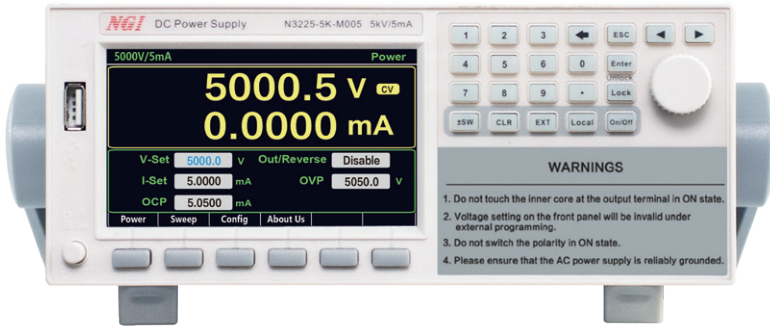


N3200 Series High Voltage Programmable DC Power Supply



DC Power Supply

Product Introduction

In high voltage device, material tests, and high energy physics experiments, it has high voltage and low current requirements, such as IGBT device breakdown test and insulation test. N3200 series high voltage DC power supply is developed for high voltage test scenarios, based on NGI's years of experience in development and design of electronic circuits and instruments. N3200 series can provide up to 10kV voltage output. Its voltage/current resolution can be up to 0.1V/0.1µA. The 2U height and half 19 inch chassis can be used not only for benchtop application, but also for rack installation. The high definition LCD screen can display multiple data.

Application Fields

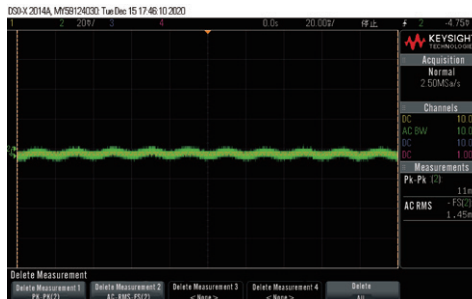
- ▶ High voltage device breakdown test
- ▶ Insulation test
- ▶ High energy physics research
- ▶ High voltage component test
- ▶ High voltage resistivity test
- ▶ Leakage Current Test

Main Features

- ▶ Voltage range: ±2.5kV/±5kV/±10kV
- ▶ Current range: 10mA/5mA/2mA
- ▶ Voltage/current minimum resolution: 0.1V/0.1µA
- ▶ Basic voltage accuracy 0.05%
- ▶ Voltage down to 0V to adjust
- ▶ Voltage/current trip warning
- ▶ Low noise for high accuracy and sensitivity measurement
- ▶ OVP/OCP/OTP protection
- ▶ LAN port and RS232 interface, supporting SCPI commands
- ▶ 4.3 inch high definition LCD screen
- ▶ High voltage output terminal, analog programming interface and voltage/current monitoring interface

Low output noise

Low output noise is critical to the power supply. Output ripple of N3200 series can be lower than 3mVrms, which is very beneficial for sensitive measuring instruments to make leakage current or high resistivity measurement.



▲ Ripple Waveform

Big size LCD screen

N3200 series adopts a 4.3-inch high definition LCD screen. Compared with traditional LED digital tubes, LCD screens have the advantages of low power consumption, compact size, and low radiation. With big size LCD screen and user-friendly interface design, it makes N3200 intuitive and easy to use.



▲ N3200 Interface

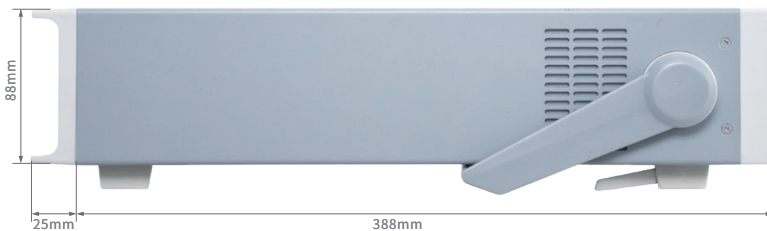
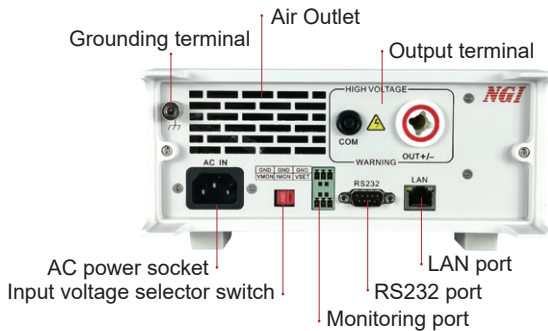
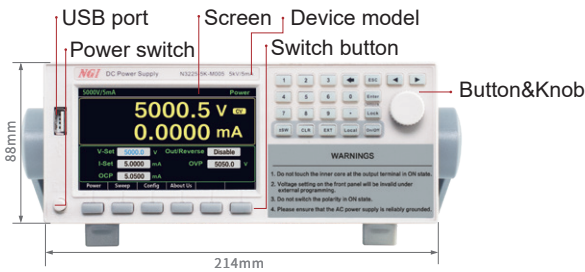


▲ Sweep

Easy to build high voltage test system

The N3200 series provides rear outlet high voltage output interface, analogue programming interface, voltage and current monitoring interface, LAN, RS232 and SCPI command supportable, with the NE101 communication converter to support the IEEE-488 standard system. Users can easily create automated high-voltage test system, which will also further improve test safety.

Product Dimension



Technical Data Sheet

Model	N3225-2.5K-M010		N3225-5K-M005		N3225-10K-M002	
Voltage	±2500V		±5000V		±10000V	
Current	10mA		5mA		2mA	
Power	25W		25W		20W	
Channels	1CH					
Voltage Range	-2500V~0V	0V~+2500V	-5000V~0V	0V~+5000V	-10000V~0V	0V~+10000V
Setting Resolution (Voltage)	0.1V		0.1V		1V	
Setting Resolution (Current)	0.1μA					
Setting Accuracy (Voltage) (23±5°C)	0.01%+0.05%F.S.					
Setting Accuracy (Current) (23±5°C)	0.02%+0.05%F.S.					
Setting Temperature Coefficient	50ppm/°C					
Readback Resolution (Voltage)	0.1V		0.1V		1V	
Readback Resolution (Current)	0.1μA					
Readback Accuracy (Voltage) (23±5°C)	0.01%+0.05%F.S.					
Readback Accuracy (Current) (23±5°C)	0.02%+0.05%F.S.					
Readback Temperature Coefficient	50ppm/°C					
Long-term Stability	≤50ppm/1000h					
Voltage Noise & Ripple (20Hz~20MHz) (With filter)	≤15mVp-p/≤3mVrms		≤30mVp-p/≤3mVrms		≤50mVp-p/≤10mVrms	
Dynamic Characteristics						
Voltage Rise Time (no load) (10%-90%F.S. Variation Time)	≤3s		≤4s		≤8s	
Voltage Rise Time (full load) (10%-90%F.S. Variation Time)	≤3s		≤4s		≤8s	
Voltage Fall Time (no load) (90%-10%F.S. Variation Time)	≤15s		≤30s		≤60s	
Voltage Fall Time (full load) (90%-10%F.S. Variation Time)	≤3s		≤3s		≤3s	
Voltage Settling Time	3s					
Line Regulation(Voltage)	≤0.01%					
Load Regulation(Voltage)	≤0.01%					
Monitoring Terminal						
Range 0~10V	0~±2500VDC(Voltage), 0~±10mA(Current)		0~±5000VDC(Voltage), 0~±5mA(Current)		0~±10000VDC(Voltage), 0~±2mA(Current)	
Output Impedance	1Ω					
Accuracy	0.2% F.S.					
Update Rate	8Hz					
External Programming						
Range 0~10V	0~±2500VDC(Voltage)		0~±5000VDC(Voltage)		0~±10000VDC(Voltage)	
Input Impedance	1MΩ					
Accuracy	0.2% F.S.					
Update Rate	16Hz					
Others						
Isolation (Output to ground)	2500V DC		5000V DC		10000VDC	
Communication Response Time	2ms					
Interface	LAN/RS232					
AC Input	Voltage110/220V AC±10%(toggle switch), frequency 47Hz~63Hz					
Temperature	Operating temperature: 0°C~40°C, storage temperature: -20°C~60°C					
Operating Environment	Altitude <2000m, relative humidity: 5%~90%RH(non-condensing), atmospheric pressure: 80~110kPa					
Net Weight	Approx. 3kg					
Dimension	2U, 88.00(H) * 214.00(W) * 413.00(D)mm					

Note 1: For other specifications, please contact NGI.

Note 2: All specifications are subject to change without notice.