

Series 2260B Programmable DC Power Supplies



Key features

- 360W, 720W and 1080W versions with voltage up to 800V and current up to 108A
- Programmable voltage or current rise and fall times preventing damage from inrush current to low impedance loads
- Constant current priority setting reduces voltage and current overshoot when powering LEDs
- Simulate a battery's output with a programmable internal resistance
- Choose from analog control, USB, LAN, or an optional GPIB interface for automated control
- Save bench and test system space: six 71mm wide 360W units or three 142mm wide 720W units or two 214mm wide 1080W units fit in a standard rack width

Applications

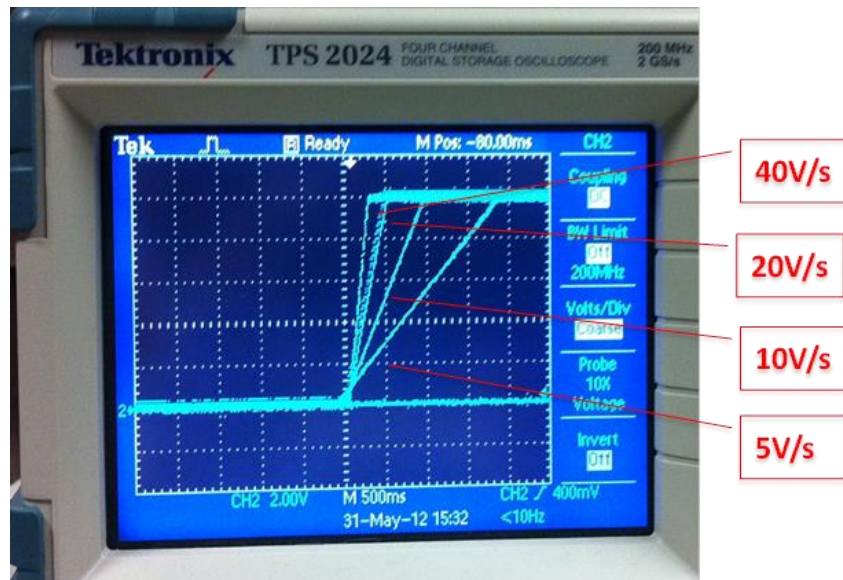
- Environmental test, stress test, and accelerated life testing
- LED lighting and high power component testing
- Automotive electronics testing
- Battery research and test
- Production test

Source a wide range of voltages and currents with the 360W Model 2260B-30-36, 2260B-80-13, 2260B-250-4 or 2260B-800-1, with the 720W Model 2260B-30-72, 2260B-80-27, 2260B-250-9 or 2260B-800-2, with the 1080W Model 2260B-30-108, 2260B-80-40, 2260B-250-13 or 2260B-800-4 Programmable DC Power Supplies. All twelve instruments have constant power outputs to provide a wide range of voltage and output currents. The 360W supplies can output as much as 30V, 80V, 250V and 800V or as much as 36A, 13.5A, 4.5A and 1.44A, the 720W supplies can output 72A, 27A, 9A and 2.88A, the 1080W supplies can output 108A, 40.5A, 13.5A and 4.32A, with the same maximum voltage outputs. The wide range of output voltages and current of the Series 2260B power supplies along with multiple interfaces

in the Series 2260B power supplies enables their use in a wide range of applications including research and design, quality control, and production test.

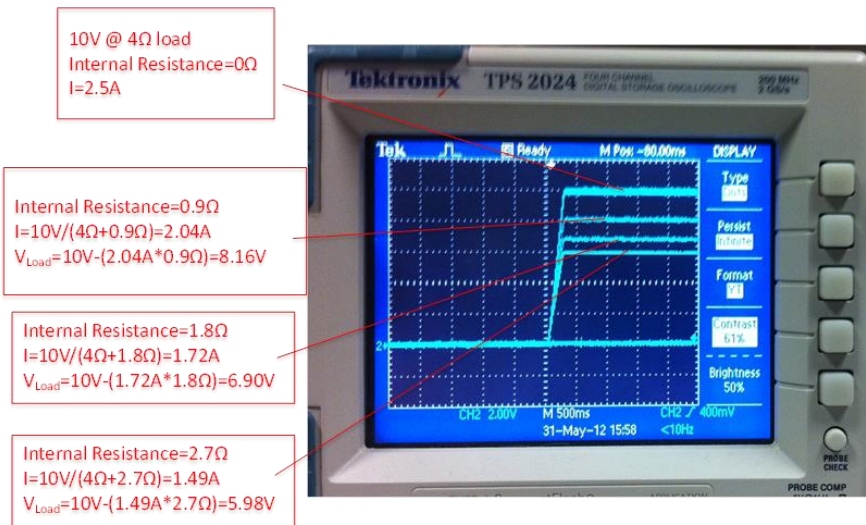
Control the Voltage or Current Rise time to Reduce Inrush Current and Prevent Device Damage

To prevent potentially dangerous inrush currents from flowing into loads that have low resistance when power is initially supplies, the Series 2260B power supplies have programmable rise time (or slew rate) control. Either the voltage rise time or the current rise time can be controlled. With voltage slew rate control, the voltage rise time can range from a slow, 0.1V/s, to a high speed of 160V/s. When operating under constant current control, the output current rise time can be programmed from a low slew rate of 0.01A/s to a maximum value of 144A/s. The programming of a current rise time, puts the series 2260B supplies in a constant current control priority mode in which the current slew rate limits the rate at which the voltage rises across the device-under-test (DUT). In addition to controlling the rise time, the fall time can also be programmed; and the fall time values can be different from the rise time values. Thus the delivery of power to a load can be precisely controlled to prevent overshoot spikes and excessive amounts of inrush current. This capability prevents damage to components, modules, or devices and will generate more precise characteristic I-V curves for components such as LEDs.



Emulate the Response of a Battery

Test a circuit or device under the most realistic conditions by applying a test source with the output resistance that is equivalent to the output resistance of the actual source that will be used to power the circuit or device. For example, a battery has a varying internal resistance and, a device powered by a battery will have a voltage applied to the device that is reduced by the voltage drop across the battery's internal resistance. Versions of the series 2260B supplies can have an internal resistance up to 5.9Ω to simulate devices such as a lead-acid battery.



Flexible and Fast for Automated Test Systems

The Series 2260B power supplies will work in any automated system since they can interface to a controller with either a USB, LAN, or an optional GPIB interface. In addition, these supplies have an analog control capability which can control outputs via an external voltage and resistance. Furthermore the series 2260B supplies have fast discharge capability to quickly dissipate the voltage on the output. These supplies also have a fast, 1ms, transient recovery time to load changes. The combination of the fast discharge time and the fast transient response help minimize critical test time in automated test systems.

Use the programmable internal resistance to simulate a battery's output. In this example, a Series 2260B power supply is simulating a 10V battery whose internal resistance is 0Ω, 0.9Ω, 1.8Ω, and 2.7Ω. The resulting voltage at the output terminals drops from 10V to 5.98V due to the voltage drop across the internal resistance of the battery.

Ordering Information

2260B-250-4	Programmable DC 360W Power Supply, 250V, 4.5A
2260B-800-1	Programmable DC 360W Power Supply, 800V, 1.44A
2260B-250-9	Programmable DC 720W Power Supply, 250V, 9A
2260B-800-2	Programmable DC 720W Power Supply, 800V, 2.88A
2260B-30-108	Programmable DC 1080W Power Supply, 30V, 108A
2260B-80-40	Programmable DC 1080W Power Supply, 80V, 40.5A
2260B-250-13	Programmable DC 1080W Power Supply, 250V, 13.5A
2260B-800-4	Programmable DC 1080W Power Supply, 800V, 4.32A

Accessories Supplied

2260B Basic Accessory Kit (for 36V and 80V models)
 2260B-010 Basic Accessories Kit (for 250V/800V Series)
 User Manual
 Documentation CD
 Test Lead Set (for 36V and 80V models)
 2260-009 Test Lead (for 250V/800V models)

Accessories Available

2260B-GPIB-USB GPIB-to-USB Adapter
 2260B-EXTERM Extended Terminal
 2260B-EXTERM-HV Extended Terminal (for 250V/800V HV models)
 2260B-RMK-JIS Rack Mount Kit (JIS racks)
 2260B-RMK-EIA Rack Mount Kit (EIA racks)

	2260B-800-1	2260B-250-4	2260B-800-2	2260B-250-9	2260B-800-4	2260B-250-13	2260B-80-40	2260B-30-108
DC output rating								
Voltage	0 -800V	0 -250V	0 -800V	0 -250V	0 - 800V	0 - 250V	0 - 80V	0 - 30V
Current	0 -1.44A	0 - 4.5A	0-2.88A	0 - 9A	0 - 4.32A	0 - 13.5A	0 - 40.5A	0 - 108A
Maximum power	360W	360W	720W	720W	1080W	1080W	1080W	1080W
Ripple and Noise (20 Hz to 7 MHz)								
CV p-p	150 mV	80 mV	200 mV	100 mV	200 mV	120 mV	100 mV	100 mV
CV rms	30 mV	15 mV	30 mV	15 mV	30 mV	15 mV	14 mV	14 mV
CC rms	5 mA	10 mA	10 mA	20 mA	15 mA	30 mA	81 mA	216 mA
Setting resolution								
Voltage	14 mV	5 mV	14 mV	5 mV	14 mV	5 mV	2 mV	1 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA	3 mA	3 mA
Setting accuracy (using remote sense, 25 °C ± 5 °C)								
Voltage	0.1 % + 400 mV	0.1 % + 200 mV	0.1 % + 400 mV	0.1 % + 200 mV	0.1 % + 400 mV	0.1 % + 200 mV	0.1 % + 10 mV	0.1 % + 10 mV
Current	0.1 % + 2 mA	0.1 % + 5 mA	0.1 % + 4 mA	0.1 % + 10 mA	0.1 % + 6 mA	0.1 % + 15 mA	0.1 % + 40 mA	0.1 % + 100 mA
Readback resolution								
Voltage	14 mV	5 mV	14 mV	5 mV	14 mV	5 mV	2 mV	1 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA	3 mA	3 mA
Readback accuracy (25 °C ± 5 °C)								
Voltage	0.1 % + 400 mV	0.1 % + 200 mV	0.1 % + 400 mV	0.1 % + 200 mV	0.1 % + 400 mV	0.1 % + 200 mV	0.1 % + 10 mV	0.1 % + 10 mV

Current	0.1 % + 2 mA	0.1 % + 5 mA	0.1 % + 4 mA	0.1 % + 10 mA	0.1 % + 6 mA	0.1 % + 15 mA	0.1 % + 40 mA	0.1 % + 100 mA
Output delay time range								
On delay and off delay: 0 s ~99.99 s								
Protection function								
OVP: 10% to 110% of rated output voltage range OCP: 10% to 110% of rated output current range. OTP: Activated by elevated internal temperatures.								