



Key features:

- Models from 600W to 14400W
- High Voltage Range, 0 500 Vdc
- Current Ranges up to 500 Adc
- High-Speed 5 Digit Precision **Metering Capability**
- Parallel Operation for High **Power Applications**
- Synchronized Operation of Multiple
- Operating Modes: CC, CP, CR and CV
- Static and Dynamic CC Modes
- Fast Current Slew Rates
- Built-in Short Circuit Test
- Built-in Power Supply Over Current **Protection Test Mode**
- Built-in Power Supply Over Power **Protection Test Mode**
- Go/NoGo Test Support
- Auto-Sequencing
- High Power Load Cabinets
- Available Interface Options are USB, RS232, GPIB and LAN



#### **OVERVIEW**

The ADAPTIVE POWER 5V Series Programmable DC Electronic Loads are ideally suited for testing high voltage, high current power supplies and batteries. With their ability to draw full current starting as low as 3.0 Vdc, the 5V Series loads can provide a wide dynamic range of load conditions.

Target applications for these loads are research & development, production test, incoming inspection, quality control and service.

The high power density of 1800W in a 4U high, single 19" wide rack-mount mainframe represents industry leading power density. The 5V Series consists of a total of seventeen different model configurations, providing a wide variation of possible current and power ranges. Starting at 600 Watt and ranging to 1800 Watt per chassis or 14400W for 5V Cabinet systems, all models offer dual voltage and current range capability for optimal accuracy and resolution.

## **HIGH POWER 5V SERIES CABINET SYSTEMS**

For high power models in the 5V Series are supplied as integrated load cabinets that combine one master 5V unit with one or more slave 5V Series rack mount units. These systems contain all necessary input wiring and output bus bars to handle DC current up to 500 Adc. These systems are ideally suited for burn in and battery discharge test applications up to 500 Vdc.

The 5V Series offers high power, high voltage load performance and durability at an affordable price point.



















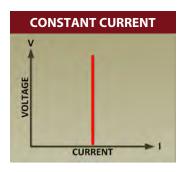


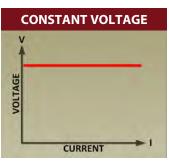


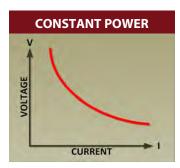
## **OPERATING MODES**

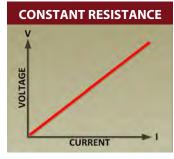
All 5V Series loads support several modes of operation to accommodate a wide range of test requirements. Voltage sources like AC/DC power supplies are best tested using Constant Current (CC) mode. Battery chargers on the other hand can be tested using an E-load in Constant Voltage (CV)mode.

The available operating modes are Constant Current, Constant Voltage, Constant Power and Constant Resistance. A graphical representation of these modes of operation is shown here.





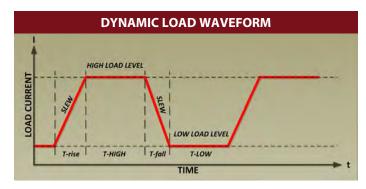




## **STATIC & DYNAMIC MODES**

The demands put on power supplies to support increasingly complex electronics systems continue to escalate. It is no longer sufficient to test power supplies for static load conditions. Instead, dynamic load conditions requiring rapid changes in current demanded from the power supply need to be evaluated and tested. The 5V Series Loads serve this purpose by offering high speed programmable dynamic load control.

The diagram below illustrates the variable load current slew rates and dwell times that can be programmed on the 5V Series loads.



Sequences of variable slew rates and test levels can be stored in non-volatile memory for recall during dynamic transient load test execution. This makes it possible to simulate real-world demanding load conditions on power supplies driving modern electronics. With current slew rates ranging up to several Amps per microsecond and dwell times down to 50 microseconds, thorough transient stability testing of power supply designs is possible. Advanced remote sense and control feedback loops ensure stable and repeatable testing with little or no distortion during load transitions.

## **FLEXIBLE INPUT CAPABILITIES**

5V Series loads are designed to accommodate a wide range of current input values within their maximum voltage and power capability. This allows the same loads to be used for higher voltage and low current requirements as well as low voltage higher current applications. A typical V-I operating curve is shown on the right for load model 5V108-07. Bounded by the maximum voltage of 500Vdc and maximum current of 72A, the input range follows an 10.8kW power curve as shown.

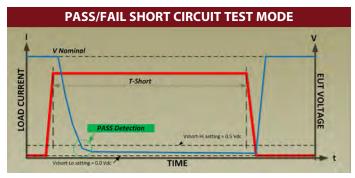
Each load continuously tracks its input voltage current and power and safeguards against any operation outside of its operating limits.

This flexible operating range allows the same load to be used for a wide range of EUTs and provides great flexibility.



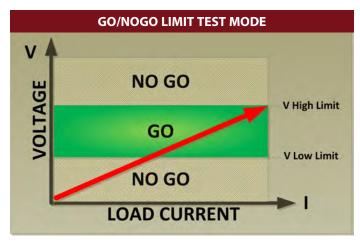
## **SHORT CIRCUIT TESTING**

Power supplies and batteries must be able to handle short circuit conditions without failing. The 5V Series loads have a built-in short circuit test mode that allows easy PASS/FAIL detection as part of a test protocol. Programmable parameters short duration time (T-short) and Hi and Lo voltage limits for the EUT during short conditions. If the sensed voltage falls within the user-defined limits, a PASS is recorded.



## **GO/NOGO LIMIT TESTING**

The GO/NG mode of operation is a convenient way to automatically check any measured parameter like voltage, current or power against predefined upper and lower limits. Once set, the load continuously compares readings against these limits and issues a GO or NoGo error output.



## **5V SERIES CABINET SYSTEMS**

For applications where the 5V Series single chassis provides insufficient current and/or power, the 5V cabinet systems provides a fully integrated Master/Slave load test system solution.

These systems come in a movable cabinet with pre-installed AC input wiring and solid copper output bus bars that can handle large amounts of DC current.

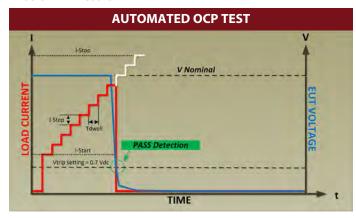
Cabinets range in size from 2400 Watt to 14400 Watt, with thirteen system configurations to choose from.



DC Load Model 5V054-18 shown

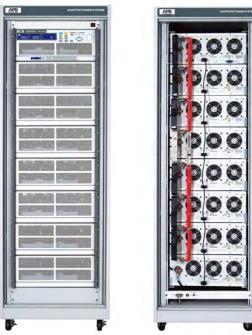
## **OCP MODE TESTING**

Testing the Over Current Protection (OCP) function of a power supply is easy when using the APS DC load. A special OPC mode allows setting of start current, end current and step size versus time. A preset voltage threshold level is used to detect protection trip current and terminate the test with either a PASS or FAIL result.



## OPP MODE TESTING

In addition to the OCP Test function, an Over Power Protection (OPP) test is provided as well. Conceptually, the test method is similar to the OCP test but instead of stepping the current, the power drawn by the load is stepped instead until the power supplies goes into protective shutdown or fold-back.



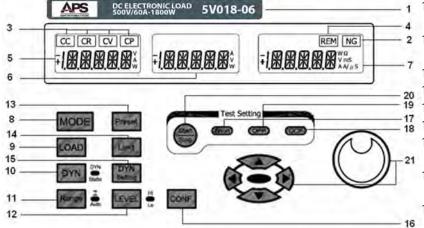
DC Load Model 5V144-50 shown

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### FRONT PANEL OPERATION

The 5V Series Load has an easy to use front panel layout consisting of large white LED back-lit LCD readouts and a keypad, shuttle combination for settings and parameter entry. Status indicator LED's accompany the various function and mode setting keys so the operational state of the DC load is easily observed by the operator. The digital rotary encoder makes slewing of parameters very intuitive.

- 1. Model Number and ranges
- Go/NoGo indicator illuminates if upper or lower limit settings are exceeded.
- 3. Operating Mode Indicators
- 4. REMOTE state indicator
- 5. Multi-purpose 5 digit display Voltage
- 6. Multi-purpose 5 digit display Current
- 7. Multi-purpose 5 digit display Power
- 8. MODE selection key
- LOAD ON/OFF button and indicator
- 10. DYNAMIC mode button and indicator

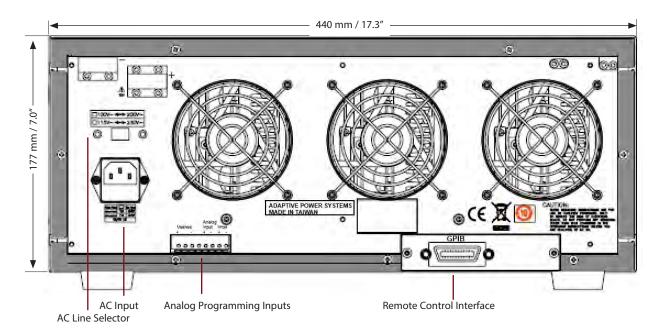


- 11. High or Low Range Selection and indicator
- 12. High or Low Load Setting Selection and indicator
- 13. Preset Mode ON/OFF
- 14. Limit Setup Menu
- 15. DYNAMIC mode settings
- 16. Configuration Menu

indicator

- 17. Short Circuit Test key and
- 18. OCP (Over Current Protection)
  Test key and indicator
- OPP (Over Power Protection)
   Test key and indicator
- 20. SHORT, OCP & OPP Start/Stop
- 21. Shuttle Knob, parameter selection, slew and cursor keys

## **REAR PANEL**



## **SPECIFICATIONS - 5V SERIES DC LOADS**

MODEL		EV004 00	EV042.04	EV040.04	EV/040.04	E1/024 00	E1/026.42	
MODEL		5V006-02	5V012-04	5V018-01	5V018-06	5V024-08	5V036-12	
OPERATING RANGES				T		T		
Por	wer Ranges	0-60 W/0-600 W	0-120 W/0-1200 W	0-180 W/0-1800 W	0-180 W/0-1800 W	0-240W/0-2400W	0-360W/0-3600W	
Curr	rent Ranges	0-2.0 A / 0-20 A	0-4.0 A / 0-40 A	0-1.2 A / 0-12 A	0-6.0 A / 0-60 A	0-8.0 A / 0-80 A	0-12.0 A / 0-120 A	
Vol	tage Range	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	
Minim	um Voltage	4.0 V @ 20 A	4.0 V @ 40 A	6.0 V @ 12 A	4.0 V @ 60 A	4.0 V @ 80 A	4.0 V @ 120 A	
OPERATING MODES	;							
CC Mode	Range	0-2.0A / 0-20 A	0-4.0A / 0-40 A	0-1.2 A / 0-12 A	0-6.0 A / 0-60 A	0-8.0 A / 0-80 A	0-12.0 A / 0-120 A	
	Resolution	0.033mA / 0.33mA	0.066mA / 0.66mA	0.02mA / 0.2mA	0.1mA / 1mA	0.133mA / 1.33mA	0.2mA / 2mA	
	Accuracy			± 0.1% OF (SET	TING + RANGE)			
CR Mode	Range	0.5 / 30 / 1800kΩ	0.2 / 5 / 900kΩ	0.8333 / 50 / 3000kΩ	0.1666 / 10 / 600kΩ	0.125 / 7.5 / 450kΩ	0.833 / 5 / 300kΩ	
	Resolution	0.5mΩ / 0.55μS	0.25mΩ / 1.1μS	0.8333mΩ / 0.333μS	0.1666mΩ / 0.032mS	0.125mΩ / 0.0022mS	0.0833mΩ / 0.00033mS	
	Accuracy			± 0.2% OF (SET	TING + RANGE)			
CV Mode	Range	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	
	Resolution	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	
	Accuracy			± 0.05% OF (SE	ΓTING + RANGE)			
CP Mode	Range	0-60W / 0-600W	0-120W / 0-1200W	0-180W / 0-1800W	0-180W / 0-1800W	0-240W / 0-2400W	0-360W / 0-3600W	
	Resolution	1mW / 10mW	2mW / 20mW	3mW / 30mW	3mW / 30mW	4mW / 40mW	6mW / 60mW	
	Accuracy	1111111	Ziiiiv / Zoiiiv		TING + RANGE)	1111111	GIIIV / GGIIIV	
PROTECTION	riccuracy			± 0.570 OT (5ET	TING T IVINGE)			
	Power (OP)	630 W	1260 W	1890 W	1890 W	2520 W	3780 W	
	Current (OC)	21.0 A	42.0 A	12.6 A	63.0 A	84.0 A	126.0 A	
	oltage (OV)	525.0 V						
		525.U V	525.0 V	525.0 V	525.0 V	525.0 V	525.0 V	
Over Tempe				+85° C /	+185° F			
DYNAMIC OPERATIO						,		
T high & T low		0.050 - 9.999 / 99.99 / 9999ms (20 kHz)						
	Resolution	0.001/0.01/0.1/1ms						
	Accuracy				ıs / 1ms + 50ppm	T		
	Slew Rate	1.6mA-100mA/μs	3.2mA-200mA/μs	0.96mA-60mA/μs	4.8mA-300mA/μs	6.4mA-400mA/μs	9.6mA-600mA/μs	
		16mA-1000mA/μs	32mA-2000mA/μs	9.6mA-600mA/μs	48mA-3000mA/μs	64mA-4000mA/μs	96mA-6000mA/μs	
	Accuracy	± 5% OF SETTING ± 10 μs						
	n. Rise Time			20μs T	Typical Typical			
METERING								
Voltage	Range			0 - 60.0 V	/ 0 - 500 V			
	Resolution	1.0 mV / 10 mV						
	Accuracy			± 0.025% OF (RE	ADING + RANGE)			
Current	Range	0-2.0A / 0-20 A	0-4.0A / 0-40 A	0-1.2 A / 0-12 A	0-6.0 A / 0-60 A	0-8.0 A / 0-80 A	0-12.0 A / 0-120 A	
	Resolution	0.033mA / 0.33mA	0.066mA / 0.66mA	0.02mA / 0.2mA	0.1mA / 1mA	0.133mA / 1.33mA	0.2mA / 2mA	
	Accuracy			± 0.1% OF (REA	DING + RANGE)			
Power	Range	0-60W / 0-600W	0-120W / 0-1200W	0-180W / 0-1800W	0-180W / 0-1800W	0-240W / 0-2400W	0-360W / 0-3600W	
	Resolution	0.03 W	0.03 W	0.03 W	0.03 W	0.04 W	0.06 W	
	Accuracy			± 0.125% OF (RE	ADING + RANGE)			
SHORT CIRCUIT								
Max. Sh	ort Current	20 A	40 A	12 A	60 A	80 A	120 A	
ANALOG I/O								
	Monitor Out			0 - 10 V out F.S. / 1Kg	Ω Zout, Non-isolated			
Analog Input (CC mode)		0 - 10V in for F.S. current @ 10V						
AC INPUT AND PHYS		ICATIONS		0 101 1110111	Tearrent & 101			
	er & Cooling		15/230Vac + 10% 50/	50 Hz 100 W max Vai	iable Speed Fan Cool	ed	200 W max.	
Dimensions (H x W x D)		115/230Vac ± 10%, 50/60 Hz, 100 W max., Variable Speed Fan Cooled 177 x 440 x 445 mm / 7.0" x 17.3" x 17.5"				839 x 600 x 600 mm		
	Veight (Net)	15.2kg / 33.5 lbs	19.4kg / 42.8 lbs	23.6kg / 52.0 lbs	23.6kg / 52.0 lbs	72.8kg / 160.5 lbs	81.2kg / 179.0 lbs	
		13.219/33.3105	19.4KY / 42.0 IUS		23.6kg / 32.0 lbs 32 - 104° F	/ 2.0kg / 100.3 lbs	01.2kg/1/9.010S	
	ating Range							
E	MC & Safety			CE I	Mark			

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# **5V SERIES MODULAR DC LOADS**

## **SPECIFICATIONS - 5V SERIES DC LOADS**

			1			
5V054-04	5V054-18	5V072-05	5V072-24	5V090-30		
0-540 W / 0-5400 W	0-540 W / 0-5400 W	0-720 W / 0-7200 W	0-720 W / 0-7200 W	0-900 W / 0-9000 W		
0 - 3.6 A / 0 - 36 A	0 - 18.0 A / 0 - 180 A	0 - 4.8 A / 0 - 48 A	0 - 24.0 A / 0 - 240 A	0 - 30.0 A / 0 - 300 A		
0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V		
6.0 V @ 36 A	4.0 V @ 180 A	3.0 V @ 48 A	4.0 V @ 240 A	4.0 V @ 300 A		
0 - 3.6 A / 0 - 36 A	0 - 18.0 A / 0 - 180 A	0 - 4.8 A / 0 - 48 A	0 - 24.0 A / 0 - 240 A	0 - 30.0 A / 0 - 300 A		
0.06mA / 0.6mA	0.3mA / 3mA	0.04mA / 0.4mA	0.4mA / 4mA	0.5mA / 5mA		
	± 0.1% OF (SET	TING + RANGE)				
0.2775 / 16.66 / 100kΩ	0.0555 / 3.3333 / 200kΩ	0.0416 / 2.5 / 150kΩ	0.0416 / 2.5 / 150kΩ	0.0333 / 2 / 120kΩ		
0.2775mΩ / 0.01mS	0.0555mΩ / 0.00033mS	0.0416mΩ / 0.0066mS	0.0416mΩ / 0.0066mS	0.0333mΩ / 0.128mS		
0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V		
1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV		
	± 0.05% OF (SE	ΓTING + RANGE)		I		
0-540 W/0-5400 W	0-540 W/0-5400 W	0-720 W/0-7200 W	0-720 W/0-7200 W	0-900 W/0-9000 W		
9mW / 90mW	9mW / 90mW	12mW / 120mW	12mW / 120mW	15mW / 150mW		
		TING + RANGE)				
		,				
5760 W	5760 W	7560 W	7560 W	9450 W		
				315.0 A		
				525.0 V		
323.0 1			323.01	323.0 1		
	1.05 - 2,					
0	050 - 9 999 / 99 99 / 9	999 9 / 9999ms (20 kH:	z)			
2 88mA-180mA/us			0.0192A-1.2A/us	0.024A-1.5A/μs		
	•		•	0.24A-15A/μs		
20.0ππ 1000ππ γ μ3	· ·	•	0.172/(12/(μ3	0.247( 15/1/μ5		
		•				
	20μ3 Ι	урісаі				
	0-600V	/ 0 - 500 V				
0-36Λ/0-36Λ		,	0-2404/0-2404	0 - 30 0 V / 0 - 300 V		
				0 - 30.0 A / 0 - 300 A 0.5mA / 5mA		
0.00IIIA / 0.0IIIA		l .	0.4IIIA / 4IIIA	0.5IIIA/ 5IIIA		
0.540.W./0.5400.W.	-	-	0.720.W / 0.7200.W	0.000 W / 0.0000 W		
				0-900 W / 0-9000 W		
0.09 W			U.12 VV	0.15 W		
	± 0.125% OF (RE	ADING + KANGE)				
26.4	100 A	40.4	240.4	200.4		
36 A	180 A	48 A	240 A	300 A		
30 A			240 A	300 A		
30 A	0 - 10 V out F.S. / 1KΩ	2 Zout, Non-isolated	240 A	300 A		
30 A	0 - 10 V out F.S. / 1KΩ		240 A	300 A		
	0 - 10 V out F.S. / 1KG 0 - 10V in for F.S	Ω Zout, Non-isolated 5. current @ 10V		300 A		
115/2:	0 - 10 V out F.S. / 1KG 0 - 10V in for F.S 30Vac ± 10%, 50/60 Hz	2 Zout, Non-isolated 5. current @ 10V z, Variable Speed Fan 0	Cooled			
115/2: 300 W max.	0 - 10 V out F.S. / 1KG 0 - 10V in for F.S 30Vac ± 10%, 50/60 Hz 300 W max.	2 Zout, Non-isolated 5. current @ 10V z, Variable Speed Fan 0 400 W max.	Cooled 400 W max.	500 W max.		
115/2:	0 - 10 V out F.S. / 1KG 0 - 10V in for F.S 30Vac ± 10%, 50/60 Hz 300 W max.	2 Zout, Non-isolated 5. current @ 10V z, Variable Speed Fan 0 400 W max. 1601x600x600 mm	Cooled	500 W max.		
115/2: 300 W max.	0 - 10 V out F.S. / 1KG 0 - 10V in for F.S 30Vac ± 10%, 50/60 Hz 300 W max.	2 Zout, Non-isolated 5. current @ 10V z, Variable Speed Fan 0 400 W max.	Cooled 400 W max.	500 W max. 1283x600x600 mm		
115/2: 300 W max. x 600 mm / 33.0″ x 23	0 - 10 V out F.S. / 1KG 0 - 10V in for F.S 30Vac ± 10%, 50/60 Hz 300 W max. .6" x 23.6"	2 Zout, Non-isolated 5. current @ 10V z, Variable Speed Fan 0 400 W max. 1601x600x600 mm	Cooled 400 W max. / 41.8"x23.6"x23.6"	500 W max. 1283x600x600 mm 50.5"x23.6"x23.6"		
	0-60.0 V / 0-500 V 6.0 V @ 36 A  0 - 3.6 A / 0 - 36 A 0.06mA / 0.6mA  0.2775 / 16.66 / 100kΩ 0.2775mΩ / 0.01mS  0-60.0 V / 0-500 V 1mV / 10mV  0-540 W/0-5400 W 9mW / 90mW  5760 W 37.8 A 525.0 V  0  2.88mA-180mA/μs 28.8mA-1800mA/μs	0 - 3.6 A / 0 - 36 A 0 - 60.0 V / 0 - 500 V 6.0 V @ 36 A  0 - 60.0 V / 0 - 500 V 6.0 V @ 36 A  0 - 3.6 A / 0 - 36 A 0.06mA / 0.6mA  0.3mA / 3mA  ± 0.1% OF (SET 0.2775 / 16.66 / 100kΩ 0.2775mΩ / 0.01mS  ± 0.2% OF (SET 0-60.0 V / 0 - 500 V 1mV / 10mV 1mV / 10mV  ± 0.055 OF (SET 0-540 W / 0 - 540 W / 0 - 540 W 9mW / 90mW 9mW / 90mW  ± 0.5% OF (SET  5760 W 37.8 A 189.0 A 525.0 V 525.0 V 525.0 V  +85° C / 0.050 - 9.999 / 99.99 / 9 0.001 / 0.01 1μs / 10μs / 100μ 2.88mA - 180mA/μs 14.4mA - 900mA/μs 28.8mA - 180mA/μs 14.4mA - 900mA/μs 28.8mA - 180mA/μs 14.4mA - 900mA/μs 15% OF SET 20μs T 0 - 60.0 V 1.0 mV ± 0.025% OF (RE 0 - 3.6 A / 0 - 36 A 0.3mA / 3mA  ± 0.1% OF (REA 0.540 W / 0 - 5400 W 0.09 W 0.09 W	0-3.6 A / 0 - 36 A	0 - 3.6 A / 0 - 36 A		

## **SPECIFICATIONS - 5V SERIES DC LOADS**

MODEL	5V090-06	5V108-07	5V108-36	5V126-42	5V144-50			
	37090-00	3V 106-07	24100-20	3V120-42	3V 144-3U			
OPERATING RANGES		T	T		T			
Power Range		0 - 1080 W / 0-10800W	0 - 1080 W / 0-10800W	0 - 1260 W / 0-12600W	0 - 1440 W / 0-14400W			
Current Range		0 - 7.2 A / 0 - 72 A	0 - 36 A / 0 - 360 A	0 - 42 A / 0 - 420 A	0 - 50 A /0 - 500 A			
Voltage Range		0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V			
Minimum Voltage	6.0 V @ 60 A	6.0 V @ 72 A	4.0 V @ 360 A	4.0 V @ 420 A	4.0 V @ 500 A			
OPERATING MODES					T			
CC Mode Range		0 - 7.2 A / 0 - 72 A	0 - 36 A / 0 - 360 A	0 - 42 A / 0 - 420 A	0 - 50 A /0 - 500 A			
Resolution		0.12mA / 1.2mA	0.6mA / 6mA	0.7mA / 7mA	0.84mA / 8.4mA			
Accurac	/	±	0.1% OF (SETTING + RANG	iE)				
CR Mode Range	0.1666 / 10 / 600kΩ	0.8333 / 8.333 / 500kΩ	0.0277 / 1.6666 / 100kΩ	0.0238 / 1.4285 / 85.71kΩ	0.02 / 1.2 / 72kΩ			
Resolution	0.1666mΩ / 0.0016mS	0.138mΩ / 0.0166mS	0.0277mΩ / 0.00033mS	0.0238mΩ / 0.00033mS	0.02mΩ / 0.0138mS			
Accuracy	/	±	0.2% OF (SETTING + RANG	E)				
CV Mode Range	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V			
Resolution	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV			
Accurac	/	± (	0.05% OF (SETTING + RAN	GE)				
CP Mode Range	0-900 W / 0-9000 W	0 - 1080 W / 0-10800W	0 - 1080 W / 0-10800W	0 - 1260 W / 0-12600W	0 - 1440 W / 0-14400W			
Resolution	15mW / 150mW	18mW / 180mW	18mW / 180mW	21mW / 210mW	24mW / 240mW			
Accurac	/	±	0.5% OF (SETTING + RANG	GE)				
PROTECTION	<u>'</u>							
Over Power (OP	9450 W	11340 W	11340 W	13230 W	15120 W			
Over Current (OC	63.0 A	75.6 A	378.0 A	441.0 A	525.0 A			
Over Voltage (OV	525.0 V	525.0 V	525.0 V	525.0 V	525.0 V			
Over Temperature (OT			+85° C / +185° F	I.	I			
DYNAMIC OPERATION	<u> </u>							
T high & T lov	,	0.050 - 9.9	999 / 99.99 / 999.9 / 9999m	ns (20 kHz)				
Resolution		0.001 / 0.01 / 0.1 / 1 ms						
Accurac		1μs / 10μs / 100μs / 1ms + 50ppm						
	4.8mA-300mA/μs	5.76mA-360mA/µs	0.0288A-1.8A/μs	0.0336A-2.1A/μs	0.04A-2.5A/μs			
Slew Rate	48mA-3000mA/μs	57.6mA-3600mA/µs	0.288A-18A/μs	0.336A-21A/μs	0.4A-25A/μs			
Accurac	· ·	1	± 5% OF SETTING ± 10 μs		01.11.2577, µ5			
Min. Rise Time			20μs Typical					
METERING	•		20µ3 1) picui					
Voltage Range	2		0 - 60.0 V / 0 - 500 V					
Resolution	1.0 mV / 10 mV							
Accurac		+ 0	.025% OF (READING + RAN	JCE)				
Current Range		0 - 7.2 A / 0 - 72 A	0 - 36 A / 0 - 360 A	0 - 42 A / 0 - 420 A	0 - 50 A /0 - 500 A			
Resolution		0.12mA / 1.2mA	0.6mA / 6mA	0.7mA / 7mA	0.84mA / 8.4mA			
Accuracy			0.1% OF (READING + RANG	0 - 1260 W / 0-12600W	0 1440 W / 0 14400W			
Power Range		0 - 1080 W / 0-10800W	0 - 1080 W / 0-10800W		0 - 1440 W / 0-14400W			
Resolution		0.18W	0.18W	0.21W	0.24W			
Accuracy	/	± 0.	.125% OF (READING + RAN	NGE)				
SHORT CIRCUIT			I		I			
Max. Short Curren	t 60 A	72 A	360 A	420 A	504 A			
ANALOG I/O								
Analog Monitor Ou	0 - 10 V out F.S. / 1KΩ Zout, Non-isolated							
Analog Input (CC mode	0 - 10V in for F.S. current @ 10V							
AC INPUT AND PHYSICAL SPEC								
Power & Cooling			10%, 50/60 Hz, Variable Sp	T .	00014/			
Power Consumptio		600 W max.	600 W max.	700 W max.	800 W max.			
Dimensions (H x W x D	Dimensions (H x W x D) 1283 x 600 x 600 mm / 50.5" x 23.6" x 23.6"			1506 x 600 x 600 mm 59.3" x 23.6" x 23.6"	1728 x 600 x 600 mm 68" x 23.6" x 23.6"			
Weight (Ne Operating Rang		104.8kg / 231.0 lbs	104.8kg / 231.0 lbs 0 - 40° C / 32 - 104° F	161.4kg / 355.8 lbs	161.4kg / 355.8 lbs			

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## **ORDERING INFORMATION:**

**Line 1:** Specify DC Load Model:

5Vxx-xx Chassis

or

5Vxxx-xx Cabinet System

**Line 2:** Specify Remote Control Option:

None, Opt GPIB, Opt RS232. Opt USB or Opt LAN

Line 3: Specify Load Cable Option. (See Table)

### **Available Load Cable Options:**

Option P/N	Description	MOQ
OPT-C1KA1	Load Cable, 1000A rated, 1 meter	2
OPT-C1KA2	Load Cable, 1000A rated, 2 meter	2
OPT-C1KA3	Load Cable, 1000A rated, 3 meter	2
OPT-C1KA4	Load Cable, 1000A rated, 4 meter	2
OPT-C1KA5	Load Cable, 1000A rated, 5 meter	2

#### **AC Input Voltage**

Please specify AC Line input voltage at the ship-to location on the order as either 120Vac or 230Vac.

#### **Included in Mainframe Ship kit:**

- · User Manuals in PDF Format on CD ROM.
- AC Line Cord.
- · Rack Handles (detached).
- Analog Input BNC Cable (1 meter/39.4").
- Voltage Sense alligator clip lead, Red (1 meter, 39.4")
- Voltage Sense alligator clip lead, Black (1 meter, 39.4")
- LAN/USB Driver CD ROM (with Opt USB or Opt LAN).
- · Certificate of Conformance.



## Service and Support

Adaptive Power Systems' customer support is second to none. Our Customer Support Program provides the training, repair, calibration, and technical support services that our customers value. So, in addition to receiving the right test equipment, our customers can also count on excellent support before, during and after the sale. With company owned support and service centers around the world, support is never far away.

Complete calibration and repair services are offered at our US, European and Chinese manufacturing facilities (see contact info below). Calibrations are to original factory specifications and are traceable to NIST (National Institute of Standards and Technology).

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