

HV RACK ADVANCED SERIES

High Voltage Rack Mount Power System

PRELIMINARY DATASHEET

The HV Rack Advanced Series of high-voltage rack mount power systems is a fully-featured chassis that enables users to reach higher levels of power for their applications. This sophisticated system features a computerized front panel, controls and display, SD card memory function for loading user voltage/current curves to simulate application, and offers advanced measurements and data logging. Users will also benefit from the high performance of the system, which includes low ripple and noise, and excellent regulation. In addition, customers can choose a master-slave option to reach a power level of 90kW!

- Voltage ranges from 0 to 20VDC up to 1,200VDC
- Power levels from 0 to 2kW up to 10kW
- Master-slave option reaches power level of 90kW
- Very low ripple & noise
- Excellent line and load regulation
- Constant voltage, constant current, constant resistive, and constant power modes standard



Applications for the HV Rack Advanced Series include ATE systems, process-water treatment, waste-water treatment, plating, and motor operation.

- Computerized front panel, full controls, & display
- SD card memory function for loading user voltage/current curves
- Simulates modes CV, CC, CP, R, PV, & automotive
- Advanced measurements & data logging
- Optional computer controls

PARAMETER	CONDITIONS	MODELS		UNITS				
		3kW	4kW & HIGHER					
INPUT								
Voltage Range	Full Power	Single phase 115 or 230		VAC				
Frequency	All Modes	47 to 63		Hz				
Current	Standby / Disable	200 each phase		mA				
Current	No Load, Max Eout	TBD		mA				
Current	Max Load, Max Eout	Contact the factory		A				
OUTPUT (15V-70V)		15V	20V	25V	35V	45V	70V	
Voltage Range	Nominal Input	0 to 15	0 to 20	0 to 25	0 to 35	0 to 45	0 to 70	VDC
Power	Nominal Input, Max Eout	3 6	4 8 10	5 8	3 4 5 6 8 10	3 4 5 6 8 10	3 4 5 6 8 10	kW
Current	out Entire Output Voltage Range	200 400	200 440 500	200 320	90 115 150 175 230 350	70 90 120 140 180 250 45 60 75 90 115 175		A
OUTPUT (150V-1200V)		150V	300V	600V	1000V	1200V		
Voltage Range	Nominal Input	0 to 150	0 to 300	0 to 600	0 to 1000	0 to 1200		VDC
Power	Nominal Input, Max Eout	3 4 5 6 8 10	3 8 5 6 8 10	3 4 5 6 8 10	3 4 5 6 8 10	3 4 5 6 8 10		kW
Current	out Entire Output Voltage Range	20 30 35 40 55 75	10 15 17 20 30 40	5 7 8.5 10 15 17	3 4 5 6 8 10	2.6 3.4 4.2 5 6.7 8.4		A
OUTPUT		ALL TYPES						
Isolation	Input to Output	3000						VAC
Ripple	Full Load, Max Eout	<±0.025						%V p-p
Programming Accuracy	10% to 100% Output Voltage	+/-0.05% + 2						mV
Dynamic Load Regulation	½ to Full Load, Max Eout	<±3.5% for 0.5mS						VDC
Line Regulation	Nom. Input, Max Eout, Full Power	<± 0.1% + 2						mV
Static Load Regulation	No Load to Full Load, Max Eout	<± 0.1% + 2						mV
Stability	30 Min. warmup, per 8 hr/ per day	<± 0.05%						VDC
Static Current Regulation	Nom. Input, Max Eout, Full Power	<±0.1% + 2						mA
PROGRAMMING & CONTROLS		ALL TYPES						
Output Control & Monitoring		Front panel and/or optional Analog 0 to +5 or +10 standard & isolated / Digital 12 bit: RS-232, RS-485, IEE-488, LAN, USB, SD card						-
ENVIRONMENTAL		ALL TYPES						
Operating	Full Load, Max Eout, Case Temp.	0 to +50						°C
Storage	Non-Operating, Case Temp.	-45 to +85						°C
Humidity	All Conditions, Standard Package	0 to 95% (non-condensing)						-
Shock	Mil-Std-810, Method 516.5, Proc. IV	< 20						G's
Vibration	Mil-Std-810, Method 514.5, Fig.514.5C-3	10 - 55 Hz/ 1min/2G XYZ						-

Specifications subject to change without notice.



Making High Voltage Easier!®

Higher Service, Higher Performance, Higher Reliability
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High Voltage Rack Mount Power System

CONSTRUCTION

TBD

SIZE

Dimensions:

3kW to 5kW models: 19" L x 2U x 17.32" [440mm] W

6kW to 10kW models: 19" L x 2U x 23.62" [600mm] W

Weight:

3kW to 5kW models: 41.89lbs [19kg]

6kW to 10kW models: 57.32lbs [26kg]

TOLERANCE

TBD

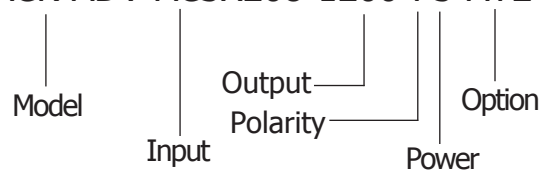
NOTES

For outline drawings of the HV Rack Advanced chassis, please contact the factory.

ORDERING INFORMATION

Model	Series Name	HV-RACK-ADV
Input	Single phase 115 VAC (3kW only)	-AC115
	Single phase 230 VAC (3kW only)	-AC230
	Three phase 187-229 VAC (4kW and higher only)	-AC3X208
	Three phase 360-440 VAC (4kW and higher only)	-AC3X400
	Three phase 432-528 VAC (4kW and higher only)	-AC3X480
Output	0 to 15VDC Output (3kW, 6kW only)	-15
	0 to 20VDC Output (4kW, 8kW, 10kW only)	-20
	0 to 25VDC Output (5kW, 8kW only)	-25
	0 to 35VDC Output	-35
	0 to 45VDC Output	-45
	0 to 70VDC Output	-70
	0 to 150VDC Output	-150
	0 to 300VDC Output	-300
	0 to 600VDC Output	-600
	0 to 1,000VDC Output	-1000
Polarity	Positive Output	-P
	Negative Output	-N
Power	0 to 3kW Output	3
	0 to 4kW Output	4
	0 to 5kW Output	5
	0 to 6kW Output	6
	0 to 8kW Output	8
	0 to 10kW Output	10
Option	ATE mode (no front panel control and monitors)	-ATE
	Isolated analog interface 0-5VDC control and monitors	-I5I
	Isolated analog interface 0-10VDC control and monitors	-I10I
	Analog interface 0-5VDC control and monitors	-I5
	Analog interface 0-10VDC control and monitors	-I10
	Rear panel RS232 interface	-RS232
	Rear panel RS485 interface	-RS485
	Rear panel Ethernet interface	-ETH
	Rear panel USB interface	-USB
	Front panel SD Card slot	-SD
	Master-slave option for 90kW output power	-SLV
	Output follows Automotive 12V profiles	-CRV12
	Output follows Automotive 24V profiles	-CRV24
Output curves on request	-DCRV	

Example: HV-RACK-ADV-AC3X208-1200-P5-ATE



Rev. 2 12/11



Safety per EN 60950
Emission per EN 6100-6-4
Immunity per EN 6100-6-2



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