

# HV RACK HP ADVANCED SERIES

## High Voltage Rack Mount Power System

### PRELIMINARY DATASHEET

The HV Rack HP Advanced Series of high-voltage rack mount power systems is a fully-featured chassis that enables users to reach very high levels of power for their applications. This sophisticated system features computerized front panel controls and display, and offers an SD card memory function for loading user voltage/current curves to simulate application, 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, HV Rack HP Advanced systems offer a master-slave option to achieve 90kW of output power!

- Voltage ranges from 0 to 40VDC up to 1,200VDC
- Power levels from 0 to 5kW up to 60kW
- Master-slave option reaches power level of 90kW
- Very low ripple & noise
- Constant voltage, constant current, constant resistive, and constant power modes standard
- Excellent line and load regulation



Model shown is 5kW to 15kW

Applications for the HV Rack HP 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	ALL MODELS																								UNITS				
<b>INPUT</b>																														
Voltage Range	Full Power	Three phase 208 (187-229), 400 (360-440), or 480 (432-528)																								VAC				
Frequency	All Modes	47-63																								Hz				
Current	Standby / Disable	200 each phase																								mA				
Current	No Load, Max Eout	TBD																								mA				
Current	Max Load, Max Eout	Contact the factory																								A				
<b>OUTPUT (40V-150V)</b>		<b>40V</b>						<b>80V</b>						<b>100V</b>						<b>150V</b>										
Voltage Range	Nominal Input	0 to 40						0 to 80						0 to 100						0 to 150						VDC				
Power	Nominal Input, Max Eout	5	10	15	20	30	45	60	5	10	15	20	30	45	60	5	10	15	20	30	45	60	5	10	15	20	30	45	60	kW
Current	out Entire Output Voltage Range	125	250	375	500	750	1125	1500	65	130	195	250	375	562.5	750	50	100	150	200	300	450	600	35	70	100	133	200	300	400	A
<b>OUTPUT (300V-1200V)</b>		<b>300V</b>						<b>600V</b>						<b>1000V</b>						<b>1200V</b>										
Voltage Range	Nominal Input	0 to 300						0 to 600						0 to 1000						0 to 1200						VDC				
Power	Nominal Input, Max Eout	5	10	15	20	30	45	60	5	10	15	20	30	45	60	5	10	15	20	30	45	60	5	10	15	20	30	45	60	kW
Current	out Entire Output Voltage Range	17	34	50	66	100	150	200	8.5	17	25	33	50	75	100	5	10	15	20	30	45	60	4	8	12	16	25	37.5	50	A
<b>OUTPUT (ALL MODELS)</b>																														
Isolation	Input to Output	3000																								VAC				
Programming Accuracy	10% to 100% Output Voltage	+/-0.05% + 2																								mV				
Ripple	Full Load, Max Eout	< 0.025																								%V p-p				
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				
<b>PROGRAMMING &amp; CONTROLS</b>																														
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, IAN, USB, SD card																								-				
<b>ENVIRONMENTAL</b>																														
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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# HV RACK HP ADVANCED SERIES

## High Voltage Rack Mount Power System

### CONSTRUCTION

TBD

### SIZE

Dimensions:

5kW to 15kW models: 19" L x 3U x 24.41" [620mm] W  
 20kW to 30kW models: 19" L x 6U x 24.41" [620mm] W  
 45kW models: 19" L x 9U x 24.41" [620mm] W  
 60kW models: 19" L x 12U x 24.41" [620mm] W

Weight:

5kW models: 41.89lbs [19kg]  
 10kW models: 57.32lbs [26kg]  
 15kW models: 72.75lbs [33kg]  
 20kW to 30kW models: 145.51lbs [66kg]  
 45kW models: 218.26lbs [99kg]  
 60kW models: 291.01lbs [132kg]

### TOLERANCE

TBD

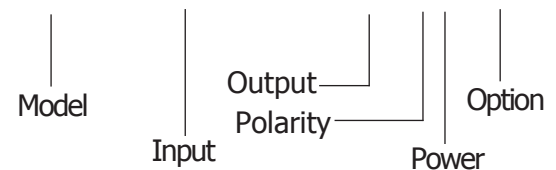
### NOTES

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

### ORDERING INFORMATION

Model	Series Name	HV-RACK-HPADV
Input	187-229VAC	-AC3X208
	360-440 VAC	-AC3X400
	432-528 VAC	-AC3X480
Output	0 to 40VDC Output	-40
	0 to 80VDC Output	-80
	0 to 100VDC Output	-100
	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 5kW Output	5
	0 to 10kW Output	10
	0 to 15kW Output	15
	0 to 20kW Output	20
	0 to 30kW Output	30
	0 to 45kW Output	45
	0 to 60kW Output	60
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-HPADV-AC3X400-600-P10-USB



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

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