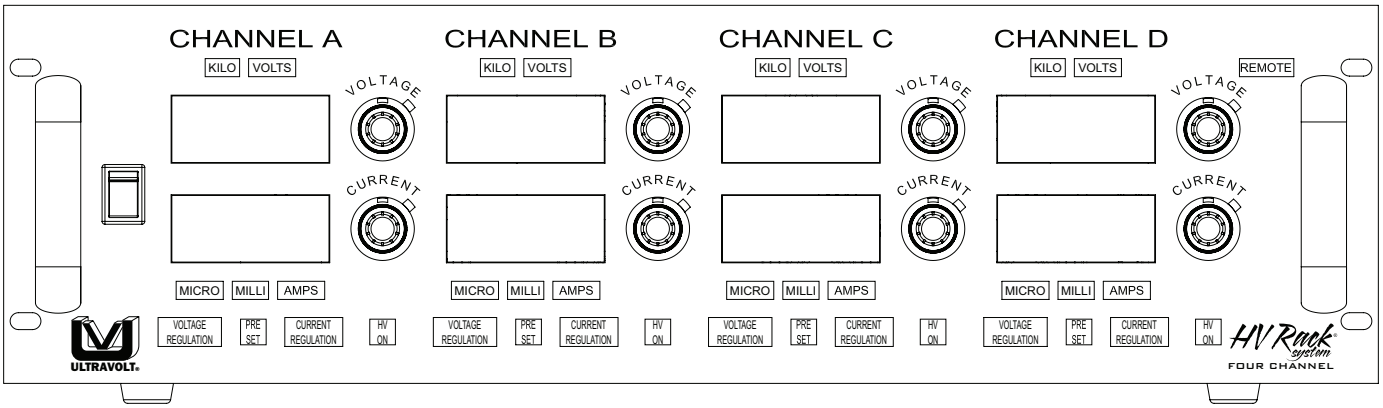

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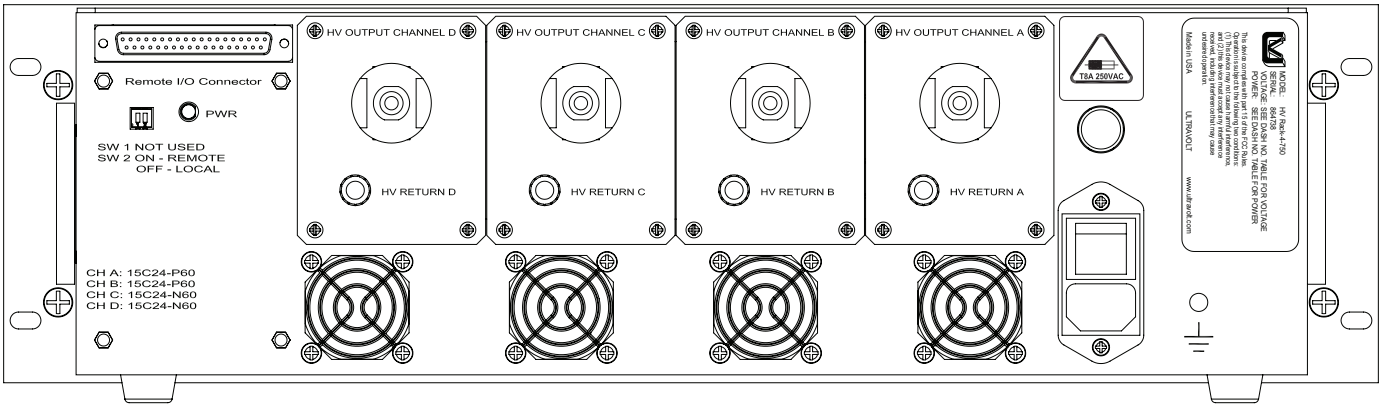
FIGURE C: REAR PANEL (EXAMPLE)



STANDARD HV CONNECTOR:

- Alden B110YX10 (one per channel)

CURRENTLY AVAILABLE OPTIONS:

- USB Interface (USB-HV-RACK)
- Floating/Isolated Channels
- SHV Connectors
- Amp Connectors
- Fischer Connectors
- Alden Connectors
- Caton Connectors
- Parker Medical Connectors
- Removable Mounting Feet
- Mounting Slides

ORDERING INFORMATION	
TYPE:	DESCRIPTION:
HV-RACK-1-250	19" HV Rack with (1) set of meters & controls with 300 watts of LV power configured for: One channel 250W max total output.
HV-RACK-1-500	19" HV Rack with (1) set of meters & controls with 600 watts of LV power configured for: One channel 500W max total output.
HV-RACK-1-750	19" HV Rack with (1) set of meters & controls with 900 watts of LV power configured for: One channel 750W max total output.
HV-RACK-1-1000	19" HV Rack with (1) set of meters & controls with 1200 watts of LV power configured for: One channel 1000W max total output.
HV-RACK-2-250	19" HV Rack with (2) sets of meters & controls with 300 watts of LV power configured for: Two channels 250W max combined output.
HV-RACK-2-500	19" HV Rack with (2) sets of meters & controls with 600 watts of LV power configured for: Two channels 500W max combined output.
HV-RACK-2-750	19" HV Rack with (2) sets of meters & controls with 900 watts of LV power configured for: Two channels 750W max combined output.
HV-RACK-2-1000	19" HV Rack with (2) sets of meters & controls with 1200 watts of LV power configured for: Two channels 1000W max combined output.
HV-RACK-3-250	19" HV Rack with (3) sets of meters & controls with 300 watts of LV power configured for: Three channels 250W max combined output.
HV-RACK-3-500	19" HV Rack with (3) sets of meters & controls with 600 watts of LV power configured for: Three channels 500W max combined output.
HV-RACK-3-750	19" HV Rack with (3) sets of meters & controls with 900 watts of LV power configured for: Three channels 750W max combined output.
HV-RACK-3-1000	19" HV Rack with (3) sets of meters & controls with 1200 watts of LV power configured for: Three channels 1000W max combined output.
HV-RACK-4-250	19" HV Rack with (4) sets of meters & controls with 300 watts of LV power configured for: Four channels 250W max combined output.
HV-RACK-4-500	19" HV Rack with (4) sets of meters & controls with 600 watts of LV power configured for: Four channels 500W max combined output.
HV-RACK-4-750	19" HV Rack with (4) sets of meters & controls with 900 watts of LV power configured for: Four channels 750W max combined output.
HV-RACK-4-1000	19" HV Rack with (4) sets of meters & controls with 1200 watts of LV power configured for: Four channels 1000W max combined output.

Note: The sum of the output power capability of the modules cannot exceed the total rack power capability. Please contact the factory to configure your HV Rack part number.

Exceeding 250W in a single channel is possible by paralleling UltraVolt's High Power C Series of 250W models.

PROUDLY

MADE IN THE USA

Rev. L 12/12

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