ADAPTIVE POWER SYSTEMS

5V SERIES DC LOADS

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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 Loads
- 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

GPIB RS232 USB UNIVERSAL SERIAL BUS 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.

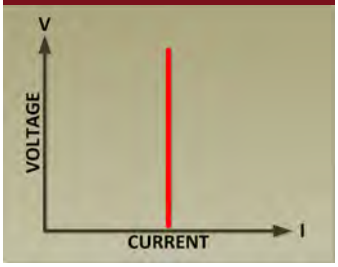
The 5V Series offers high power, high voltage load performance and durability at an affordable price point.

OPERATING MODES

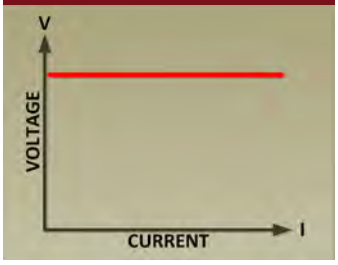
All 5V Series loads support several modes of operation to accommodate a wide range of test requirements. Voltage sources like AC/DC power supplies are best tested using Constant Current (CC) mode. Battery chargers on the other hand can be tested using an E-load in Constant Voltage (CV)mode.

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.

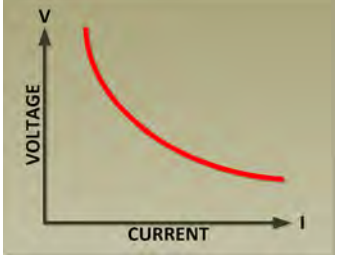
CONSTANT CURRENT



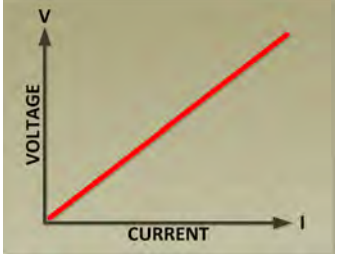
CONSTANT VOLTAGE



CONSTANT POWER



CONSTANT RESISTANCE

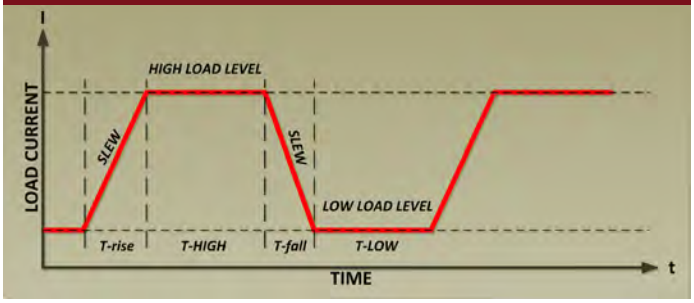


STATIC & DYNAMIC MODES

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.

DYNAMIC LOAD WAVEFORM



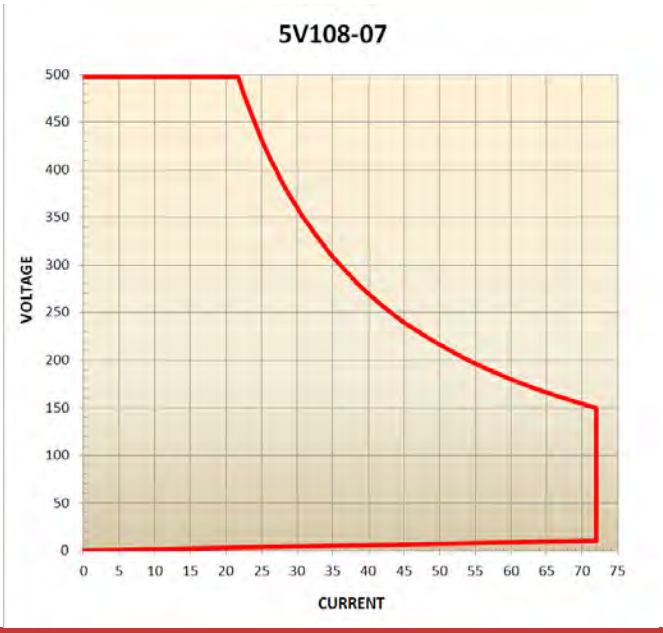
Sequences of variable slew rates and test levels can be stored in non-volatile memory for recall during dynamic transient load test execution. This makes it possible to simulate real-world demanding load conditions on power supplies driving modern electronics. With current slew rates ranging up to several 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.

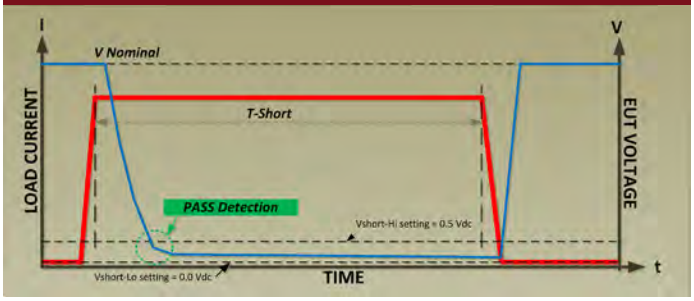
This flexible operating range allows the same load to be used for a wide range of EUTs and provides great flexibility.



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.

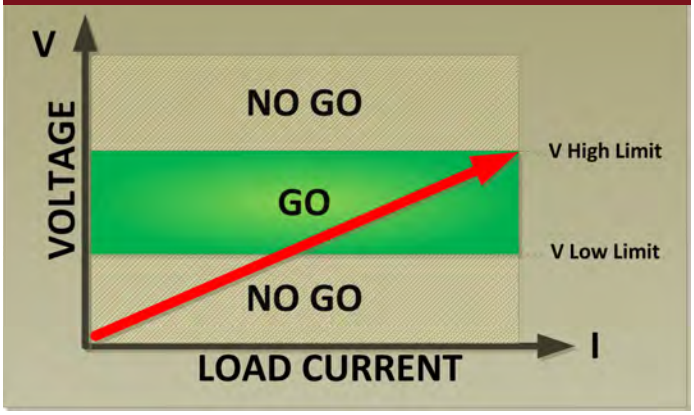
PASS/FAIL SHORT CIRCUIT TEST MODE



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.

GO/NOGO LIMIT TEST MODE



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.

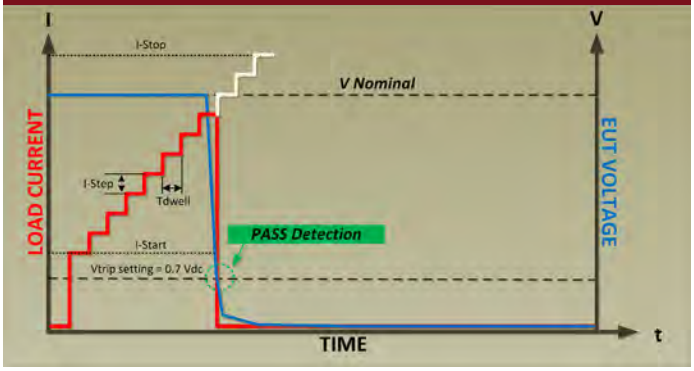
These systems come in a movable cabinet with pre-installed AC input wiring and solid copper output bus bars that can handle large amounts of DC current.

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

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.

AUTOMATED OCP TEST



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.

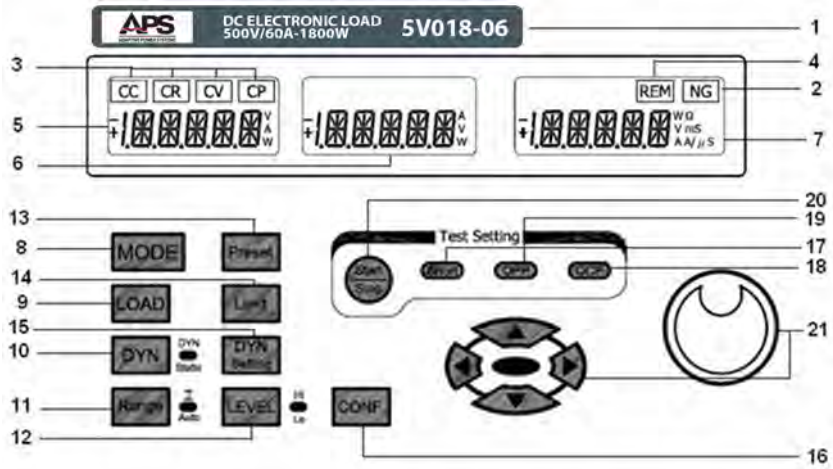
DC Load Model 5V054-18 shown

DC Load Model 5V144-50 shown

FRONT PANEL OPERATION

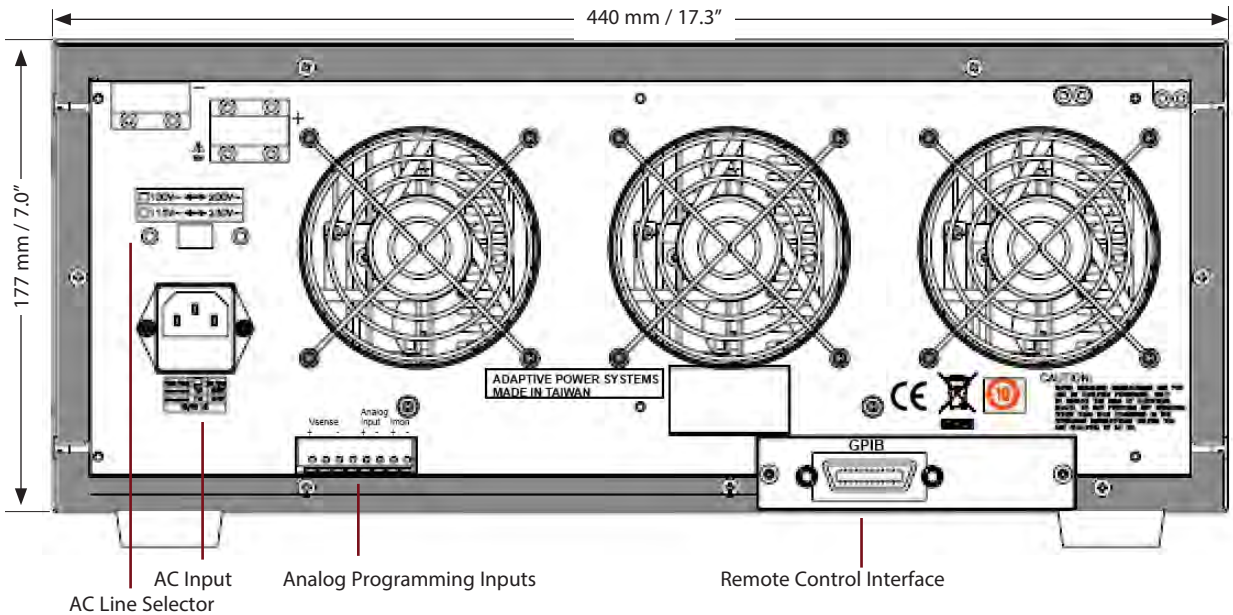
The 5V Series Load has an easy to use front panel layout consisting of large white LED back-lit LCD readouts and a keypad, shuttle combination for settings and parameter entry. Status indicator LED's accompany the various function and mode setting keys so the operational state of the DC load is easily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

1. Model Number and ranges
2. 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
9. 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
17. Short Circuit Test key and indicator
18. OCP (Over Current Protection) Test key and indicator
19. 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	5V006-02	5V012-04	5V018-01	5V018-06	5V024-08	5V036-12
OPERATING RANGES						
Power 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
Current 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
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	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V
Minimum 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 (SETTING + 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 (SETTING + 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 (SETTING + 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	± 0.5% OF (SETTING + RANGE)					
PROTECTION						
Over Power (OP)	630 W	1260 W	1890 W	1890 W	2520 W	3780 W
Over Current (OC)	21.0 A	42.0 A	12.6 A	63.0 A	84.0 A	126.0 A
Over Voltage (OV)	525.0 V	525.0 V	525.0 V	525.0 V	525.0 V	525.0 V
Over Temperature (OT)	+85° C / +185° F					
DYNAMIC OPERATION						
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)					
Resolution	0.001 / 0.01 / 0.1 / 1ms					
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm					
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					
Min. Rise Time	20µs Typical					
METERING						
Voltage Range	0 - 60.0 V / 0 - 500 V					
Resolution	1.0 mV / 10 mV					
Accuracy	± 0.025% OF (READING + 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 (READING + 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 (READING + RANGE)					
SHORT CIRCUIT						
Max. Short Current	20 A	40 A	12 A	60 A	80 A	120 A
ANALOG I/O						
Analog Monitor Out	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 SPECIFICATIONS						
Power & Cooling	115/230Vac ± 10%, 50/60 Hz, 100 W max., Variable Speed Fan Cooled					200 W max.
Dimensions (H x W x D)	177 x 440 x 445 mm / 7.0" x 17.3" x 17.5"				889 x 596 x 600 mm / 35.0" x 23.5" x 23.6"	
Weight (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
Operating Range	0 - 40° C / 32 - 104° F					
EMC & Safety	CE Mark					

SPECIFICATIONS - 5V SERIES DC LOADS

MODEL	5V036-02	5V054-04	5V054-18	5V072-05	5V072-24	5V090-30
OPERATING RANGES						
Power Ranges	0-360 W / 0-3600 W	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
Current Ranges	0 - 2.4 A / 0 - 24 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
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	0-60.0 V / 0-500 V	0-60.0 V / 0-500 V
Minimum Voltage	6.0 V @ 24 A	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
OPERATING MODES						
CC Mode Range	0 - 2.4 A / 0 - 24 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
Resolution	0.02mA / 0.2mA	0.06mA / 0.6mA	0.3mA / 3mA	0.04mA / 0.4mA	0.4mA / 4mA	0.5mA / 5mA
Accuracy	± 0.1% OF (SETTING + RANGE)					
CR Mode Range	0.416 / 25 / 1500kΩ	0.2775 / 16.66 / 100kΩ	0.0555 / 3.3333 / 200kΩ	0.0416 / 2.5 / 150kΩ	0.0416 / 2.5 / 150kΩ	0.0333 / 2 / 120kΩ
Resolution	0.416mΩ / 0.00066mS	0.2775mΩ / 0.01mS	0.0555mΩ / 0.00033mS	0.0416mΩ / 0.0066mS	0.0416mΩ / 0.0066mS	0.0333mΩ / 0.128mS
Accuracy	± 0.2% OF (SETTING + 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 (SETTING + RANGE)					
CP Mode Range	0-360 W/0-3600 W	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
Resolution	6mW / 60mW	9mW / 90mW	9mW / 90mW	12mW / 120mW	12mW / 120mW	15mW / 150mW
Accuracy	± 0.5% OF (SETTING + RANGE)					
PROTECTION						
Over Power (OP)	630 W	1260 W	1890 W	1890 W	2520 W	3780 W
Over Current (OC)	21.0 A	42.0 A	12.6 A	63.0 A	84.0 A	126.0 A
Over Voltage (OV)	525.0 V	525.0 V	525.0 V	525.0 V	525.0 V	525.0 V
Over Temperature (OT)	+85° C / +185° F					
DYNAMIC OPERATION						
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)					
Resolution	0.001 / 0.01 / 0.1 / 1ms					
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm					
Slew Rate	1.92mA-120mA/µs	2.88mA-180mA/µs	14.4mA-900mA/µs	0.0192A-1.2A/µs	0.0192A-1.2A/µs	0.024A-1.5A/µs
	19.2mA-1200mA/µs	28.8mA-1800mA/µs	144mA-9000mA/µs	0.192A-12A/µs	0.192A-12A/µs	0.24A-15A/µs
Accuracy	± 5% OF SETTING ± 10 µs					
Min. Rise Time	20µs Typical					
METERING						
Voltage Range	0 - 60.0 V / 0 - 500 V					
Resolution	1.0 mV / 10 mV					
Accuracy	± 0.025% OF (READING + RANGE)					
Current Range	0 - 2.4 A / 0 - 24 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
Resolution	0.02mA / 0.2mA	0.06mA / 0.6mA	0.3mA / 3mA	0.4mA / 4mA	0.4mA / 4mA	0.5mA / 5mA
Accuracy	± 0.1% OF (READING + RANGE)					
Power Range	0-360 W / 0-3600 W	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
Resolution	0.06 W	0.09 W	0.09 W	0.12 W	0.12 W	0.15 W
Accuracy	± 0.125% OF (READING + RANGE)					
SHORT CIRCUIT						
Max. Short Current	24 A	36 A	180 A	48 A	240 A	300 A
ANALOG I/O						
Analog Monitor Out	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 SPECIFICATIONS						
Power & Cooling	115/230Vac ± 10%, 50/60 Hz, Variable Speed Fan Cooled					
Power Consumption	200 W max.	300 W max.	300 W max.	400 W max.	400 W max.	500 W max.
Dimensions (H x W x D)	889 x 596 x 600 mm / 35.0" x 23.5" x 23.6"			1556 x 596 x 600mm / 61.3" x 23.5" x 23.6"		
Weight (Net)	81.2kg / 179.0 lbs	104.8kg / 231.0 lbs	104.8kg / 231.0 lbs	161.4kg / 355.8 lbs	161.4kg / 355.8 lbs	185.0kg / 407.9 lbs
Operating Range	0 - 40° C / 32 - 104° F					
EMC & Safety	CE Mark					

SPECIFICATIONS - 5V SERIES DC LOADS

MODEL	5V090-06	5V108-07	5V108-36	5V126-42	5V144-50
OPERATING RANGES					
Power Ranges	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
Current Ranges	0 - 6.0 A / 0 - 60 A	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	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					
CC Mode Range	0 - 6.0 A / 0 - 60 A	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	0.1mA / 1mA	0.12mA / 1.2mA	0.6mA / 6mA	0.7mA / 7mA	0.84mA / 8.4mA
Accuracy	± 0.1% OF (SETTING + RANGE)				
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 + 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
Resolution	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV	1mV / 10mV
Accuracy	± 0.05% OF (SETTING + RANGE)				
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
Accuracy	± 0.5% OF (SETTING + RANGE)				
PROTECTION					
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				
DYNAMIC OPERATION					
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)				
Resolution	0.001 / 0.01 / 0.1 / 1ms				
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm				
Slew Rate	4.8mA-300mA/µs	5.76mA-360mA/µs	0.0288A-1.8A/µs	0.0336A-2.1A/µs	0.04A-2.5A/µs
	48mA-3000mA/µs	57.6mA-3600mA/µs	0.288A-18A/µs	0.336A-21A/µs	0.4A-25A/µs
Accuracy	± 5% OF SETTING ± 10 µs				
Min. Rise Time	20µs Typical				
METERING					
Voltage Range	0 - 60.0 V / 0 - 500 V				
Resolution	1.0 mV / 10 mV				
Accuracy	± 0.025% OF (READING + RANGE)				
Current Range	0 - 6.0 A / 0 - 60 A	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	0.1mA / 1mA	0.12mA / 1.2mA	0.6mA / 6mA	0.7mA / 7mA	0.84mA / 8.4mA
Accuracy	± 0.1% OF (READING + RANGE)				
Power 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	0.15W	0.18W	0.18W	0.21W	0.24W
Accuracy	± 0.125% OF (READING + RANGE)				
SHORT CIRCUIT					
Max. Short Current	60 A	72 A	360 A	420 A	504 A
ANALOG I/O					
Analog Monitor Out	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 SPECIFICATIONS					
Power & Cooling	115/230Vac ± 10%, 50/60 Hz, Variable Speed Fan Cooled				
Power Consumption	500 W max.	600 W max.	600 W max.	700 W max.	800 W max.
Dimensions (H x W x D)	1556 x 596 x 600mm / 61.3" x 23.5" x 23.6"				1778 x 596 x 600 mm / 70.0" x 23.5" x 23.6"
Weight (Net)	81.2kg / 179.0 lbs	104.8kg / 231.0 lbs	104.8kg / 231.0 lbs	161.4kg / 355.8 lbs	161.4kg / 355.8 lbs
Operating Range	0 - 40° C / 32 - 104° F				
EMC & Safety	CE Mark				

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 4: 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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