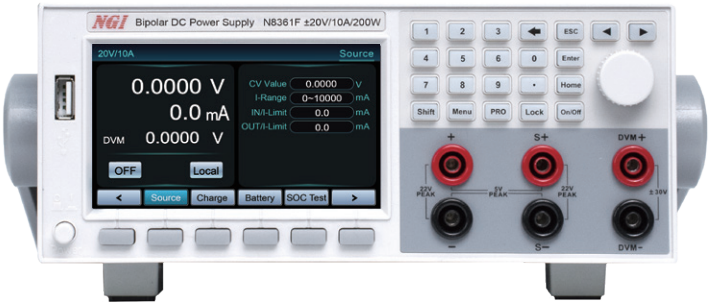
N8361F Bipolar Programmable DC Power Supply



Product Introduction

N8361F series is a programmable DC power supply with bipolar voltage and bidirectional current output, which can be operated from the first to the fourth quadrant. N8361F supports characteristics such as fast response,high accuracy,high stability,high flexibility. its voltage rise and fall time less than 50μs, current accuracy up to 1μA, It can be used in applications that require positive and negative voltage power supply, such as analog circuits, laboratory equipment, electronic component testing and automotive electronic ground drift testing.

Application Fields

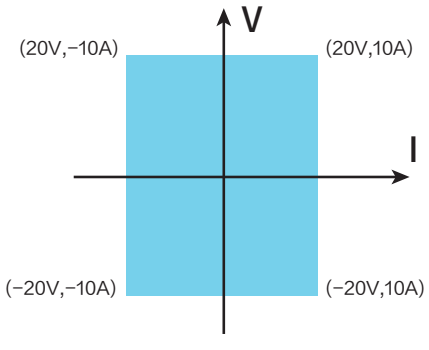
- Positive and negative voltage electronic products test
- Consumer electronics fast charge test
- Analog circuit, relay test
- ECU ground drift test

Main Features

- Voltage Range:-20V~+20V
- Current Range: -10A~+10A,Power Range： 0~200W
- Voltage rise and fall time ≤50μs
- Support SEQ mode
- High accuracy: voltage accuracy 0.01%+2mV,Current accuracy up to 1μA
- High precision DVM
- Support front and rear outlet, easier for desktop & integration
- With digital I/O,supporting trigger test
- LAN/RS232/CAN Interface

Bipolar Power Supply, Four-quadrant Operation

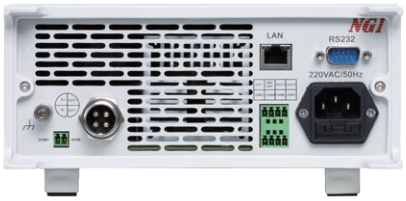
The unique feature of bipolar DC power supply is the positive and negative polarity switch. By adjusting the position of the switch, users can choose positive voltage or negative voltage output to meet the needs of circuit testing. Combined with the bidirectional current flow design,N8361F can achieve four-quadrant operation.



▲ N8361F Four−quadrant Operation

Front and rear wiring design

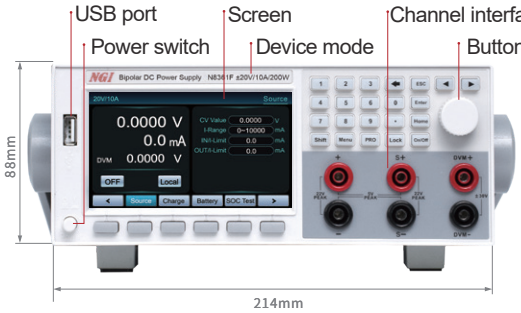
N8361F is equipped with banana jack at the front panel and output terminal at the rear panel, which is easy for desktop application & integration,and improves the test efficiency.

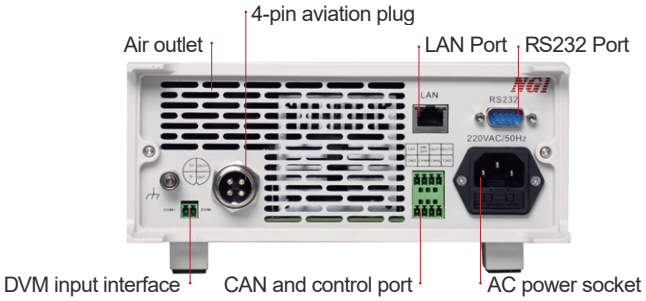


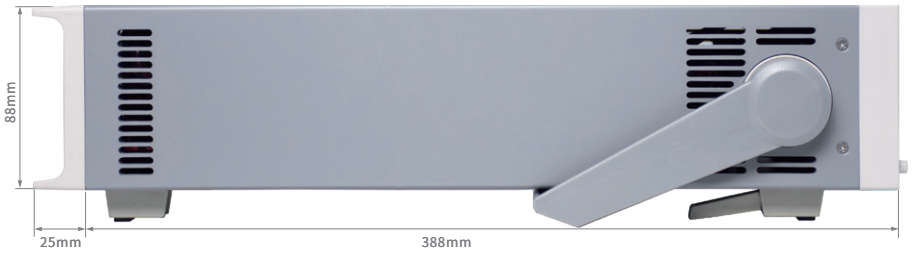
DVM test function

N8361F series provides basic circuit measurement function. It has one channel built-in DVM to test external voltage. The voltage range is -30V ~ 30V, and the resolution is 0.1mV. The LCD screen will show the dynamic data, which is convenient for users to observe the voltage changes.

Product Dimension







Technical Data Sheet

Model	N8361F		
Current	±10A/CH		
Voltage	±20V/CH		
Power	200W/CH		
CV Mode			
Range	-20~0V	0~20V	
Setting Resolution	0.1mV		
Setting Accuracy (23±5℃)	0.01%+3mV		
Readback Resolution	0.1mV		
Readback Accuracy（23±5℃）	0.01%+2mV		
Load Regulation	0.01%		
Line Regulation	0.01%		
Voltage Ripple (20Hz-20MHz)	1mVrms		
Temperature Coefficient (0-40℃)	≤25ppm/℃		
Current Measurement			
Range 1			
Range	-10~10A		
Resolution	0.1mA		
Accuracy (23±5℃)	0.05%+4mA		
Range 2			
Range	-1~1A		
Resolution	0.01mA		
Accuracy (23±5℃)	0.05%+0.4mA		
Range 3			
Range	-1~1mA		
Resolution	0.1μA		
Accuracy (23±5℃)	0.05%+1μA		
DVM Function			
Channels	1CH	Measurement Accuracy	±0.01%F.S.
Measurement Range	-30V~+30V	Measurement Frequency	4Hz
Measurement Resolution	0.1mV	Input Impedance	2MΩ
Terminal	Pluggable terminal	Temperature Coefficient（0~40℃）	30ppm/℃
Dynamic Characteristics			
Voltage Rise Time (10%-90%F.S. Variation Time)	<50μs (no load)	Voltage Rise Time (10%-90%F.S. Variation Time)	<50μs (pure resistive full load)
Voltage Fall Time (90%-10%F.S. Variation Time)	<50μs (no load)	Voltage Fall Time (90%-10%F.S. Variation Time)	<50μs (pure resistive full load)
Transient Voltage Drop [1]	600mV	Transient Recovery Time[2]	<100μs
Others			
Communication Response Time	≤10ms		
Interface	LAN/RS232/CAN		
AC Input	Single phase 100-240V AC, frequency 47Hz~63Hz, current ≤2A@220V, ≤4A@110V		
Temperature	Operating temperature: 0℃~40℃, storage temperature: -20℃~60℃		
Operating Environment	Altitude <2000m, relative humidity: 5%~90%RH(non-condensing), atmospheric pressure: 80~110kPa		
Net Weight	Approx. 4kg		
Dimension	2U, 88.0(H)*214.0(W)*388.0(D)mm		

Note 1: Load varies from10% to 90% by full voltage output.
Note 2: Load varies from 10% to 90% by full voltage output, with voltage recovering within 50mV of previous voltage.
Note 3: For other specifications, please contact NGI.
Note 4: All specifications are subject to change without notice.