

ELECTRONIC LOAD CATALOG



MODULAR DC LOADS

41L/42L Series
41T Series
41D/42D Series LED
44M Mainframes



19" RACK DC LOADS

41T Series
5L Series
5P Series
5VP Series



DC LOAD CABINETS

5P Series
5VPxA Series



AC & DC LOADS

3A Modular Series
3B Series
3C Series



"Your Best Choice in Power"



ADAPTIVE POWER SYSTEMS

www.adaptivepower.com

Company Profile

Adaptive Power Systems (APS) was created in 2003 to manufacture and distribute a complete and extensive line of AC and DC power equipment to meet world-wide applications. Our equipment is sold by independent sales representatives and distributors throughout the world.

The APS series products are designed to fill the needs of power conversion for either AC or DC applications.

- Our AC to AC converters provide frequencies and voltages found around the world and also for military avionics/shipboard applications. The APS Frequency changer product range is available in power levels from 500 VA to 120 kVA, single- and three-phase output.
- For DC power requirements, we offer a broad range of highly efficient and compact programmable AC/DC power supplies for bench or rack mount use ranging from 5k Watts to 100's of kilo Watts. A wide selection of power levels and voltage ranges to choose from ensures optimal solutions at very competitive prices.
- In addition to AC and DC power sources, we offer a range of AC and DC programmable electronic loads for a wide range of power test and development applications. You can find these products on the subsequent pages of this Electronic Load Catalog.

Adaptive Power System's customer base consists of major U.S. and international corporations. Markets served include production test, household appliance and consumer product manufacturing, defense, commercial aviation, telecommunications, industrial manufacturing and compliance test agencies.

With design, manufacturing, sales and service centers around the world, Adaptive Power Systems is a global provider of affordable power test solutions. Put us to the test.



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Key Features

- Programmable DC Load Modules
- CC, CR, CV and CP Modes of Operation
- Static and Dynamic CC Mode
- Parallel Operation of Multiple Loads
- Short Circuit Test Built-in
- Automatic OCP and OPP Mode Tests
- Individual Controls and Displays per Module
- Fast Load Transient Programming in Dynamic CC Mode
- High Speed Measurements and Communications
- 150 sets of Store/Recall Memory per Mainframe
- Mainframe Interface Options: USB, RS-232, GPIB or LAN

Modular DC Loads
75W/150W/300W
60V/250V/500V
0.3A - 60A



Description

The 41L Series offers a wide range of voltage and current load combinations to meet your DC test needs. Synchronized operation of loads allows multichannel loads to be configured easily. Easy to read LCD displays show settings and read-back data at a quick glance. Available remote control interfaces facilitate integration with other test equipment. Advanced APS load features like SHORT time duration programming and 150 sets of STORE/RECALL memory with AUTO SEQUENCE programming greatly speeds up go/no-go testing in high volume test environments. The 41L Series offers excellent performance and durability at an affordable price point.

MODEL	41L0630		41L0660		41L2512		41L5012		41L0615	
OPERATING RANGES										
Power Ranges	0-15 W	0-150 W	0-30 W	0-300 W	0-30 W	0-300 W	0-30 W	0-300 W	0-7.5 W	0-75 W
Current Ranges	0-3 A	0-30 A	0-6 A	0-60 A	0-1.2 A	0-12 A	0-1.2 A	0-12 A	0-1.5 A	0-15 A
Voltage Range	60 V		60 V		250 V		500 V		60 V	
Minimum Voltage	0.6V @ 30A		0.6V @ 60A		1.0V @ 12A		6.0V @ 12A		0.3V @ 15A	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)									
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)									
DYNAMIC OPERATION										
T high & T low	50 µsec TO 9.999s (20 kHz)									
Slew Rate	2.0-125 mA/µsec	20-1250 mA/µsec	4-250 mA/µsec	40-2500 mA/µsec	0.8-50 mA/µsec	8-500 mA/µsec	0.8-50 mA/µsec	8.0-500 mA/µsec	1.0-62.5 mA/µsec	10.0-625 mA/µsec
METERING										
Voltage Ranges	0 - 6.0 V	0 - 60.0 V	0 - 6.0 V	0 - 60.0 V	0 - 30.0 V	0 - 250.0 V	0 - 60.0 V	0 - 500.0 V	0 - 6.0 V	0 - 60.0 V
Current Ranges	0- 3.0 A	0- 30.0 A	0 - 6.0 A	0- 60.0 A	0 - 1.2 A	0 - 12.0 A	0 - 1.2 A	0 - 12.0 A	0 - 1.5 A	0 - 15.0 A
SHORT CIRCUIT										
Programmable Short	BUILT - IN									
Max. Short Current	30 A		60 A		12 A		12 A		15 A	

44M00 Series Modular Load Mainframes

Mainframe	44M01/44M01T	44M02/44M02T	44M04/44M04T
No. of Slots	1	2	4
Supports	41L0630, 41L0660, 41L2512, 41:5012, 41L0616 42L0860, 42L0824, 42L0803 41D3002, 41D1020, 41D5002, 42D5003 Note: 41T Modules require 44M0xT Mainframe		
Max. Power	300W	600W	1200W
Dimensions (WxHxD)	160x177x452mm 6.3x7.0x17.8"	269x177x452mm 10.6x7.0x17.8"	440x177x445mm 17.3x7.0x17.5"
Weight	5.5 kg / 12.2 lbs	7.5 kg / 16.5 lbs	9.3 kg / 20.5 lbs



44M01 Mainframe



44M02 Mainframe



44M04 Mainframe

41T SERIES - MODULAR TURBO DC LOADS

Key Features

- Programmable DC Load Modules
- CC, CR, CV, CP, CC+CV, CP+CV Modes of Operation
- Static and Dynamic CC Mode
- Unique TURBO Mode triples Current & Power
- Parallel Operation of Multiple Loads
- Short Circuit Test Built-in
- Automatic OCP and OPP Mode Tests
- Individual Controls and Displays per Module
- Fast Load Transient Programming in Dynamic CC Mode
- High Speed Measurements and Communications
- 150 sets of Store/Recall Memory per Mainframe
- Mainframe Interface Options: USB, RS-232, GPIB or LAN

DC Loads w/TURBO
150W/3000W/400W
60V, 80V, 250V, 500V
0.3A - 180A



Description

The 41T Series modular DC loads offer a number of advanced features and functions, including **TURBO** boost mode. TURBO mode allows three to four times the maximum rated load current to be absorbed by the load for short periods of time. This mode is perfect for testing protection functions of power supplies such as over-current and over power protection. The same TURBO mode supports testing of current protection devices like Fuses and PTC's without having to use an over-sized load.

Special test modes for Li-Ion Battery Management Systems testing and battery discharge test profiles are including on all 41T Series Modular loads. Solar panel testing is supported with built-in MPPT mode. The 41T0880 and 41T5020 modules offer 400W continuous and 800W in TURBO mode per slot.

MODEL	41T0630		41T0660		41T2512		41T5012		41T0615		41T0880		41T5020	
OPERATING RANGES														
Power Ranges	0-15 W	0-150 W	0-30 W	0-300 W	0-30 W	0-300 W	0-30 W	0-300 W	0-7.5 W	0-75 W	0-40 W	0-400 W	0-40 W	0-400 W
Current Ranges	0-3 A	0-30 A	0-6 A	0-60 A	0-1.2 A	0-12 A	0-1.2 A	0-12 A	0-1.5 A	0-15 A	0-8 A	0-80 A	0-2 A	0-20 A
TURBO Mode	0-90 A	0-450 W	0-180 A	0-450 W	0-36 A	0-900 W	0-36 A	0-900 W	0-45 A	0-300W	0-160 A	0-800 W	0-40 A	0-800 W
Voltage Range	60 V		60 V		250 V		500 V		60 V		80 V		500 V	
Minimum Voltage	0.6V @ 30A		0.6V @ 60A		1.0V @ 12A		6.0V @ 12A		0.3V @ 15A		0.1V-25V		0.4V-100V	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP), CC + CV Mode, CP + CV Mode Battery Management System Test (BMS), Fuse Test, MPPT Mode													
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)													
TEST MODES	Battery Management System Test (BMS), Fuse Test, Solar Panel MPPT Mode													
DYNAMIC OPERATION														
T high & T low	0.010~9.999/99.99/9.999s (20 kHz)													
Slew Rate	2.0-125 mA/μsec	20-1250 mA/μsec	4-250 mA/μsec	40-2500 mA/μsec	0.8-50 mA/μsec	8-500 mA/μsec	0.8-50 mA/μsec	8.0-500 mA/μsec	1.0-62.5 mA/μsec	10.0-625 mA/μsec	5.4-337.5 mA/μsec	54-3375 mA/μsec	1.28-80 mA/μsec	12.8-800 mA/μsec
METERING														
Voltage Ranges	0 - 6.0V	0 - 60.0V	0 - 6.0V	0 - 60.0V	0 - 30.0V	0 - 250.0V	0 - 60.0V	0 - 500.0V	0 - 6.0V	0 - 60.0V	0 - 8.03 V	0 - 80.4 V	0 - 60.0V	0 - 500.0V
Current Ranges	0 - 3.0 A	0 - 30.0 A	0 - 6.0 A	0 - 60.0 A	0 - 1.2 A	0 - 12.0 A	0 - 1.2 A	0 - 12.0 A	0 - 1.5 A	0 - 15.0 A	0 - 8.4 A	0 - 80.4 A	0 - 2.04 A	0 - 20.4 A
SHORT CIRCUIT														
Progr. Short	BUILT - IN													
Max. Short Current	30 A / 90 A		60 A / 180 A		12 A / 36 A		12 A / 36 A		15 A / 45 A		80 A / 160 A		20 A / 40 A	

44M00 Series Modular Load Mainframes

The 41T Load Modules are supported by the 44M0xT version Mainframes only. See page 3 for details.

Key Features

- Dual Input Programmable DC Load Modules
- CC, CR, CV and CP Modes of Operation
- Short Circuit Test Built-in
- Supports up to Eight Loads in 4U Rack space
- Mix with 41L & 41D Loads in 44M04 Mainframe
- Dual set of Controls and LCD Displays per Module
- Fast Load Transient Programming in Dynamic CC Mode
- High Speed Measurements and Communications
- 150 sets of Store/Recall Memory per Mainframe
- Mainframe Interface Options: USB, RS-232, GPIB or LAN

Dual Input DC Loads
40W/120W/250W
80V
0.3A - 60A



Description

The 42L Series supports having a large number of Load channels in a single mainframe. With 3 models to choose from, the 42L is the perfect solution for a wide range of power and current load test requirements where space is at a premium. Synchronized operation allows multichannel loads to be configured easily. Each Module has two sets of Controls and LCD displays - one for each input channel - that show settings and read-back data. Available remote control interfaces facilitate integration with other test equipment.

Advanced APS load features like SHORT time duration programming and 150 sets of STORE/RECALL memory with AUTO SEQUENCE programming greatly speeds up go/no-go testing in high volume test environments. The 42L Load modules offer numerous protection modes such as over voltage, current, power and temperature to prevent damage to the load resulting from out of range conditions or transients. The 42L Series offers excellent performance at durability for high density test requirements.

MODEL	42L0860		42L0824		42L0803	
OPERATING RANGES						
Power Ranges	0-25 W / 0-250 W	0-5 W / 0-50 W	0-12 W / 0-120 W	0-12W / 0-120 W	0-4 W / 0-40 W	0-4 W / 0-40 W
Current Ranges	0-6 A / 0-60 A	0-0.6 A / 0-6 A	0-2.4 A / 0-24 A	0-2.4 A / 0-24 A	0-0.3 A / 0-3 A	0-0.3 A / 0-3 A
Voltage Range	0-80 V	0-80 V	0-80 V	0-80 V	0-80 V	0-80 V
Minimum Voltage	0.8 V @ 60 A	0.8 V @ 6 A	0.8 V @ 24 A	0.8 V @ 24 A	0.3 V @ 3 A	0.3 V @ 3 A
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)					
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)					
DYNAMIC OPERATION						
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)					
Slew Rate	4mA - 250mA/μs	0.4mA - 25mA/μs	1.6mA - 100mA/μs		0.2mA - 12.5mA/μs	
	40mA - 2500mA/μs	4mA - 250mA/μs	16mA - 1000mA/μs		2mA - 125mA/μs	
METERING						
Voltage Ranges	0 - 6 V / 0 - 81 V					
Current Ranges	0 - 6.0 A / 0 - 60.0 A	0 - 0.6 A / 0 - 6.0 A	0 - 2.4 A / 0 - 24.0 A		0 - 0.3 A / 0 - 3.0 A	
Power Range	0 - 250.0 W	0 - 50.0 W	0 - 120.0 W		0 - 40.0 W	
MAX. SHORT CURRENT	60 A	6 A	24 A		3 A	

44M00 Series Modular Load Mainframes

The 42L Load Modules are supported by the 44M00 Mainframes. See page 3 for details.

41D/42D SERIES - MODULAR LED LOADS

Key Features

- LED Simulator Load Modules
- LED Mode in addition to CC, CR, CV, CP Modes
- Simulates LED Forward Bias Voltage (Vd) and Resistance (Rd)
- Fast Response for PWM Dimming Test
- Built in Control Output for PWM Dimming Test
- High Speed Measurements and Communications
- Short Test Control Output for External Shorting Relay
- Mainframe Interface Options: USB, RS-232, GPIB or LAN

Modular LED Loads
75W,150W,300W
120V/300V/500V
2A - 24A



Description

The 41D & 42D Series are specifically designed to simulate LED's in lighting applications. Newly upgraded to support three voltage ranges, increased accuracy and higher current capability. The new and improved 41D/42D Series is ideally suited to test LED power supplies. Synchronized operation allows multi channel LED string simulation to be configured easily. The 41D & 42D LED Load Modules are supported by the 44M00 Mainframes. See page 3 for details.

MODEL	41D3024	41D5012	41D5024	41D1204	42D5006	42D1202							
OPERATING RANGES													
Power Ranges	0-300 W		0-300 W		0-150 W	0-150 W	0-75 W	0-75 W					
Current Ranges	0 - 6 A	0 - 24 A	0 - 3 A	0 - 12 A	0 - 6 A	0 - 24 A	0 - 1.2 A	0 - 4 A	0-1.5A	0-6A	0-0.6A	0-2A	
Voltage Range	0 - 300 V		0 - 500 V		0 - 500 V		0 - 120 V		0 - 500 V	0 - 500 V	0 - 120 V	0 - 120 V	
Minimum Voltage	3 V @ 24 A		6 V @ 12 A		6 V @ 24 A		3 V @ 4 A		4 V @ 6 A		4 V @ 6 A		
OPERATING MODES	LED, CC, CR, CV, CP						LED, CC, CR, CV						
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)												
DYNAMIC OPERATION													
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)									N/A		N/A	
Slew Rate	4.8 - 300 mA / μ s		2.4 - 150 mA / μ s		4.8 - 300 mA / μ s		0.96 - 60 mA / μ s		N/A		N/A		
	19.2 - 1200 mA / μ s		9.6 - 600 mA / μ s		19.2 - 1200 mA / μ s		0.24mA / μ s		N/A		N/A		
METERING													
Voltage Ranges	0-30V / 0-150V / 0-300V		0-60V / 0-300V / 0-500V		0-60V / 0-300V / 0-500V		30V / 60V / 120V		0-60V / 0-300V / 0-500V		30V / 60V / 120V		
Current Ranges	0 - 6.0 A	0-24.0 A	0 - 3.0 A	0-12.0 A	0 - 6.0 A	0-24.0 A	0 - 1.2 A	0 - 4.0 A	0 - 1.5 A	0 - 6.0 A	0 - 0.6 A	0 - 2.0 A	
Power Range	0 - 300.0 W		0 - 300.0 W		0 - 300.0 W		0 - 150.0 W		0 - 150.0 W		0 - 75.0 W		
DIMMING CONTROL													
Output	Range: 0 - 12 V / Freq Range: DC - 1KHz / Duty Cycle: 1% - 99%												
Short Signal Output	12V / 100mA max.												

44M00 Series Modular Load Mainframes

The 41D/42D LED Load Modules are supported by the 44M00 Mainframes. See page 3 for details.

Key Features

- Programmable DC Load Modules
- CC, CR, CV, CP, CC+CV, CP+CV Modes of Operation
- Static and Dynamic CC Mode
- Unique TURBO Mode doubles Current & Power
- Short Circuit Test Built-in
- Automatic OCP and OPP Mode Tests
- Fast Load Transient Programming in Dynamic CC Mode
- High Speed Measurements and Communications
- 150 sets of Store/Recall Memory per Mainframe
- Mainframe Interface Options: USB, RS-232, GPIB or LAN



Description

The 41T Series Bench DC loads offer a number of advanced features and functions, including **TURBO** boost mode. TURBO mode allows twice the maximum rated load current to be absorbed by the load for short periods of time. This mode is perfect for testing protection functions of power supplies such as over-current and over power protection. The same TURBO mode supports testing of current protection devices like Fuses and PTC's without having to use an over-sized load. Special test modes for Li-Ion Battery Management Systems testing and battery discharge test profiles are including on all 41T Series loads. Solar panel testing is supported with built-in MPPT mode. The 41T08160 and 41T5040 loads offer 800W continuous and 1600W in TURBO mode per slot.

MODEL	41T0630		41T0660	
OPERATING RANGES				
Power Ranges	0 – 80 W	0 – 800 W	0 – 80 W	0 – 800 W
Current Ranges	0 – 16 A	0 – 160 A	0 – 4 A	0 – 40 A
TURBO Mode	0 -320 A	0 – 1600 W	0 – 80 A	0 – 1600 W
Voltage Range	80 V		500 V	
Load ON Voltage	0.1V-25V		0.4V-100V	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP), CC + CV Mode, CP + CV Mode Battery Management System Test (BMS), Fuse Test, MPPT Mode			
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)			
TEST MODES	Battery Management System Test (BMS), Fuse Test, Solar Panel MPPT Mode			
DYNAMIC OPERATION				
T high & T low	0.010~9.999/99.99/9.999s (20 kHz)			
Slew Rate	10.8-6755 mA / μsec	10.8-6750 mA / μsec	2.56-160 mA / μsec	25.6-1600 mA / μsec
METERING				
Voltage Ranges	0 – 8.04 V	0 – 80.4 V	0 – 60.0 V	0 – 500.0 V
Current Ranges	0 – 16.02 A	0 – 160.2 A	0 – 4.02 A	0 – 40.2 A
SHORT CIRCUIT				
Progr. Short	BUILT – IN			
Max. Short Current	160 A / 320 A		40 A / 80 A	
AC INPUT & PHYSICAL SPECIFICATIONS				
AC Input	115/230 Vac ±10%, 50/60Hz			
Operating Range	0 - 40° C / 32 - 104° F @ 700W, 0 - 25° C / 32 - 77° F for 800W			
Cooling	Variable Speed Fan Cooled			
Dimensions (HxWxD)	187 x 269 x 486 mm / 7.4" x 10.6" x 19.1"			
Weight(Net)	14.5 kg / 32.0 lbs		14.5 kg / 32.0 lbs	

5D SERIES - LED LOADS

Key Features

- High Power LED Loads
- LED Mode in addition to CC, CR, CV, CP Modes
- Simulates LED Forward Bias Voltage (Vd) and Resistance (Rd)
- Fast Response for PWM Dimming Test
- Built in Control Output for PWM Dimming Test
- Short Test Control Output for External Shorting Relay
-



Description

The 5D Series models are special LED loads designed to support development and test of LED drivers. These loads simulate various combinations of LED and their electrical characteristics. These loads share the same feature set as the 41D Series above but at a significant higher power level to support large string LED driver development and test. Available in power levels of 1800W in 4U rack mount or 3600W as a small floor standing cabinet.

MODEL	5D18-12		5D36-24	
OPERATING RANGES				
Power Ranges	0-1800 W		0-3600 W	
Current Ranges	0-12.0 A		0-24.0 A	
Voltage Range	0 - 600 V		0 - 600 V	
Minimum Voltage	6.0 V @ 12 A		6.0 V @ 24 A	
OPERATING MODES	LED, Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)			
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)			
DYNAMIC OPERATION				
T high & T low	0.050 – 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)			
Slew Rate	2.4mA-150mA / μ s	9.6mA-600mA / μ s	4.8mA-300mA / μ s	19.2mA-1200mA / μ s
METERING				
Voltage Range	0 - 6.0 V / 60.0 V			
Current Range	0-12 A / 120 A	0-12 A / 120 A	0-24 A / 240 A	0-12 A / 120 A
Power Range	0 - 600.0 W	0 - 1200.0 W	0 - 1200.0 W	0 - 1800.0 W
AC INPUT & PHYSICAL SPECIFICATIONS				
AC Input	115/230 Vac \pm 10%, 50/60Hz			
Cooling	Variable Speed Fan Cooled			
Dimensions (HxWxD)	177 x 440 x 445 mm / 7.0"x 17.3" x 17.5"		839 x 600 x 600 mm / 33.0" x 23.6" x 23.6"	
Weight (Net)	23.6 kg / 52.0 lbs		81.2 kg / 179 lbs	



Model 5D36-24 3600W LED Load

Key Features

- Fully Programmable DC Load
- CC, CR, CV and CP Modes of Operation
- Short Circuit Test Built-in
- Large, Easy to Read Displays
- Fast Load Transient Programming
- High speed measurements and communications
- 5 Digit Digital Metering
- Easy front-panel operation
- 150 sets of Store/Recall memory
- Available Interface Options: USB, RS232, GPIB or LAN

19" Rack DC Load
600W - 1800W
60V
12A - 360A



Description

Available in power levels from 600W to 2400W, the 5L Series is a workhorse DC load instrument for a wide range of bench and ATE applications up to 60Vdc. Easy to use front panel controls with a shuttle knob to slew settings and large digital readouts for settings and measurements make this instrument very accessible to both causal and experienced users alike. Available remote control interfaces facilitate integration with other test equipment. Advanced APS load features like SHORT time duration programming and 150 sets of STORE/RECALL memory with AUTO SEQUENCE programming greatly speeds up go/no-go testing in high volume test environments. The 5L Load offer numerous protection modes such as over voltage, current, power and temperature to prevent damage to the load resulting from out of range conditions or transients.

The 5L Series offers excellent performance and durability for applications up to 60Vdc in a compact package. For higher voltage requirements, refer to our 5V and 5VP Series models.

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	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)					
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)					
DYNAMIC OPERATION						
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)					
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
METERING						
Voltage Range	0 - 6.0 V / 60.0 V					
Current Range	0-12A / 120A	0-12A / 120A	0-24 A / 240 A	0-12 A / 120 A	0-24 A / 240 A	0-36 A / 360 A
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
SHORT CIRCUIT CURRENT	120 A	120 A	240 A	120 A	240 A	360 A
AC INPUT AND PHYSICAL SPECIFICATIONS						
AC Input	115/230 Vac ±10%, 50/60Hz					
Cooling	Variable Speed Fan Cooled					
Dimensions (HxWxD)	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

Key Features

- Fully Programmable DC Load
- CC, CR, CV and CP Modes of Operation
- Short Circuit Test Built-in
- Large, Easy to Read Displays
- Fast Load Transient Programming
- High speed measurements and communications
- 5 Digit Digital Metering
- Easy front-panel operation
- 150 sets of Store/Recall memory
- Available Interface Options: USB, RS232, GPIB or LAN

Cabinet DC Load
2400W - 14.4kW
60V
24A - 1000A



Description

Available in power levels from 600W to 2400W, the 5L Series is a workhorse DC load instrument for a wide range of bench and ATE applications up to 60Vdc. Easy to use front panel controls with a shuttle knob to slew settings and large digital readouts for settings and measurements make this instrument very accessible to both causal and experienced users alike. Available remote control interfaces facilitate integration with other test equipment. Advanced APS load features like SHORT time duration programming and 150 sets of STORE/RECALL memory with AUTO SEQUENCE programming greatly speeds up go/no-go testing in high volume test environments. The 5L Load offer numerous protection modes such as over voltage, current, power and temperature to prevent damage to the load resulting from out of range conditions or transients. The 5L Series offers excellent performance and durability for applications up to 60Vdc in a compact package. For higher voltage requirements, refer to our 5V and 5VP Series models.

MODEL	5P024-24	5P024-48	5P036-24	5P036-48	5P036-72	5P054-36	5P054-72
OPERATING RANGES							
Power Ranges	0-240 W / 0-2400 W	0-240 W / 0-2400 W	0-360 W / 0-3600 W	0-360 W / 0-3600 W	0-360 W / 0-3600 W	0-540 W / 0-5400 W	0-540 W / 0-5400 W
Current Ranges	0 - 24 A / 0 - 240 A	0 - 48 A / 0 - 480 A	0 - 24 A / 0 - 240 A	0-48 A / 0 - 480 A	0 - 72 A / 0 - 720 A	0 - 36 A / 0 - 360 A	0 - 72 A / 0 - 720 A
Voltage Range	0 - 60V	0 - 60V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V	0 - 60 V
Minimum Voltage	0.6V @ 240 A	0.7 V @ 480 A	0.6V @ 240 A	0.7 V @ 480 A	0.7 V @ 720 A	0.6 V @ 360 A	0.7 V @ 720 A
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)						
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)						
DYNAMIC OPERATION							
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)						
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
METERING							
Voltage Range	0 - 6 V / 60 V						
Current Range	0 - 24A / 240A	0 - 48A / 480A	0 - 24A / 240A	0 - 48A / 480A	0 - 72A / 720A	0 - 36A / 360A	0 - 72A / 720A
Power Range	0 - 2400.0 W	0 - 2400W	0 - 2400W	0 - 3600W	0 - 3600W	0 - 5400W	0 - 5400W
SHORT CIRCUIT CURRENT	240 A	480 A	240 A	480 A	720 A	360 A	720 A
AC INPUT AND PHYSICAL SPECIFICATIONS							
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled						
DIMENSIONS (HxWxD)	889 x 596 x 600 mm						
	35.0" x 23.5" x 23.6"						
WEIGHT (Net)	81.2kg / 179.0 lb	72.8kg / 160.5 lbs	81.2kg / 179.0 lbs	81.2kg / 179.0 lbs	81.2kg / 179.0 lbs	104.8kg / 231 lbs	104.8kg / 231 lbs

MODEL	5P054-99	5P072-48	5P072-96	5P090-60	5P108-72	5P126-84	5P144-96	
OPERATING RANGES								
Power Ranges	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 - 1080 W / 0 - 10800 W	0 - 1260 W / 0 - 12600 W	0 - 1440 W / 0 - 14400 W	
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	0.6 V @ 480 A	0.6 V @ 960 A	0.6 V @ 600 A	0.6 V @ 720 A	0.6 V @ 840 A	0.6 V @ 960 A	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)							
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)							
DYNAMIC OPERATION								
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)							
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	
METERING								
Voltage Range	0 - 6 V / 60V							
Current Range	0-100A / 1000A	0-48A / 480A	0-96A / 960A	0-60A / 600A	0-72A / 720A	0-84A / 840A	0-96A / 960A	
Power Range	0 - 5400W	0 - 7200W	0 - 7200W	0 - 9000W	0 - 10800W	0 - 12600W	0 - 14400W	
SHORT CIRCUIT CURRENT	1000 A	480 A	960 A	600 A	720 A	840 A	960 A	
AC INPUT AND PHYSICAL SPECIFICATIONS								
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled							
DIMENSIONS (HxWxD)	889 x 596 x 600 mm		1556 x 596 x 600 mm				1778x596x600 mm	
	35.0" x 23.5" x 23.6"		61.3" x 23.5" x 23.6"				70.0" x 23.5" 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	

refer to our 5V and 5VP Series models.

5P Series Cabinets

The 5P Series cabinets consists of 2 or more 5L Series Loads mounted in a 19" cabinet and operating in parallel mode. 5P Models and are shipped as fully configured systems. This includes all internal wiring for AC input and DC bus bars for Load.

Ordering Information

Specify model number 5Pxxx-xx and AC input voltage, 115Vac or 230Vac.

Interface Options

Select Interface from following options:

- Opt GPIB GPIB Interface
- Opt RS-232 Serial Interface
- Opt USB USB Interface
- Opt LAN Ethernet Interface

Load Cable Options

- OPT-C1KAx Load Cable, 1000A, x = length in meters
Available lengths are 1, 2, 3, 4 or 5.



DC Load Model 5P144-96 shown

5V SERIES - DC LOADS

Key Features

- Fully Programmable DC Load
- CC, CR, CV and CP Modes of Operation
- Short Circuit Test Built-in
- Large, Easy to Read Displays
- Fast Load Transient Programming
- High speed measurements and communications
- 5 Digit Digital Metering
- Easy front-panel operation
- 150 sets of Store/Recall memory
- Available Interface Options: USB, RS232, GPIB or LAN

19" Rack DC Load
600W - 14.4kW
500V
12A - 500A



Description

Available in power levels from 600W to 14,400W, the 5V Series offers higher voltage operation than the comparable 5L Series to support higher voltage, high current applications up to 500 Adc. It uses the same front panel controls and displays as the 5L Series offering the same convenient easy of use. Available remote control interfaces facilitate integration with other test equipment. Advanced APS load features like SHORT time duration programming, LOAD On/Off functionality and 150 sets of STORE/RECALL memory with AUTO SEQUENCE programming greatly speeds up testing in high volume test environments. The 5V Load offers protection modes such as over voltage, current, power and temperature to prevent any damage to the load.

The 5V Series offers excellent performance and durability for higher voltage, high current applications up to 500Vdc in a compact package. For even higher voltage requirements, refer to the 5VP Series models.

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	0-240 W / 0-2400 W	0-360 W / 0-3600 W
Current Ranges	0-2.0 A / 0-20 A	0-4.0 A / 0-40 A	0-1.2A / 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 - 500 V	0 - 500 V	0 - 500 V	0 - 500V	0 - 500 V	0 - 500 V
Minimum Voltage	4 V @ 20 A	4 V @ 40 A	6 V @ 12 A	4 V @ 60 A	4 V @ 80 A	4 V @ 120 A
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)					
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)					
DYNAMIC OPERATION						
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999ms (20 kHz)					
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
METERING						
Voltage Range	0 - 60 V / 500 V					
Current Range	0-2.0A / 20.0A	0-4A / 40A	0-1.2A / 12A	0-6A / 60A	0-8A / 80A	0-12A / 120A
Power Range	0-60W / 600W	0-120W / 1200W	0-180W / 1800W	0-180W / 1800W	0-240W / 2400W	0-360W / 3600W
SHORT CIRCUIT CURRENT	20 A	40 A	12 A	60 A	80 A	120 A
AC INPUT AND PHYSICAL SPECIFICATIONS						
AC INPUT	115/230 Vac ±10%, 50/60Hz					
COOLING	Variable Speed Fan Cooled					
DIMENSIONS (HxWxD)	177 x 440 x 445 mm					889x596x600mm
	7.0" x 17.3" x 17.5"					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

MODEL	5V036-02	5V054-04	5V054-18	5V072-05	5V072-24	5V090-06
OPERATING RANGES						
Power Ranges	0-360 W / 0-3600 W	0-540 W / 0-5400 W	0-540 W / 0-5400 W	0-720W/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 A / 0 - 180 A	0 - 4.8 A / 0 - 48 A	0 - 24 A / 0 - 240 A	0 - 6.0 A / 0 - 60 A
Voltage Range	0 - 500 V	0 - 500 V	0 - 500 V	0 - 500 V	0 - 500 V	0 - 500 V
Minimum Voltage	6 V @ 24 A	6 V @ 36 A	4 V @ 180 A	3 V @ 48 A	4 V @ 240 A	6 V @ 60 A
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)					
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)					
DYNAMIC OPERATION						
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999mS (20 kHz)					
Slew Rate	1.92mA-120mA/μs	2.88mA-180mA/μs	14.4mA-900mA/μs	0.0192A-1.2A/μs	0.0192A-1.2A/μs	4.8mA-300mA/μs
	19.2mA-1200mA/μs	28.8mA-1800mA/μs	144mA-9A/μs	0.192A-12A/μs	0.192A-12A/μs	48mA-3000mA/μs
METERING						
Voltage Range	0 - 60 V / 500 V					
Current Range	0-2.4A / 24A	0-3.6A / 36A	0-18A / 180A	0-4.8A / 48A	0-24A / 240A	0-6A / 60A
Power Range	0-360W / 3600W	0-540W / 5400W	0-540W / 5400W	0-720W / 7200W	0-720W / 7200W	0-900W / 9000W
SHORT CIRCUIT CURRENT	24 A	36 A	180 A	48 A	240 A	60 A
AC INPUT AND PHYSICAL SPECIFICATIONS						
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled					
DIMENSIONS (HxWxD)	889x596x600mm			1556x596x600mm		
	35.0" x 23.5" x 23.6"			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

MODEL	5V090-30	5V108-36	5V108-07	5V126-42	5V144-50
OPERATING RANGES					
Power Ranges	0-900 W/0-9000 W	0-1080 W / 0-10800 W	0-1080 W / 0-10800 W	0-1260 W/ 0-12600 W	0-1440 W/0-14400 W
Current Ranges	0 - 30A / 0 - 300 A	0 - 36 A / 0 - 360 A	0 - 7.2 A / 0 - 72 A	0 - 42 A / 0 - 420 A	0 - 50 A / 0 - 500 A
Voltage Range	0 - 500 V	0 - 500 V	0 - 500 V	0 - 500 V	0 - 500 V
Minimum Voltage	4 V @ 300 A	4 V @ 360 A	6 V @ 72 A	4 V @ 420 A	4 V @ 500 A
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)				
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)				
DYNAMIC OPERATION					
T high & T low	0.050 - 9.999 / 99.99 / 999.9 / 9999mS (20 kHz)				
Slew Rate	0.024A-1.5A/μs	0.0288A-1.8A/μs	5.76mA-360mA/μs	0.0336A-2.1A/μs	0.04A-2.5A/μs
	0.24A-15A/μs	0.288A-18A/μs	57.6mA-3600mA/μs	0.336A-21A/μs	0.4A-25A/μs
METERING					
Voltage Range	0 - 60.0 V / 500 V				
Current Range	0-30A / 300A	0-36A / 360A	0-7.2A / 72A	0-42A / 420A	0-50A / 500A
Power Range	0-900W / 9000W	0-1080W / 10800W	0-1080W / 10800W	0-1260W / 12600W	0-1440W / 14400W
SHORT CIRCUIT CURRENT	300 A	360 A	72 A	420 A	504 A
AC INPUT AND PHYSICAL SPECIFICATIONS					
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled				
DIMENSIONS (HxWxD)	1556x596x600mm				1778 x 596 x 600 mm
	61.3" x 23.5" x 23.6"				70.0" x 23.5" x 23.6"
WEIGHT (Net)	185.0kg / 407.9 lbs	208.6kg / 459.9 lbs	208.6kg / 459.9 lbs	232.2kg / 511.9 lbs	268.8kg / 592.6 lbs

Key Features

- High Power DC Load Cabinet Systems
- CC, CR, CV and CP Modes of Operation
- Solid Copper Bus Bar Connections
- MASTER/SLAVE Parallel Mode up to 8 Units
- Short Circuit Test Built-in
- Enhanced Front Panel Controls
- Fast Load Transient Programming
- High speed measurements and communications
- 5 Digit Digital Metering
- Available Interface Options: USB, RS232, GPIB or LAN

Cabinet DC Load
5kW - 480kW
60V/600V/1000V/1250V
16 A - 1000 A



Description

Available in power levels from 5 kW to 60 kW, the 5VP Series Cabinet systems provide the highest level of programmable DC Loads available. Housed in an airflow efficient floor standing cabinet, the 5VP Series addresses a wide range of High Power DC application, including Alternative Energy storage systems and Electric or Hybrid-Electric Vehicle system development and test.

Available remote control interfaces facilitate integration with other test equipment. Advanced APS load features like SHORT time duration programming and 150 sets of STORE/RECALL memory with AUTO SEQUENCE programming greatly speeds up go/no-go testing in high volume test environments.

The 5VP Load Cabinet systems offer every available protection mode such as over voltage, current, power and temperature to prevent damage to the load resulting from out of range conditions or transients. Models are available for 60Vdc, 600Vdc, 1000Vdc and 1250Vdc with currents up to 1000 Adc.

MODEL	5VP05-100A		5VP10-100A		5VP15-100A		5VP20-100A		5VP25-100A		5VP30-100A		
OPERATING RANGES													
Power Ranges	0-0.5kW	0-5kW	0-1.0kW	0-10kW	0-1.5kW	0-15kW	0-2.0kW	0-20kW	0-2.5kW	0-25 kW	0-3kW	0-30 kW	
Current Ranges	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	
Voltage Range	0 - 60 V												
Minimum Voltage	0.1V@100A	0.7V@1000 A	0.1V@100A	0.7V@1000 A	0.1V@100A	0.7V@1000 A	0.1V@100A	0.7V@1000 A	0.1V@100A	0.7V@1000 A	0.1V@100A	0.7V@1000 A	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)												
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)												
DYNAMIC OPERATION													
T high & T low	0.150-9.999/.../9999ms		0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)										
Slew Rate	24mA-1.5A/μs	240mA-15A/μs	24mA-1.5A/μs	240mA-15A/μs	24mA-1.5A/μs	240mA-15A/μs	24mA-1.5A/μs	240mA-15A/μs	24mA-1.5A/μs	240mA-15A/μs	24mA-1.5A/μs	240mA-15A/μs	
METERING													
Voltage Range	0 - 6 V	6 - 60 V	0 - 6 V	6 - 60 V	0 - 6 V	6 - 60 V	0 - 6 V	6 - 60 V	0 - 6 V	0 - 60 V	0 - 6 V	0 - 60 V	
Current Range	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	0-100A	0-1000A	
Power Range	0 - 0.5kW	0 - 5kW	0 - 1kW	0 - 10kW	0 - 1.k	0 - 15kW	0 - 2kW	0 - 20kW	0 - 2.5kW	0 - 25kW	0 - 3kW	0 - 30kW	
S/C CURRENT	1000 A												
AC INPUT AND PHYSICAL SPECIFICATIONS													
AC INPUT/COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled												
DIMENSIONS (HxWxD)	577x647x766mm				736x 647x766mm			889x 647x 766mm		1048x647x766mm		1201x647x766mm	
	22.7"x25.5"x30.2"				29"x25.5"x30.2"			35"x25.5"x30.2"		41.3"x25.5"x30.2"		47.3"x25.5"x30.2"	
WEIGHT (Net)	100kg / 220.5 lbs		130kg / 286.6 lbs		170kg / 374.8 lbs		220kg / 485.0 lbs		280kg / 617.3 lbs		340kg / 749.6 lbs		

MODEL	5VP35-100A		5VP40-100A		5VP05-16A		5VP10-32A		5VP15-48A	
OPERATING RANGES										
Power Ranges	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW	0 - 0.5 kW	0 - 5 kW	0 - 1.0 kW	0 - 10 kW	0 - 1.5 kW	0 - 15 kW
Current Ranges	0 - 100 A	0 - 1000 A	0 - 100 A	0 - 1000 A	0 - 16A	0 - 160 A	0 - 32 A	0 - 320 A	0 - 48 A	0 - 480 A
Voltage Range	0 - 60 V				0 - 600 V					
Minimum Voltage	0.1V@100A	0.7V@1000 A	0.1V@100A	0.7V@1000 A	10 V@160 A		10 V@320 A		10 V@480 A	
OPERATING MODES Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)										
PROTECTION Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)										
DYNAMIC OPERATION										
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)									
Slew Rate	24mA-1.5A/μs	240mA-15A/μs	24mA-1.5A/μs	240mA-15A/μs	12.8mA-800mA/μs	128mA-8A/μs	25.6mA-1.6A/μs	256mA-16A/μs	38.4mA-2.4A/μs	384mA-24A/μs
METERING										
Voltage Range	0 - 6 V	0 - 60 V	0 - 6 V	0 - 60 V	0 - 60 V	0 - 600 V	0 - 60 V	0 - 600 V	0 - 60 V	0 - 600 V
Current Range	0 - 100 A	0 - 1000 A	0 - 100 A	0 - 1000 A	0 - 16 A	0 - 160 A	0 - 32 A	0 - 320 A	0 - 48 A	0 - 480 A
Power Range	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW	0 - 0.5 kW	0 - 5 kW	0 - 1.0 kW	0 - 10 kW	0 - 1.5 kW	0 - 15 kW
SHORT CIRCUIT CURRENT	1000 A				160 A		320 A		480 A	
AC INPUT AND PHYSICAL SPECIFICATIONS										
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled									
DIMENSIONS (HxWxD)	1353x647x766 mm		1509x647x766mm		577x 647x766mm		577x 647x766mm		736x 647x766mm	
	53.3"x25.5"x30.2"		59.6"x25.5"x30.2"		22.7"x25.5"x30.2"		22.7"x25.5"x30.2"		29"x25.5"x30.2"	
WEIGHT (Net)	390 kg/859.8 lbs		430 kg/947.9 lbs		100kg / 220.5 lbs		130kg / 286.6 lbs		170kg / 374.8 lbs	

MODEL	5VP20-64A		5VP25-80A		5VP30-96A		5VP35-112A		5VP40-128A	
OPERATING RANGES										
Power Ranges	0 - 2.0 kW	0 - 20 kW	0 - 2.5 kW	0 - 25 kW	0 - 3.0 kW	0 - 30 kW	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW
Current Ranges	0 - 64 A	0 - 640 A	0 - 80 A	0 - 800 A	0 - 96 A	0 - 960 A	0 - 112 A	0 - 1120 A	0 - 128 A	0 - 1280 A
Voltage Range	0 - 600 V									
Minimum Voltage	10 V @ 640 A		10 V @ 800 A		10 V @ 960 A		10 V @ 1120 A		10 V @ 1280 A	
OPERATING MODES Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)										
PROTECTION Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)										
DYNAMIC OPERATION										
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)									
Slew Rate	51.2mA-3.2A/μs	512mA-32A/μs	64mA-4A/μs	640mA-40A/μs	76.8mA-4.8A/μs	768mA-48A/μs	0.0896A-5.6A/uS	0.896A-56A/uS	0.1024A-6.4A/uS	1.024A-64A/uS
METERING										
Voltage Range	0 - 60 V	0 - 600 V	0 - 60 V	0 - 600 V	0 - 60 V	0 - 600 V	0 - 60 V	0 - 600 V	0 - 60 V	0 - 600 V
Current Range	0 - 64 A	0 - 640 A	0 - 80 A	0 - 800 A	0 - 96 A	0 - 960 A	0 - 112 A	0 - 1120 A	0 - 128 A	0 - 1280 A
Power Range	0 - 2kW	0 - 20kW	0 - 2.5kW	0 - 25kW	0 - 3kW	0 - 30kW	0 - 3.5kW	0 - 35kW	0 - 4kW	0 - 40kW
SHORT CIRCUIT CURRENT	640 A		800 A		960 A		1120 A		1280 A	
AC INPUT AND PHYSICAL SPECIFICATIONS										
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled									
DIMENSIONS (HxWxD)	889x 647x766mm		1048x 647x 766mm		1201x 647x 766mm		1353x647x766 mm		1509x647x766mm	
	35"x25.5"x30.2"		41.3"x25.5"x30.2"		47.3"x25.5"x30.2"		53.3"x25.5"x30.2"		59.6"x25.5"x30.2"	
WEIGHT (Net)	220kg / 485.0 lbs		280kg / 617.3 lbs		340kg / 749.6 lbs		390 kg/859.8 lbs		430 kg/947.9 lbs	

MODEL	5VP05-05A		5VP10-10A		5VP15-15A		5VP20-20A	
OPERATING RANGES								
Power Ranges	0 - 0.5 kW	0 - 5 kW	0 - 1.0 kW	0 - 10 kW	0 - 1.5 kW	0 - 15 kW	0 - 2.0 kW	0 - 20 kW
Current Ranges	0 - 5 A	0 - 50 A	0 - 10 A	0 - 100 A	0 - 15 A	0 - 150 A	0 - 20 A	0 - 200 A
Voltage Range	0 - 1000 V							
Minimum Voltage	10 V @ 50 A		10 V @ 100 A		10 V @ 150 A		10 V @ 200 A	
OPERATING MODES Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)								
PROTECTION Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)								
DYNAMIC OPERATION								
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)							
Slew Rate	0.004A-0.25A/μs	0.04A-2.5A/μs	0.008A-0.5A/μs	0.08A-5A/μs	0.012A-0.75A/μs	0.12A-7.5A/μs	0.016A-1A/μs	0.16A-10A/μs
METERING								
Voltage Range	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V
Current Range	0 - 5 A	5 - 50 A	0 - 10 A	10 - 100 A	0 - 15 A	15 - 150 A	0 - 20 A	20 - 200 A
Power Range	0 - 0.5 kW	0 - 5 kW	0 - 1.0 kW	0 - 10 kW	0 - 1.5 kW	0 - 15 kW	0 - 2.0 kW	0 - 20 kW
SHORT CIRCUIT CURRENT	50 A		100 A		150 A		200 A	
AC INPUT AND PHYSICAL SPECIFICATIONS								
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled							
DIMENSIONS (HxWxD)	577x647x766mm				736x647x766mm		889x647x766mm	
	22.7"x25.5"x30.2"				29"x25.5"x30.2"		35"x25.5"x30.2"	
WEIGHT (Net)	100kg / 220.5 lbs		130kg / 286.6 lbs		170kg / 374.8 lbs		220kg / 485.0 lbs	

5VPxA SERIES - DC LOADS

MODEL	5VP25-25A		5VP30-30A		5VP35-35A		5VP40-40A	
OPERATING RANGES								
Power Ranges	0 - 2.5 kW	0 - 25 kW	0 - 3.0 kW	0 - 30 kW	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW
Current Ranges	0 - 25 A	0 - 250 A	0 - 30 A	0 - 300 A	0 - 35 A	0 - 350 A	0 - 40 A	0 - 400 A
Voltage Range	0 - 1000 V							
Minimum Voltage	10V @ 250 A		10V @ 300 A		10V @ 350 A		10V @ 400 A	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)							
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)							
DYNAMIC OPERATION								
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)							
Slew Rate	0.02A-1.25A/μs	0.2A-12.5A/μs	0.024A-1.5A/μs	0.24A-15A/μs	0.028A-1.75A/μs	0.28A-17.5A/μs	0.032A-2A/μs	0.32A-20A/μs
METERING								
Voltage Range	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V
Current Range	0 - 25 A	25 - 250 A	0 - 30 A	30 - 300 A	0 - 35 A	35 - 350 A	0 - 40 A	40 - 400 A
Power Range	0 - 2.5 kW	0 - 25 kW	0 - 3.0 kW	0 - 30 kW	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW
SHORT CIRCUIT CURRENT	250 A		300 A		350 A		400 A	
AC INPUT AND PHYSICAL SPECIFICATIONS								
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled							
DIMENSIONS (HxWxD)	1048x647x766mm 41.3"x25.5"x30.2"		1201x647x766mm 47.3"x25.5"x30.2"		1360x647x766mm 53.6"x25.5"x30.2"		1513x647x766mm 59.6"x25.5"x30.2"	
WEIGHT (Net)	280kg / 617.3 lbs		340kg / 749.6 lbs		390kg / 859.8 lbs		430kg / 948.0 lbs	

MODEL	5VP50-21A		5VP60-24A		5VP50-50A		5VP60-60A	
OPERATING RANGES								
Power Ranges	0 - 5.0 kW	0 - 50 kW	0 - 6.0 kW	0 - 60 kW	0 - 5.0 kW	0 - 50 kW	0 - 6.0 kW	0 - 60 kW
Current Ranges	0 - 21 A	0 - 210 A	0 - 24 A	0 - 240 A	0 - 52.5 A	0 - 500 A	0 - 60 A	0 - 600 A
Voltage Range	0 - 600 V				0 - 1000 V			
Minimum Voltage	10V @ 210 A		10V @ 240 A		10V @ 500 A		10V @ 600 A	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP)							
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)							
DYNAMIC OPERATION								
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)							
Slew Rate	16.8mA-1.05A/uS	168mA-10.5A/uS	19.2mA-1.2A/uS	192mA-12A/uS	42mA-2.625A/uS	420mA-26.25A/uS	48mA-3A/uS	480mA-30A/uS
METERING								
Voltage Range	0 - 60 V	60 - 600 V	0 - 60 V	60 - 600 V	0 - 100 V	100 - 1000 V	0 - 100 V	100 - 1000 V
Current Range	0 - 21 A	21 - 210 A	0 - 24 A	24 - 240 A	0 - 52.5 A	52.5 - 500 A	0 - 60 A	60 - 600 A
Power Range	0 - 5 kW	0 - 50 kW	0 - 6 kW	0 - 60 kW	0 - 5 kW	0 - 50 kW	0 - 6 kW	0 - 60 kW
SHORT CIRCUIT CURRENT	210 A		240 A		500 A		600 A	
AC INPUT AND PHYSICAL SPECIFICATIONS								
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled							
DIMENSIONS (HxWxD)	1360 x 853 x 766 mm 53.6"x33.6"x30.2"		1513 x 853 x 766 mm 59.6"x33.6"x30.2"		1360 mm x 853 x 766 mm 53.6"x33.6"x30.2"		1513 x 853 x 766 mm 59.6"x33.6"x30.2"	
WEIGHT (Net)	510kg / 1124.4 lbs		630kg / 1388.9 lbs		510kg / 1124.4 lbs		630kg / 1388.9 lbs	

MODEL	5VP05-02.5A		5VP10-05A		5VP15-07.5A		5VP20-10A	
OPERATING RANGES								
Power Ranges	0 - 0.5 kW	0 - 5 kW	0 - 1.0 kW	0 - 10 kW	0 - 1.5 kW	0 - 15 kW	0 - 2.0 kW	0 - 20 kW
Current Ranges	0 - 2.5 A	0 - 25 A	0 - 5 A	0 - 50 A	0 - 7.5 A	0 - 75 A	0 - 10 A	0 - 100 A
Voltage Range	0 - 1250 V							
Load ON Voltage	0 - 250V		0 - 250V		0 - 250V		0 - 250V	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP), Constant Current + Constant Voltage (CC+CV) and Constant Power + Constant Voltage (CV)							
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)							
DYNAMIC OPERATION								
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)							
Slew Rate	0.002A-0.125A/μs	0.02A-1.25A/μs	0.004-0.25A/μs	0.04A-2.5A/μs	0.006A-0.375A/μs	0.06A-3.75A/μs	0.008A-0.5A/μs	0.08A-5A/μs
METERING								
Voltage Range	0 - 125 V	0 - 1250 V	0 - 125 V	0 - 1250 V	0 - 125 V	0 - 1250 V	0 - 125 V	0 - 1250 V
Current Range	0 - 2.5 A	0 - 25 A	0 - 5 A	0 - 50 A	0 - 7.5 A	0 - 75 A	0 - 10 A	0 - 100 A
Power Range	0 - 0.5 kW	0 - 5 kW	0 - 1.0 kW	0 - 10 kW	0 - 1.5 kW	0 - 15 kW	0 - 2.0 kW	0 - 20 kW
SHORT CIRCUIT CURRENT	50 A		100 A		150 A		200 A	
AC INPUT AND PHYSICAL SPECIFICATIONS								
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled							
DIMENSIONS (HxWxD)	577x647x766mm 22.7"x25.5"x30.2"				736x647x766mm 29"x25.5"x30.2"		889x647x766mm 35"x25.5"x30.2"	
WEIGHT (Net)	100kg / 220.5 lbs		130kg / 286.6 lbs		170kg / 374.8 lbs		220kg / 485.0 lbs	

MODEL	5VP25-12.5A		5VP30-15A		5VP35-17.5A		5VP40-20A	
OPERATING RANGES								
Power Ranges	0 - 2.5 kW	0 - 25 kW	0 - 3.0 kW	0 - 30 kW	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW
Current Ranges	0 - 12.5 A	0 - 125 A	0 - 15 A	0 - 150 A	0 - 17.5 A	0 - 175 A	0 - 20 A	0 - 200 A
Voltage Range	0 - 1250 V							
Load ON Voltage	0 - 250V		0 - 250V		0 - 250V		0 - 250V	
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP), Constant Current + Constant Voltage (CC+CV) and Constant Power + Constant Voltage (CV)							
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)							
DYNAMIC OPERATION								
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)							
Slew Rate	0.01A-0.625A/μs	0.1A-6.25A/μs	0.012A-0.75A/μs	0.12A-7.5A/μs	0.014A-0.875A/μs	0.14A-8.75A/μs	0.016A-1A/μs	0.16A-10A/μs
METERING								
Voltage Range	0 - 125 V	0 - 1250 V	0 - 125 V	0 - 1250 V	0 - 125 V	0 - 1250 V	0 - 125 V	0 - 1250 V
Current Range	0 - 12.5 A	0 - 125 A	0 - 15 A	0 - 150 A	0 - 17.5 A	0 - 175 A	0 - 20 A	0 - 200 A
Power Range	0 - 2.5 kW	0 - 25 kW	0 - 3.0 kW	0 - 30 kW	0 - 3.5 kW	0 - 35 kW	0 - 4.0 kW	0 - 40 kW
SHORT CIRCUIT CURRENT	250 A		300 A		350 A		400 A	
AC INPUT AND PHYSICAL SPECIFICATIONS								
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled							
DIMENSIONS (HxWxD)	1048x647x766mm 41.3"x25.5"x30.2"		1201x647x766mm 47.3"x25.5"x30.2"		1360x647x766mm 53.6"x25.5"x30.2"		1513x647x766mm 59.6"x25.5"x30.2"	
WEIGHT (Net)	280kg / 617.3 lbs		340kg / 749.6 lbs		390kg / 859.8 lbs		430kg / 948.0 lbs	

MODEL	5VP50-25A		5VP60-30A		
OPERATING RANGES					
Power Ranges	0 - 5.0 kW		0 - 50 kW		
Current Ranges	0 - 25 A		0 - 250 A		
Voltage Range	0 - 1250 V				
Load ON Voltage	0 - 250V		0 - 250V		
OPERATING MODES	Constant Current (CC), Constant Resistance (CR), Constant Voltage (CV), Constant Power (CP), Constant Current + Constant Voltage (CC+CV) and Constant Power + Constant Voltage (CV)				
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)				
DYNAMIC OPERATION					
T high & T low	0.050-9.999 / 99.99 / 999.9 / 9999ms (20 kHz)				
Slew Rate	0.02A-1.25A/μs		0.2A-12.5A/μs		
METERING					
Voltage Range	0 - 125 V		0 - 1250 V		
Current Range	0 - 25 A		0 - 250 A		
Power Range	0 - 5.0 kW		0 - 50 kW		
SHORT CIRCUIT CURRENT	250 A		300 A		
AC INPUT AND PHYSICAL SPECIFICATIONS					
AC INPUT / COOLING	115/230 Vac ±10%, 50/60Hz / Variable Speed Fan Cooled				
DIMENSIONS (HxWxD)	1360 x 853 x 766 mm 53" x 33.6" x 30.2"		1513 x 853 x 766 mm 59.6" x 33.6" x 30.2"		
WEIGHT (Net)	510kg / 1124.4lbs		630kg / 1388.9 lbs		

5VP Series Chassis

The 5VP Series are housed in fully configured and integrated floor standing cabinets.

Ordering Information

Specify model number 5VPxxx-xxA and AC input voltage, 115Vac or 230Vac.

Interface Options

Select Interface from following options:

- Opt GPIB GPIB Interface
- Opt RS-232 Serial Interface
- Opt USB USB Interface
- Opt LAN Ethernet Interface

Load Cable Options

- OPT-C1Kax Load Cable, 1000A, x = length in meters
Available lengths are 1, 2, 3, 4 or 5.
Min. order quantity for cables is two.



5VP10-100 10kW Model shown

3A SERIES - AC & DC MODULAR LOADS

Key Features

- Programmable AC or DC Load Modules
- Sine, Square or Step Waveform Support
- CC, CR, and Crest Factor Modes of Operation
- Programmable Leading or Lagging Power Factor
- Mainframes for 1 or 4 modules
- Individual Controls and Displays per Module
- 4½ Digit measurements for V, I, W and VA
- Easy front-panel operation and GO/NO-GO limit check
- 150 sets of Store/Recall memory per Mainframe
- Mainframe Interfaces: RS232 std, GPIB Optional

Modular AC & DC Loads
300 VA
60V/150V/300V
2Arms - 20A rms



Description

Available at a power level of 300VA per module, the 3A Series offers three voltage and current load combinations to meet your AC or DC test needs. Support for several AC voltage waveforms such as Sine wave, Square wave or Step wave is perfect for testing UPS's, AC Sources and other AC products. A frequency range of 40Hz to 400Hz support testing of both commercial and aviation products, including 3 Phase products. For higher power needs, two or more Load modules can be operated in parallel. Easy to read LED displays on each module show settings and read-back data at a quick glance. Available GPIB remote control interface facilitates integration with other test equipment.

Advanced APS load features like Power Factor and Crest Factor programming allow simulation of real-world AC Load conditions to be applied to the Equipment under Test (EUT). The 3A Load modules offer numerous protection modes such as over voltage, current, power and temperature to prevent damage to the load resulting from out of range conditions or transients.

MODEL	3A060-20		3A150-08		3A300-04	
OPERATING RANGES						
Power Ranges	0 - 300 VA		0 - 300 VA		0 - 300 VA	
Current Ranges	0-10 Arms	10-20 Arms	0 - 4 Arms	4 - 8 Arms	0 - 2 Arms	2 - 4 Arms
Voltage Range	10 - 60 Vrms		15 - 150 Vrms		30 - 300 Vrms	
Frequency	DC, 40 - 400Hz (CC Mode) / DC - 400Hz (LIN,CR Mode)					
OPERATING MODES	Constant Current (CC), Linear CC (LIN), Constant Resistance (CR), CREST FACTOR (CF) (in CC Mode only)					
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)					
CREST & POWER FACTOR RANGE						
Lagging PF	CF: $\sqrt{2}$ to 3.5 . PF: - 0.30 to -0.85					
Leading PF	CF: $\sqrt{2}$ to 3.5 . PF: + 0.30 to +0.85 or 1.00					
METERING						
Voltage Range	0 - 60 V		0 - 150 V		0 - 300 V	
Current Range	0 - 20 A		0 - 8 A		0 - 4 A	
Power Range	0 - 300 W					
VA Range	0 - 300 VA					
OTHER SPECIFICATIONS						
CURRENT MONITOR	5 A/V		2 A/V		1 A/V	
DIMENSIONS (HxWxD)	143 x 108 x 405 mm					
	5.6" x 4.25" x 15.9					
WEIGHT (Net, Module)	3.5kg / 7.7 lbs					

Mainframe	34M01	34M01-01	34M04	34M04-01
No. of Slots	1	1	4	4
Supports	3A060-20, 3A150-08, 3A300-04			
Max. Power	300 VA		1200 VA	
Remote Interface	RS232	RS232 + GPIB	RS232	RS232 + GPIB
Dimensions (WxHxD)	150 x 177 x 445 mm 5.9 x 7.0 x 17.5"		440 x 177 x 445 mm 17.3 x 7.0 x 17.5"	
Weight	5.5 kg / 12.1 lbs		9.3 kg / 20.5 lbs	



34M01 Mainframe



34M04 Mainframe

Key Features

- Programmable AC or DC Load Modules
- Sine, Square or Step Waveform Support
- CC, CR, and Crest Factor Modes of Operation
- Leading or Lagging Power Factor
- 4½ Digit measurements for V, I, W and VA
- Frequency Range 40 Hz to 400 Hz and DC
- Easy front-panel operation and GO/NO-GO limit check
- 5 sets of Store/Recall memory per Mainframe
- Standard Interfaces: RS232, GPIB

AC & DC Loads
1200VA - 12.6kVA
300V
12A - 126A



FOR NEW APPLICATIONS, REFER TO 3C SERIES

Description

Available in power levels from 1200 VA to 12.6 kVA, the 3B Series Electronic AC & DC Load is widely used to test AC power products such as Uninterpretable Power Supplies, Solid State and Rotary Frequency Converters and Adjustable AC Voltage Sources. Support for typical AC voltage waveforms such as Sine wave, Square wave or Step wave perfect for testing these type of products. A frequency range of 40Hz to 400Hz supports testing of both commercial and avionics products, including 3 Phase products. For multi-phase AC applications, two or more Loads can be operated simultaneously. Advanced APS load features like Power Factor and Crest Factor programming allow simulation of real-world AC Load conditions to be applied to the Equipment under Test (EUT).

Easy to read LED displays show settings and read-back data at a quick glance. The 3B Series offers ample protection modes such as over voltage, current, power and temperature protection to prevent damage to the load resulting from out of range conditions or transient conditions.

MODEL	3B012-12	3B018-18	3B024-24	3B036-36	3B054-54
OPERATING RANGES					
Power Ranges	0 - 1200 VA		0 - 1800 VA		0 - 2400 VA
Current Ranges	0 - 6 A	6 - 12 A	0 - 9 A	9 - 18 A	0 - 12 A
Voltage Range	50 - 300 Vrms		50 - 300 Vrms		50 - 300 Vrms
Frequency	DC, 40 - 400Hz (CC Mode) / DC - 400Hz (LIN,CR Mode)				
OPERATING MODES	Constant Current (CC), Linear CC (LIN), Constant Resistance (CR), CREST FACTOR (CF) (in CC Mode only)				
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)				
CREST & POWER FACTOR RANGE					
Lagging PF	CF: $\sqrt{2}$ to 3.5 . PF: - 0.30 to -0.85				
Leading PF	CF: $\sqrt{2}$ to 3.5 . PF: + 0.30 to +0.85 or 1.00				
METERING					
Voltage Range	0 - 300 V				
Current Range	0 - 12 A	0 - 18 A	0 - 24 A	0 - 36 A	0 - 54 A
Power Range	0 - 1200 W	0 - 1800 W	0 - 2400 W	0 - 3600 W	0 - 5400 W
VA Range	0 - 1200 VA	0 - 1800 VA	0 - 2400 VA	0 - 3600 VA	0 - 2400 VA
OTHER SPECIFICATIONS					
CURRENT MONITOR	3 A/V	4.5 A/V	6 A/V	9 A/V	13.5 A/V
DIMENSIONS (WxHxD)	440 x 177 x 445 mm			596 x 889 x 600 mm	
	17.3" x 7.0" x 17.5			23.5" x 35" x 23.6"	
WEIGHT (Net)	18.5kg / 40.8 lbs	23.6kg / 52.0 lbs	77.0kg / 169.8 lbs	77.0kg / 169.8 lbs	98.5kg / 217.2 lbs

3B SERIES - AC & DC LOADS

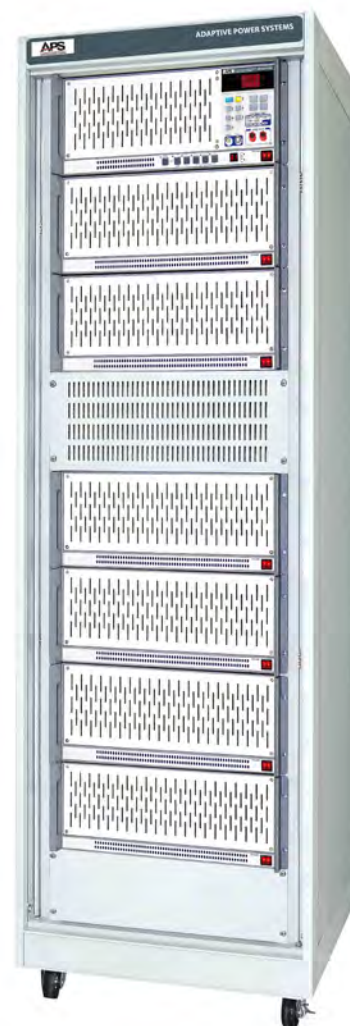
MODEL	3B072-72		3B090-90		3B108-108		3B126-126	
OPERATING RANGES								
Power Ranges	0 - 7200 VA		0 - 9000 VA		0 - 10800 VA		0 - 12600 VA	
Current Ranges	0 - 36 A	36 - 72 A	0 - 45 A	45 - 90 A	0 - 54 A	54 - 108 A	0 - 63 A	63 - 126 A
Voltage Range	50 - 300 Vrms		50 - 300 Vrms		50 - 300 Vrms		50 - 300 Vrms	
Frequency	DC, 40 - 400Hz (CC Mode) / DC - 400Hz (LIN,CR Mode)							
OPERATING MODES	Constant Current (CC), Linear CC (LIN), Constant Resistance (CR), CREST FACTOR (CF) (in CC Mode only)							
PROTECTION	Over Power (OP), Over Current (OC), Over Voltage (OV), Over Temperature (OT)							
CREST & POWER FACTOR RANGE								
Lagging PF	CF: $\sqrt{2}$ to 3.5 . PF: - 0.30 to -0.85							
Leading PF	CF: $\sqrt{2}$ to 3.5 . PF: + 0.30 to +0.85 or 1.00							
METERING								
Voltage Range	0 - 300 V							
Current Range	0 - 72 A		0 - 90 A		0 - 108 A		0 - 126 A	
Power Range	0 - 7200 W		0 - 9000 W		0 - 10800 W		0 - 12600 W	
VA Range	0 - 7200 VA		0 - 9000 VA		0 - 10800 VA		0 - 12600 VA	
OTHER SPECIFICATIONS								
CURRENT MONITOR	3 A/V		4.5 A/V		6 A/V		9 A/V	
DIMENSIONS (WxHxD)	596 x 889 x 600 mm						596 x 1778 x 600 mm	
	23.5" x 35" x 23.6"						23.5" x 70" x 23.6"	
WEIGHT (Net)	153.0kg / 337.3 lbs		174.5kg / 384.7 lbs		196.0kg / 432.1 lbs		230.5kg / 508.2 lbs	

3B Series Cabinets

The 3B Series cabinets contain 2 or more load chassis operating in parallel mode and are shipped as fully configured systems. This includes all internal wiring for AC input and bus bars for Load.

Ordering Information

Specify model number 3Bxxx-xx and AC input voltage, 115Vac or 230Vac.



Model 3B126-126 AC & DC Load Cabinet

Key Features

- Programmable AC or DC Load Modules
- AC Voltage range 350Vac, Voltage DC range 500Vdc
- Sine, Square or Step Waveform Support
- CC, CR, and Crest Factor Modes of Operation
- Full range 0.0 to ±1.0 Leading or Lagging Power Factor
- Precision 16 bit measurements for V, I, W and VA
- Frequency Range 40 Hz to 440 Hz and DC
- Easy front-panel operation and GO/NO-GO limit check
- MASTER/SLAVE mode for higher power or three phase configurations
- Interfaces: USB, LAN, RS232 or GPIB



Description

The ADAPTIVE POWER 3C Series Programmable AC and DC Electronic Loads are ideally suited for testing AC power supplies, frequency converters, DC/AC inverters, Uninterruptable Power Supplies (UPS) and transformers. With their ability to support sinusoidal and non-sinusoidal AC voltage waveforms alike, the 3C Series loads can support a wide variety of AC test requirements.

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

The high power density of 3750VA/W in a 4U high, single 19" wide rack-mount chassis supports bench testing of most single phase AC products. The 3C Series consists of a total of three bench models. Higher power system can be configured using up to three 4U units in a master/slave parallel mode or in 3 phase Delta or Wye configuration. All models offer dual current range capability for optimal accuracy and resolution using 5 digit precision metering.

The 3C Series supports an AC frequency range from 40Hz to 440Hz. This covers testing at utility power frequencies for commercial and industrial power sources as well as at 400Hz avionics power for military, defense and commercial aviation power source testing.

MODEL	3C018-18		3C028-18		3C028-28		3C038-28		3C038-38	
OPERATING RANGES										
Power Ranges	0 - 1875 VA / W		0 - 2800 VA / W		0 - 2800 VA / W		0 - 3750 VA / W		0 - 3750 VA / W	
Current	0-18.75 Arms	56.25 Apeak	0-18.75 Arms	56.25 Apeak	0 - 28.0 Arms	84.0 Apeak	0 - 28.0 Arms	84.0 Apeak	0 - 37.5 Arms	112.5 Apeak
Voltage Range	50 - 350 Vrms/ 500.0 Vdc									
Frequency	DC, 40 - 440 Hz in CC & CP Modes, DC - 440 Hz in LIN, CR & CV Modes									
AC Waveforms	Sinewave, Square Wave, Quasi-Square Wave. PWM Wave									
OPERATING MODES										
Constant Current (CC), Linear CC (LIN), Constant Resistance (CR), CREST FACTOR (CF)										
CREST / POWER FACTOR RANGE										
Range	CF: $\sqrt{2}$ to 5.0 / PF: 0.00 to 1.00 Leading or Lagging									
Resolution	CF: 0.1 / PF: 0.01									
Accuracy	CF: (0.5% / Irms) + 1.0% F.S. / PF: 1.0% F.S.									
TEST MODES										
Type	UPS Efficiency Measurement (Non-linear Mode)					Measuring Efficiency for PV Systems and Power Conditioners for				
	UPS Back-up Function (CC, LIN, CR, CP Modes)					THD 80% - Resistive + Non Linear CC Mode				
	Battery Discharge Function (CC, LIN, CR, CP Modes)					UPS Transfer Time				
	Fuse Test Mode									
METERING										
Voltage Ranges	0 - 500 V									
Current Range	0 - 9.375 A	0 - 18.75 A	0 - 9.375 A	0 - 18.75 A	0 - 14.0 A	0 - 28.0 A	0 - 14.0 A	0 - 28.0 A	0 - 18.75 A	0 - 37.5 A
Power Range	0 - 1875 W		0 - 2800 W		0 - 2800 W		0 - 3750 W		0 - 3750 W	
VA Range	0 - 1875 VA		0 - 2800 VA		0 - 2800 VA		0 - 3750 VA		0 - 3750 VA	
GENERAL										
AC Input	100 - 230 Vac \pm 10%, 50/60 Hz									
Cooling	Variable speed fan, front air intake, rear exhaust									
Dimensions (H x W x D)	177 x 513 x 440 mm / 7" x 20.2" x 17.32"									
Weight (Net)	21.5 kg / 47.4 lbs		21.5 kg / 47.4 lbs		27.5 kg / 60.6 lbs		27.5 kg / 60.6 lbs		33.5 kg / 73.9 lbs	
Operating Temp. Range	0 - 40° C / 32 - 104° F									
EMC & Safety	CE Mark									

3C SERIES - AC & DC LOADS

MODEL	3C075-75		3C112-112	
OPERATING RANGES				
Power Ranges	0 - 7500 VA / W		0 - 11250 VA / W	
Current	0 - 75 Arms	225 Apeak	0 - 112.5 Arms	337.5 Apeak
Voltage Range	50 - 350 Vrms/ 500.0 Vdc			
Frequency	DC, 40 - 440 Hz in CC & CP Modes, DC - 440 Hz in LIN, CR & CV Modes			
AC Waveforms	Sinewave, Square Wave, Quasi-Square Wave. PWM Wave			
OPERATING MODES				
Constant Current (CC), Linear CC (LIN), Constant Resistance (CR), CREST FACTOR (CF)				
CREST / POWER FACTOR RANGE				
Range	CF: $\sqrt{2}$ to 5.0 / PF: 0.00 to 1.00 Leading or Lagging			
Resolution	CF: 0.1 / PF: 0.01			
Accuracy	CF: (0.5% / Irms) + 1.0% F.S. / PF: 1.0% F.S.			
TEST MODES				
Type	UPS Efficiency Measurement (Non-linear Mode)		Measuring Efficiency for PV Systems and Power Conditioners for THD 80% - Resistive + Non Linear CC Mode	
	UPS Back-up Function (CC, LIN, CR, CP Modes)			
	Battery Discharge Function (CC, LIN, CR, CP Modes)		UPS Transfer Time	
	Fuse Test Mode			
METERING				
Voltage Ranges	0 - 500 V			
Current Range	0 - 37.5 A	0 - 75.0 A	0 - 56.25 A	0 - 112.5 A
Power Range	0 - 7500 W		0 - 11250 W	
VA Range	0 - 7500 VA		0 - 11250 VA	
GENERAL				
AC Input	100 - 230 Vac \pm 10%, 50/60 Hz			
Cooling	Variable speed fan, front air intake, rear exhaust			
Dimensions (H x W x D)	458 x 480 x 593 mm / 18.0" x 18.9" x 23.4"		636 x 480 x 593 mm / 25.0" x 18.9" x 23.4"	
Weight (Net)	70 kg / 154.3 lbs		105 kg / 231.5 lbs	
Operating Temp. Range	0 - 40° C / 32 - 104° F			
EMC & Safety	CE Mark			

Note 1: S = Siemens or ohm, unit of conductance. $1S = 1/\Omega = A/V$.

Note 2: Accuracy specifications are valid for ambient temperature of 25 ± 5 °C



Model 3C075-75 AC & DC Load



Model 3C112-112 AC & DC Load

APS POWER PRODUCTS SOFTWARE

Adaptive Power Systems control software allows full control over your Adaptive Power products from a Windows PC.

This includes load programming, measurements, data logging, sequencing of test steps if supported by the product and any other functions and features that are programmable. We also offer instrument drivers for LabView for customer that need to develop their own ATE system using multiple types of test equipment.

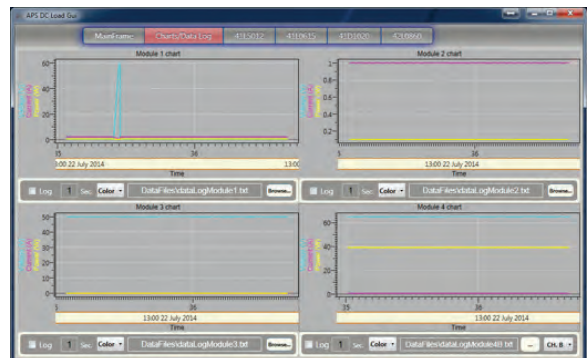
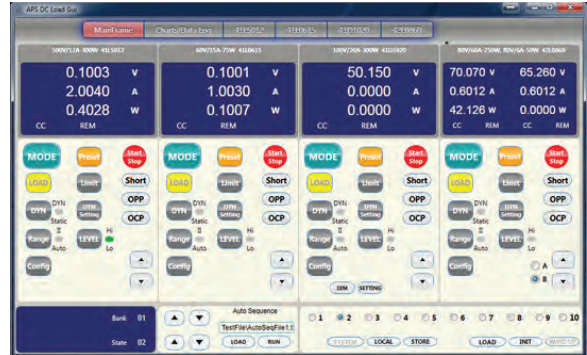
For product information, select the software for the relevant product category below.

DC Load GUI Software

The ADAPTIVE POWER SYSTEMS DC Load GUI control software provides a graphical user interface (GUI) that allows you to take full control of all DC load functions and settings over any of the available remote control interfaces using a Windows computer. Using a visual representation of the actual front panel layout and operation of the load, this Windows software adds convenient data entry using a PC keyboard and mouse. The larger screen available on PC's also provides multiple read outs and enhanced data displays compared to front panel operation.

OS Support: Windows 7, 8.1, 10

Interfaces: USB, RS232, LAN, GPIB

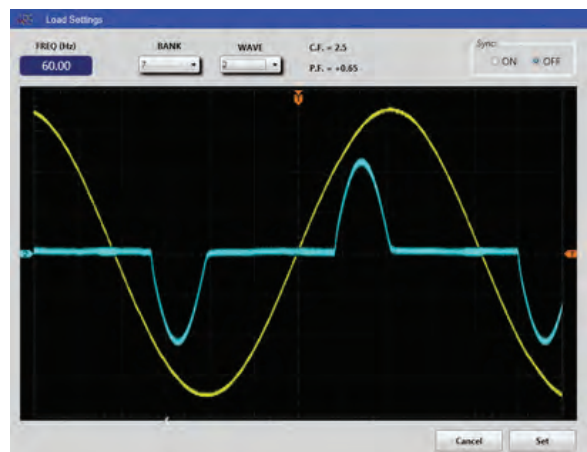


AC+DC Load GUI Software

The ADAPTIVE POWER SYSTEMS AC Load GUI control software provides a graphical user interface (GUI) that allows you to take full control of all AC load functions and settings over any of the available remote control interfaces using a Windows computer. Both AC mode and DC mode of operation is supported. Using a visual representation of the actual front panel layout and operation of the load, this Windows software adds convenient data entry using a PC keyboard and mouse. The larger screen available on PC's also provides multiple read outs and enhanced data displays compared to front panel operation.

OS Support: Windows 7, 8.1, 10

Interfaces: USB, RS232, LAN, GPIB



PRECISION PROGRAMMABLE AC & DC LOADS



Model 3C018-18



Model 3C028-18



Model 3C028-28



Model 3C038-28



Model 3C038-38

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.

New Product Warranty: AC Sources & Loads: 1 year, DC Power Supplies: 2 years.

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).

NEED HELP?

sales@adaptivepower.com
OR CALL
Toll Free: +1 (866) 517-8400
Int: +1 (949) 752-8400



NORTH AMERICA

Adaptive Power Systems
Irvine, USA
Phone: +1(949) 752-8400
Fax: +1 (949) 756-0838
Email: support@adaptivepower.com

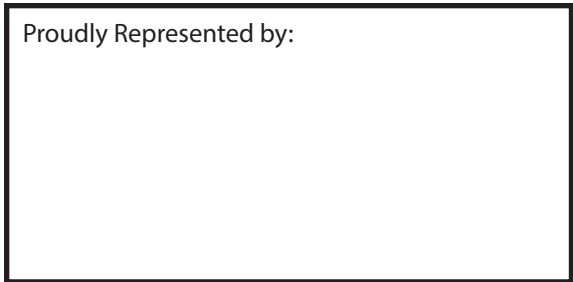
EUROPE

Caltest Instruments Ltd.
Guildford, United Kingdom
Phone: +44(0)1483 302 700
Fax: +44(0)1483 300 562
Email: support@adaptivepower.com

CHINA

PPST Shanghai Co. Ltd.
Shanghai, China
Phone: +86-21-6763-9223
Fax: +86-21-5763-8240
Email: support@adaptivepower.com

Proudly Represented by:



ADAPTIVE POWER SYSTEMS

17711 Mitchell North
Irvine, CA 92614
United States
Toll Free: 1.866.517-8400
Tel: +1.949.752-8400
Fax: +1.949.756-0838

