

N36200 Series Wide Range Programmable DC Power Supply



Product Introduction

N36200 series is a wide range programmable DC power supply with ultra compact size, high performance, high power density. The 1 U height and half 19 inch width design brings comfortable experience with space-saving in both standalone and integrated cabinet. N36200 series supports fast dynamic response, high accuracy output, multi test functions, to meet the needs of different application scenarios.

Application Fields

- ▶ R&D laboratory
- ▶ Aerospace&automotive electronics
- ▶ ATE test system
- ▶ Storage battery
- ▶ Consumer electronics

Main Features

- ▶ Ultra compact size, high power density
- ▶ Fast dynamic response time, voltage rise&fall time $\leq 10\text{ms}$
- ▶ Voltage accuracy: $0.03\% + 0.02\% \text{F.S.}$
- ▶ Current accuracy: $0.1\% + 0.1\% \text{F.S.}$
- ▶ Support automotive waveform simulation test (optional)
- ▶ Support SEQ test, battery charging test, internal resistance simulation
- ▶ Support LAN/RS232/RS485/CAN communication control
- ▶ Support Modbus-RTU/SCPI/CANopen communication protocol
- ▶ Adjustable voltage/current slew rate
- ▶ CC&CV priority function
- ▶ 3.2 inch LCD screen

Ultra compact size, High power density

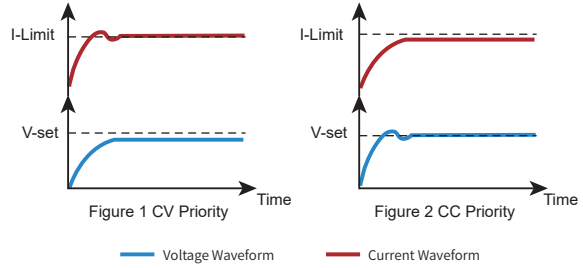
N36200 series DC power supply adopts systematic heat dissipation design, 1U half-width chassis integrated 1600W wide range output, voltage up to 80V, current up to 42 A. N36200 series is designed with small size and high power density to meet customers' test application scenarios, save the purchasing cost and occupied space.



CC&CV priority function

N36200 series supports CC&CV priority function, users can choose the optimal working mode for testing according to the characteristics of DUT.

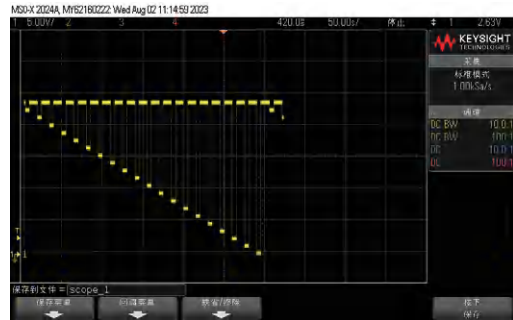
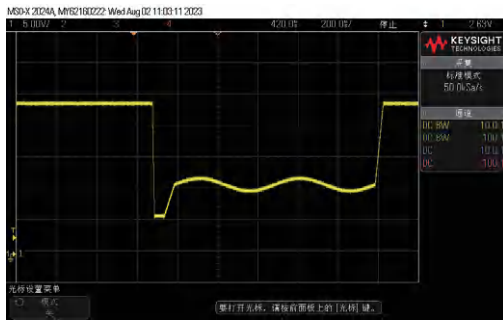
As shown in figure one, when the DUT needs to avoid voltage overshoot during testing, the voltage priority mode should be used to obtain a fast and smooth rise voltage.



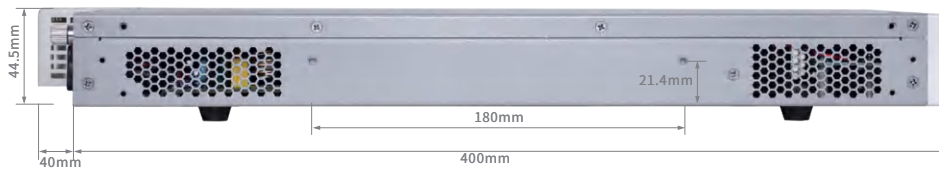
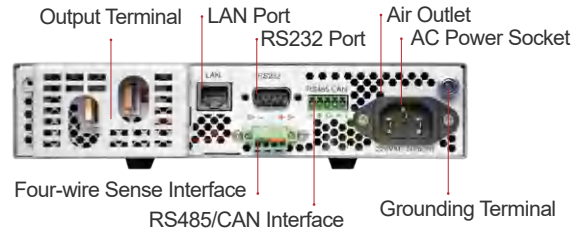
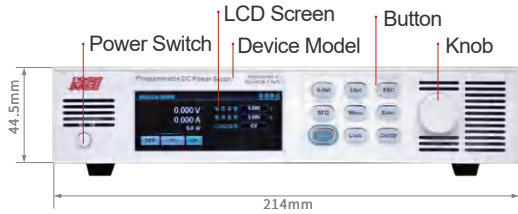
As shown in figure two, when the DUT needs to avoid the current overshoot, or the DUT is low impedance, the current priority mode should be used to obtain a fast and smooth rising current.

Support automotive waveform analogue function, used for cartronics electric performance test(Optional)

N36200 series can be optional automobile waveform analogue function, which can simulate automobile starting waveform, short-time voltage plunge waveform, unloading waveform, etc., it meets ISO16750-2, LV124 and other standards, used for cartronics electric performance test.



Product Dimension



Technical Data Sheet

Model	N36216-80-42		
Voltage	0~80V		
Current	0~42A		
Power	1600W		
CV Mode			
Range	0~80V		
Setting Resolution	1mV		
Setting Accuracy (23±5°C)	≤0.03%+0.02%F.S.		
Voltage Ripple(20Hz-20MHz)	≤80mVp-p		
CC Mode			
Range	0~42A		
Setting Resolution	1mA		
Setting Accuracy (23±5°C)	≤0.1%+0.1%F.S.		
Current Ripple(20Hz-20MHz)	≤50mArms		
CP Mode			
Range	1600W		
Setting Accuracy (23±5°C)	0.1W		
Setting Accuracy (23±5°C)	0.5%F.S.		
Voltage Measurement			
Range	0~80V		
Readback Resolution	1mV		
Readback Accuracy (23±5°C)	≤0.03%+0.02%F.S.		
Current Measurement			
Range	0~42A		
Readback Resolution	1mA		
Readback Accuracy (23±5°C)	≤0.1%+0.1%F.S.		
Line Regulation			
Voltage	≤0.01%F.S.		
Current	≤0.02%F.S.		
Load Regulation			
Voltage	≤0.01%F.S.		
Current	≤0.05%F.S.		
Dynamic Characteristics			
Voltage Rise Time(no load)	≤10ms	Voltage Fall Time(no load)	≤25ms
Voltage Rise Time(full load)	≤10ms	Voltage Fall Time(full load)	≤10ms
Transient Recovery Time	The output voltage recovering within 0.5% of the rated output voltage value (10%~90% load)≤2ms		
Others			
Isolation(Output to Ground)	500V DC		
Interface	LAN/RS232/RS485/CAN		
Communication Response Time	5ms		
AC Input	220V AC±10%, 47Hz~63Hz		
Temperature	Operating temperature: 0°C-40°C, storage temperature: -10°C~70°C		
Operating Environment	Altitude <2000m, relative humidity: 5%-90%RH(non-condensing), atmospheric pressure: 80-110kPa		
Net Weight	Approx. 4.3kg		
Dimension	44.5(H)*214.0(W)*440.0(D)mm, with output shield		

Note 1: For other specifications, please contact NGI.

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