

5L & 5P Series

Modular DC Loads

600W, 1200W or 1800W; up to 14.4kW

Key Features

- 600W, 1200W or 1800W per Chassis (5L Series)
- 14,400W per Cabinet (5P Series)
- Low Voltage Range, 0 - 60 Vdc
- Current Ranges up to 1000 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



OVERVIEW

The ADAPTIVE POWER 5L Series Programmable DC Electronic Loads are ideally suited for testing low voltage, high current power supplies and batteries. With their ability to draw full current starting as low as 0.6 Vdc, the 5L 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 5L Series consists of a total of six different models, providing a wide variation of possible current and power ranges. Starting at 600 Watt and ranging to 1800 Watt per chassis, all models offer dual voltage and current range capability for optimal accuracy and resolution.

HIGH POWER 5P SERIES CABINET SYSTEMS

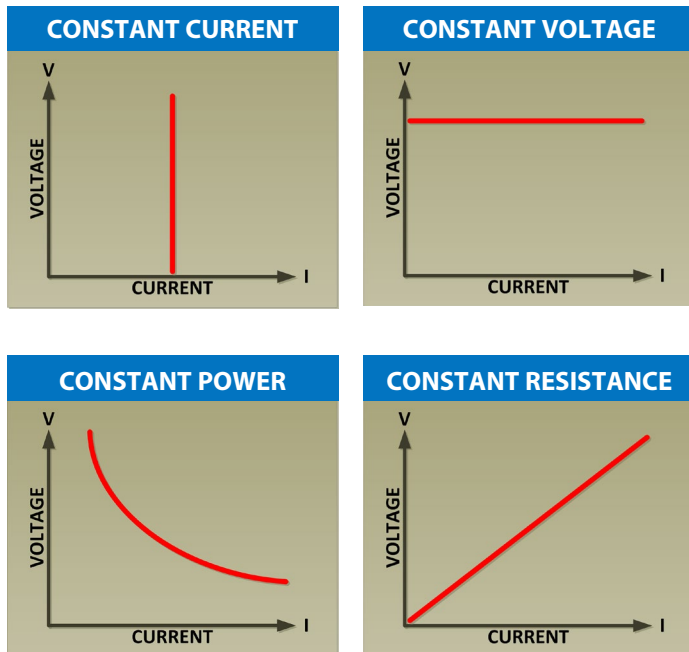
For high current load requirements, the 5P Series of Load Cabinets combines two or more 5L Series rack mount units into an integrated load cabinet system. These systems contain all necessary input wiring and output bus bars to handle DC current up to 1000 Adc. These systems are ideally suited for burn in and battery discharge test applications up to 60 Vdc and as low as 0.6Vdc.

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

OPERATING MODES

All 5L & 5P 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.

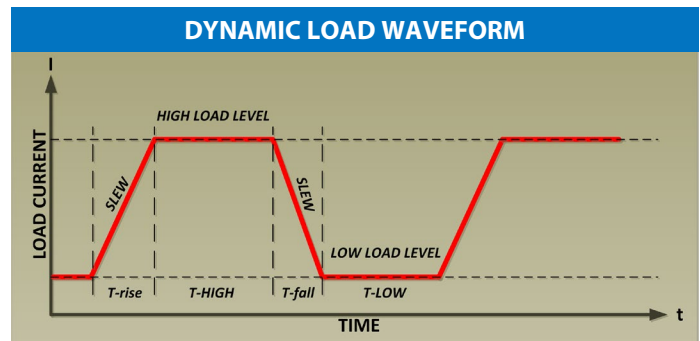
The available operating modes are Constant Current, Constant Voltage, Constant Power and Constant Resistance. A graphical representation of these modes of operation is shown here.



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 5L & 5P 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 5L & 5P 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.

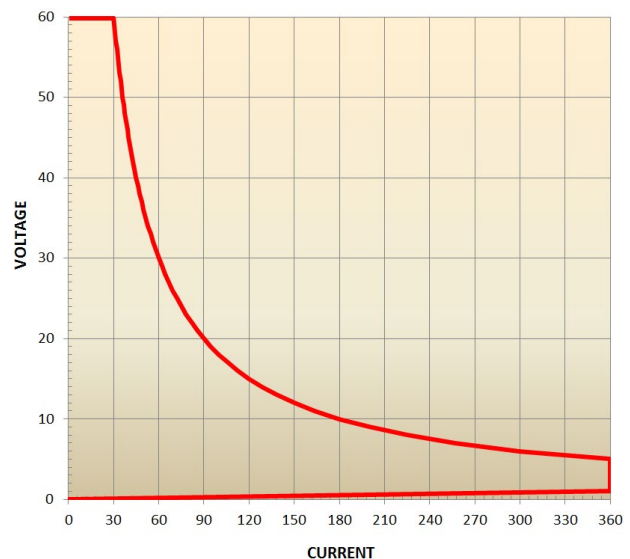
FLEXIBLE INPUT CAPABILITIES

5L 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 5L18-36. Bounded by the maximum voltage of 60Vdc and maximum current of 360A, the input range follows an 1800W power curve as shown.

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

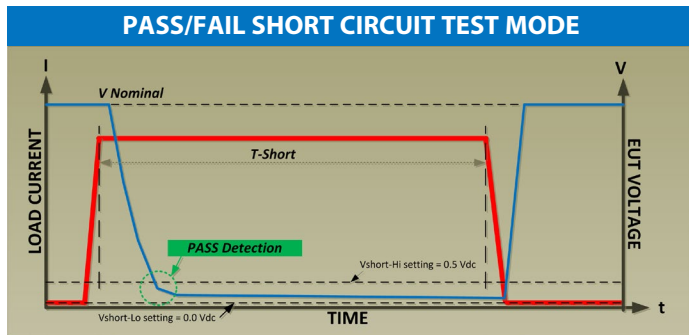
This flexible operating range allows the same load to be used for a wide range of EUTs and provides great flexibility.

5L18-36



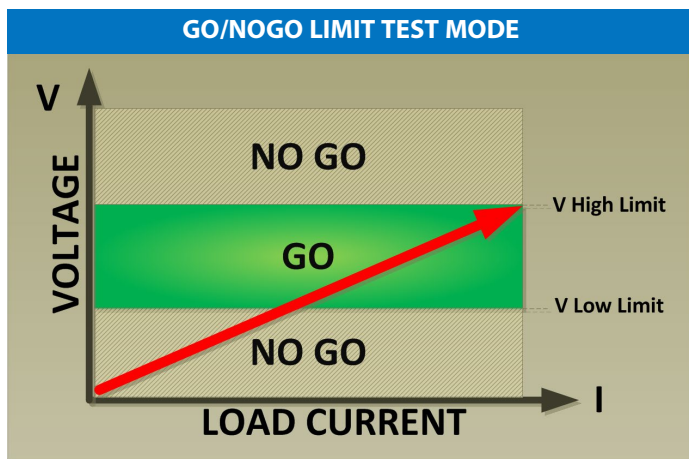
SHORT CIRCUIT TESTING

Power supplies and batteries must be able to handle short circuit conditions without failing. The 5L & 5P 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.



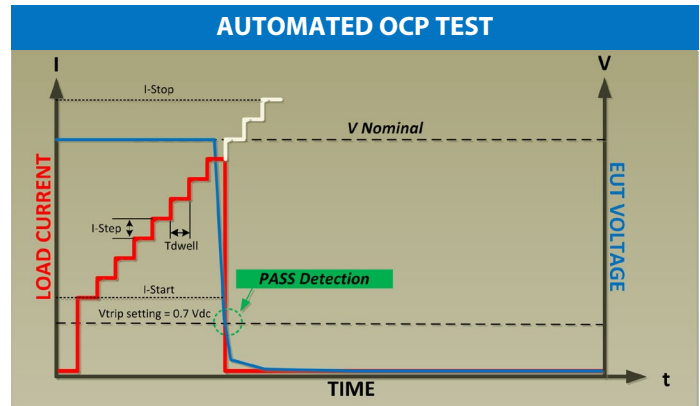
GO/NOGO LIMIT TESTING

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.



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.

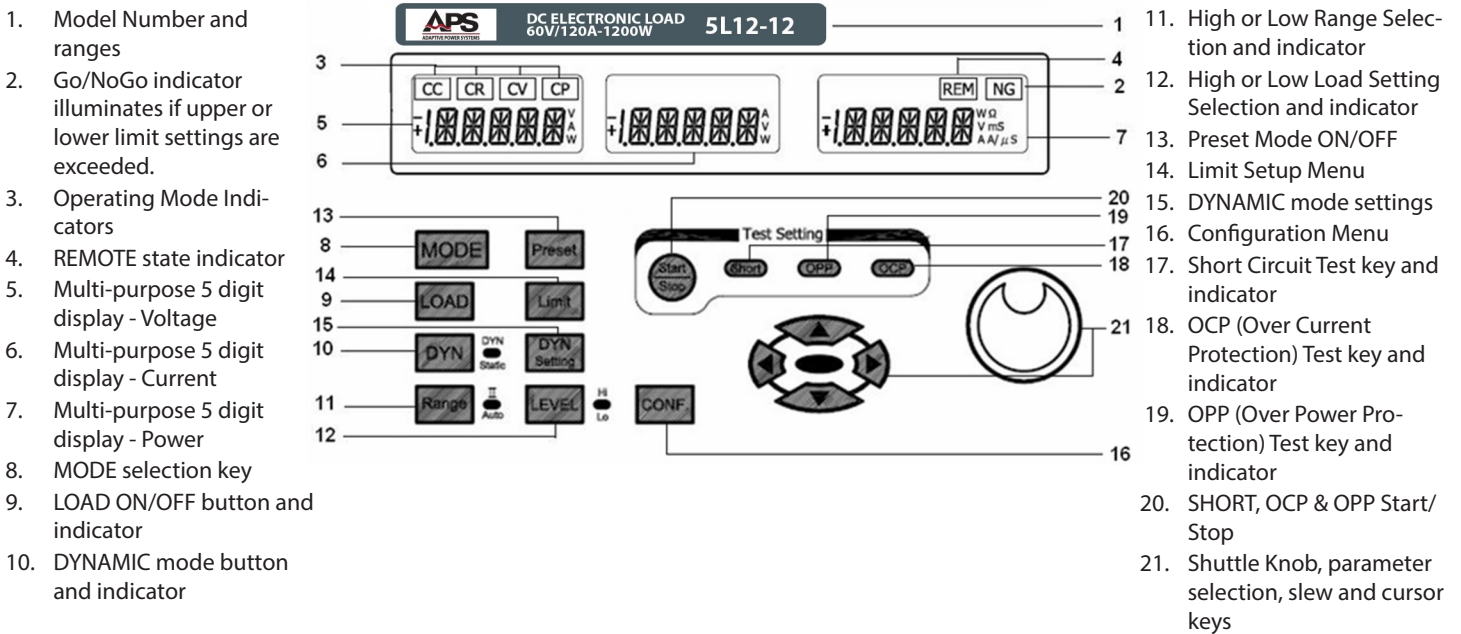


OPP MODE TESTING

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.

FRONT PANEL OPERATION

The 5L 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.



5P SERIES CABINET SYSTEMS

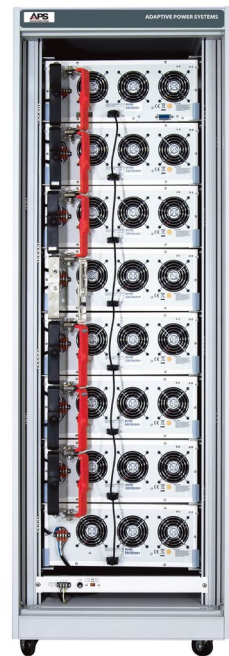
For applications where the 5L Series single chassis provides insufficient current and/or power, the 5P Series of Cabinet Systems provides a fully integrated Master/Slave load test system solution.

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 fourteen system configurations to choose from.



DC Load Model 5P054-99 shown



5P SERIES ALTERNATIVE FORM FACTORS

All 5L Series DC Loads are provided as 19" rack mountable units which can also be used as a bench top unit.

The 5P Series of DC Loads is available in alternative different form factors as follows:

- Rack mountable 19" stack unit consisting of one master unit and one or more auxiliary units underneath. This version is intended for installation into the end-user's cabinet.
- Mobile stack on wheels, Ready for use as shipped.

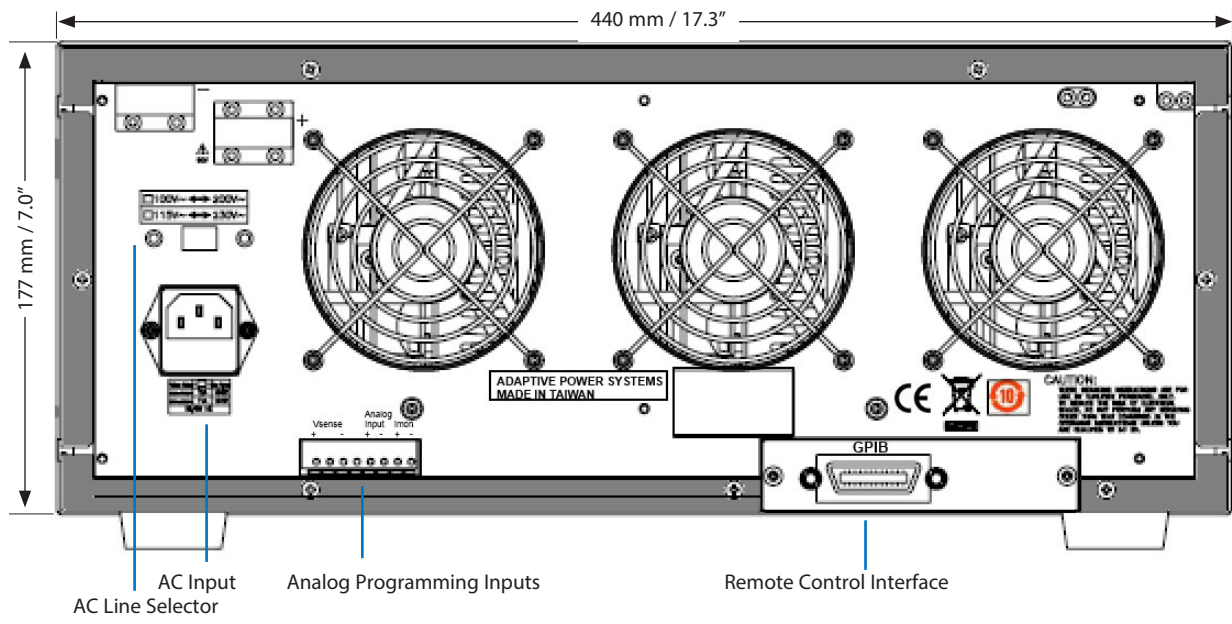


Rack Mount Version



Mobile Stack on wheels

REAR PANEL



SPECIFICATIONS - 5L SERIES DC LOADS

MODEL	5L06-12	5L12-12	5L12-24	5L18-12	5L18-24	5L18-36
OPERATING RANGES						
Power Ranges	0-60 W/0-600 W	0-120 W/0-1200 W	0-120 W/0-1200 W	0-180 W/0-1800 W	0-180 W/0-1800 W	0-180 W/0-1800 W
Current Ranges	0-12A / 0-120 A	0-12A / 0-120 A	0-24 A / 0-240 A	0-12 A / 0-120 A	0-24 A / 0-240 A	0-36 A / 0-360 A
Voltage Range	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V
Minimum Voltage	0.6 V @ 120 A	0.6 V @ 120 A	0.7 V @ 240 A	0.4 V @ 120 A	0.7 V @ 240 A	0.7 V @ 360 A
OPERATING MODES						
CC Mode Range	0-12 A / 120 A	0-12 A / 120 A	0-24 A / 240 A	0-12 A / 120 A	0-24 A / 240 A	0-36 A / 360 A
Resolution	0.2 mA / 2 mA	0.2 mA / 2 mA	0.4 mA / 4 mA	0.2 mA / 2 mA	0.4 mA / 4 mA	0.6 mA / 6 mA
Accuracy	± 0.1% OF (SETTING + RANGE)					
CR Mode Range	0.0083 / 0.5 / 30kΩ	0.0083 / 0.5 / 30kΩ	0.0041 / 0.25 / 15kΩ	0.0083 / 0.5 / 30kΩ	0.0041 / 0.25 / 15kΩ	0.0027 / 0.167 / 10Ω
Resolution	0.0083mΩ/0.033mS	0.0083mΩ/0.033mS	0.0041mΩ/0.066mS	0.0083mΩ/0.033mS	0.0041mΩ/0.066mS	0.0027mΩ / 0.1mS
Accuracy	± 0.2% OF (SETTING + RANGE)					
CV Mode Range	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V
Resolution	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV
Accuracy	± 0.05% OF (SETTING + RANGE)					
CP Mode Range	0-60 W/0 -600 W	0-120 W/0 -1200 W	0-120 W/0 -1200 W	0-180 W/0 -1800 W	0-180 W/0 -1800 W	0-180 W/0 -1800 W
Resolution	1 mW / 10 mW	2 mW / 20 mW	2 mW / 20 mW	3 mW / 30 mW	3 mW / 30 mW	3 mW / 30 mW
Accuracy	± 0.5% OF (SETTING + RANGE)					
PROTECTION						
Over Power (OP)	630 W	1260 W	1260 W	1890 W	1890 W	1890 W
Over Current (OC)	126.0 A	126.0 A	252.0 A	126.0 A	252.0 A	378.0 A
Over Voltage (OV)	63.0 V	63.0 V	63.0 V	63.0 V	63.0 V	63.0 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	8mA-500mA/µs		16mA-1A/µs	8mA-500mA/µs	16mA-1A/µs	24mA-1500mA/µs
	80mA-5A/µs		160mA-10A/µs	80mA-5A/µs	160mA-10A/µs	240mA-15A/µs
Accuracy	± 5% OF SETTING ± 10 µs					
Min. Rise Time	24µs Typical					
METERING						
Voltage Range	0 - 6.0 V / 60.0 V					
Resolution	0.1 mV / 1 mV					
Accuracy	± 0.025% OF (READING + RANGE)					
Current Range	0-12 A / 120 A	0-12 A / 120 A	0-24 A / 240 A	0-12 A / 120 A	0-24 A / 240 A	0-36 A / 360 A
Resolution	0.2 mA / 2 mA	0.2 mA / 2 mA	0.4 mA / 4 mA	0.2 mA / 2 mA	0.4 mA / 4 mA	0.6 mA / 6 mA
Accuracy	± 0.1% OF (READING + RANGE)					
Power Range	0 - 600.0 W	0 - 1200.0 W	0 - 1200.0 W	0 - 1800.0 W	0 - 1800.0 W	0 - 1800.0 W
Resolution	0.1 W					
Accuracy	± 0.125% OF (READING + RANGE)					
SHORT CIRCUIT						
Max. Short Current	120 A	120 A	240 A	120 A	240 A	360 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					
Dimensions (H x W x D)	177 x 440 x 445 mm / 7.0" x 17.3" x 17.5"					
Weight (Net)	15.2kg / 33.5lbs	19.4kg / 42.8lbs	19.4kg / 42.8lbs	23.6kg / 52.0lbs	23.6kg / 52.0lbs	23.6kg / 52.0lbs
Operating Range	0 - 40° C / 32 - 104° F					
EMC & Safety	CE Mark					

SPECIFICATIONS - 5P SERIES DC LOADS

MODEL	5P024-24	5P024-48	5P036-24	5P036-48	5P036-72	5P054-36	5P054-72	
OPERATING RANGES								
Power Ranges	0-240W/0-2400W	0-240W/0-2400W	0-360W/0-3600W	0-360W/0-3600W	0-360W/0-3600W	0-540W/0-5400W	0-540W/0-5400W	
Current Ranges	0 -24A/0-240A	0 -48A/0-480A	0 -24A/0-240A	0 -48A/0-480A	0-72A/0-720A	0-36A/0-360A	0-72A/0-720A	
Voltage Range	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	
Minimum Voltage	0.7 V @ 240 A	0.7 V @ 480 A	0.7 V @ 240 A	0.7 V @ 480 A	0.7 V @ 720 A	0.7 V @ 360 A	0.7 V @ 720 A	
OPERATING MODES								
CC Mode	Range	0 - 24 A / 240 A	0 - 48 A / 480 A	0 - 24 A / 240 A	0 - 48 A / 480 A	0 - 72 A / 720 A	0 - 36 A / 360 A	0 - 72 A / 720 A
	Resolution	0.4 mA / 4 mA	0.8 mA / 8 mA	0.4 mA / 4 mA	0.8 mA / 8 mA	1.2 mA / 12 mA	0.6 mA / 6 mA	1.2 mA / 12 mA
	Accuracy	± 0.1% OF (SETTING + RANGE)						
CR Mode	Range	0.0041/0.25/15kΩ	0.002/0.125/7.5kΩ	0.0041/0.25/15kΩ	0.002/0.125/7.5kΩ	0.00138/0.0833/5kΩ	0.0027/0.167/10kΩ	0.00138/0.0833/5kΩ
	Resolution	0.0041mΩ/0.066mS	0.002mΩ/0.1333mS	0.0041mΩ/0.066mS	0.002mΩ/0.133mS	0.00138mΩ/0.2mS	0.0028mΩ/0.1mS	0.0028mΩ/0.1mS
	Accuracy	± 0.2% OF (SETTING + RANGE)						
CV Mode	Range	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V
	Resolution	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV
	Accuracy	± 0.05% OF (SETTING + RANGE)						
CP Mode	Range	0-240W/0-2400W	0-240W/0-2400W	0-360W/0-3600W	0-360W/0-3600W	0-360W/0-3600W	0-540W/0-5400W	0-540W/0-5400W
	Resolution	3 mW / 30 mW	4 mW / 40 mW	6 mW / 60 mW	6 mW / 60 mW	6 mW / 60 mW	9 mW / 90 mW	9 mW / 90 mW
	Accuracy	± 0.5% OF (SETTING + RANGE)						
PROTECTION								
Over Power (OP)		2520 W	2520 W	3780 W	3780 W	3780 W	5670 W	5670 W
Over Current (OC)		252.0 A	504.0 A	252.0 A	504.0 A	756.0 A	378.0 A	756.0 W
Over Voltage (OV)		63.0 V	63.0 V	63.0 V	63.0 V	63.0 V	63.0 V	63.0 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		0.016A-1A/μs	0.032A-2A/μs	0.016A-1A/μs	0.016A-1A/μs	0.048A-3A/μs	0.024A-1.5A/μs	0.048A-3A/μs
		0.16A-10A/μs	0.32A-20A/μs	0.16A-10A/μs	0.16A-10A/μs	0.48A-30A/μs	0.24A-15A/μs	0.48A-30A/μs
Accuracy		± 5% OF SETTING ± 10 μs						
Min. Rise Time		24μs Typical						
METERING								
Voltage	Range	0 - 6.0 V / 60.0 V						
	Resolution	0.1 mV / 1 mV						
	Accuracy	± 0.025% OF (READING + RANGE)						
Current	Range	0 - 24 A / 240 A	0 - 48 A / 480 A	0 - 24 A / 240 A	0 - 48 A / 480 A	0 - 72 A / 720 A	0 - 36 A / 360 A	0 - 72 A / 720 A
	Resolution	0.4 mA / 4 mA	0.8 mA / 8 mA	0.4 mA / 4 mA	0.8 mA / 8 mA	1.2 mA / 12 mA	0.6 mA / 6 mA	1.2 mA / 12 mA
	Accuracy	± 0.1% OF (READING + RANGE)						
Power	Range	0 - 2400.0 W	0 - 2400.0 W	0 - 2400.0 W	0 - 3600.0 W	0 - 3600.0 W	0 - 5400.0 W	0 - 5400.0 W
	Resolution	0.1 W						
	Accuracy	± 0.125% OF (READING + RANGE)						
SHORT CIRCUIT								
Max. Short Current		240 A	480 A	240 A	480 A	720 A	360 A	720 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						
Dimensions (H x W x D)		839 x 600 x 600 mm / 33.0" x 23.6" x 23.6"						
Weight (Net)		81.2kg / 179.0 lb	81.2kg / 179.0 lb	81.2kg / 179.0 lbs	81.2kg / 179.0 lbs	81.2kg / 179.0 lbs	104.8kg / 231 lbs	104.8kg / 231 lbs
Operating Range		0 - 40° C / 32 - 104° F						
EMC & Safety		CE Mark						

SPECIFICATIONS - 5P SERIES DC LOADS

MODEL	5P054-99	5P072-48	5P072-96	5P090-60	5P108-72	5P126-84	5P144-96	
OPERATING RANGES								
Power Ranges	0-540W/0-5400W	0-720W/0-7200W	0-720W/0-7200W	0-900W/0-9000W	0-1080W/0-10800W	0-1260W/0-12600W	0-1440W/0-14400W	
Current Ranges	0-100 A /0-1000 A	0-48 A /0-480 A	0-96 A /0-960 A	0-60 A /0-600 A	0-72 A /0-720 A	0-84 A /0-840 A	0-96 A /0-960 A	
Voltage Range	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	
Minimum Voltage	0.7 V @ 1000 A	0.7 V @ 480 A	0.7 V @ 960 A	0.7 V @ 600 A	0.7 V @ 720 A	0.7 V @ 840 A	0.7 V @ 960 A	
OPERATING MODES								
CC Mode	Range	0-100 A /0-1000 A	0-48 A / 0-480 A	0-96 A / 0-960 A	0-60 A / 0-600 A	0-72 A / 0-720 A	0-84 A / 0-840 A	0-96 A / 0-960 A
	Resolution	1.6 mA / 16 mA	0.8 mA / 8 mA	1.6 mA / 16 mA	1m A / 10 mA	1.2 mA /12 mA	1.4 mA / 14 mA	1.6 mA / 16 mA
	Accuracy	± 0.1% OF (SETTING + RANGE)						
CR Mode	Range	0.001 / 0.06/3.6kΩ	0.002/0.125/7.5kΩ	0.001/0.0625/3750Ω	0.0017 / 0.1 / 6kΩ	0.00138/0.083/5kΩ	0.0012/0.0714/4284Ω	0.001/0.0625/3750Ω
	Resolution	0.001mΩ/0.277mS	0.002mΩ/0.13mS	0.001mΩ/0.267mS	0.0016mΩ/0.016mS	0.0014mΩ/0.2mS	0.0003mΩ/0.23mS	0.001mΩ/0.267mS
	Accuracy	± 0.2% OF (SETTING + RANGE)						
CV Mode	Range	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V	0-6.0 V / 0-60.0 V
	Resolution	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV	0.1 mV / 1 mV
	Accuracy	± 0.05% OF (SETTING + RANGE)						
CP Mode	Range	0-540W/0-5400W	0-720W/0-7200W	0-720W/0-7200W	0-900W/0-9000W	0-1080W/0-10800W	0-1260W/0-12600W	0-1440W/0-14400W
	Resolution	9 mW / 90 mW	12 mW / 120 mW	12 mW / 120 mW	15 mW / 150 mW	18 mW / 180 mW	21 mW / 210 mW	24 mW /240 mW
	Accuracy	± 0.5% OF (SETTING + RANGE)						
PROTECTION								
Over Power (OP)		5670 W	7560 W	7560 W	9450 W	11340 W	13320 w	15120 W
Over Current (OC)		1050 A	504.0 A	1008 A	630.0 A	756.0 A	882.0 A	1008 A
Over Voltage (OV)		63.0 V	63.0 V	63.0 V	63.0 V	63.0 V	63.0 V	63.0 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		0.0664A-4.15A/µs	0.032A-2A/µs	0.064A-4A/µs	0.04A-2.5A/µs	0.048A-3A/µs	0.056A-3.5A/µs	0.064A-4A/µs
		0.644A-41.5A/µs	0.32A-20A/µs	0.64A-40A/µs	0.4A-25A/µs	0.48A-30A/µs	0.56A-35A/µs	0.64A-40A/µs
Accuracy		± 5% OF SETTING ± 10 µs						
Min. Rise Time		24µs Typical						
METERING								
Voltage	Range	0 - 6.0 V / 60.0 V						
	Resolution	0.1 mV / 1 mV						
	Accuracy	± 0.025% OF (READING + RANGE)						
Current	Range	0-100 A /0-1000 A	0-48 A / 0-480 A	0-96 A / 0-960 A	0-60 A / 0-600 A	0-72 A / 0-720 A	0-84 A / 0-840 A	0-96 A / 0-960 A
	Resolution	1.6 mA / 16 mA	0.8 mA / 8 mA	1.6 mA / 16 mA	1m A / 10 mA	1.2 mA /12 mA	1.4 mA / 14 mA	1.6 mA / 16 mA
	Accuracy	± 0.1% OF (READING + RANGE)						
Power	Range	0 - 5400.0 W	0 - 7200.0 W	0 - 7200.0 W	0 - 9000.0 W	0 - 10800.0 W	0 - 12600.0 W	0 - 14400.0 W
	Resolution	0.1 W						
	Accuracy	± 0.125% OF (READING + RANGE)						
SHORT CIRCUIT								
Max. Short Current		1000 A	480 A	960 A	600 A	720 A	840 A	960 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						
Dimensions (H x W x D)		839x600x600mm 33" x 23.6" x 23.6"	1601 x 600 x 600 mm 41.8" x 23.6" x 23.6"		1283 x 600 x 600 mm 50.5" x 23.6" x 23.6"		1506x600x600mm 59.3"x23.6"x23.6"	1728x600x600mm 68"x 23.6" x 23.6"
Weight (Net)		104.8kg/231.0 lbs	161.4kg/355.8lbs	161.4kg/355.8 lbs	185.0kg/407.9 lbs	208.6kg/459.9 lbs	232.2kg/511.9 lbs	268.8kg / 592.6 lbs
Operating Range		0 - 40° C / 32 - 104° F						
EMC & Safety		CE Mark						

ORDERING INFORMATION:

Line 1: Specify DC Load Model:

5Lxx-xx Chassis

or

5Pxxx-xx (Specify form factor on order per page 5)

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.

WORLDWIDE 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. Customers can rely on us for excellent support before, during and after the sale with support and service centers around the world.

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

AMERICAS & INTL

PPST Solutions, Inc.

Irvine, USA

Phone: +1(888) 239-1619

Email: sales@ppstsolutions.com

EUROPE

Caltest Instruments GmbH.

Kappelrodeck, Germany

Phone: +49(0)7842-99722-00

Email: info@caltest.de

UNITED KINGDOM

Caltest Instruments, LTD.

Hampshire, UK

Phone: +44(0)1483 302 700

Email: info@caltest.co.uk

CHINA

PPST Shanghai Co. Ltd.

Shanghai, China

Phone: +86-21-6763-9223

Email: info@ppst.com.cn



©2025 ADAPTIVE POWER SYSTEMS, Irvine, CA, U.S.A. Subject to change without notice.

PPST Solutions, Inc.

2802 Kelvin Avenue, Suite 100, Irvine CA 92614

Direct: 888-239-1619 • Fax: 949-756-0838

Email: sales@ppstsolutions.com

www.ppstsolutions.com