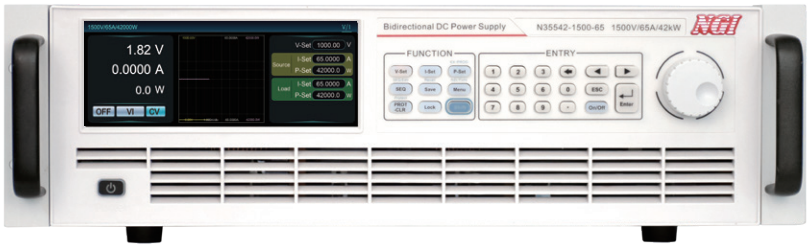
N35500 Series High Performance High Power Bidirectional Programmable DC Power Supply



Product Introduction

The N35500 series is a high power bidirectional programmable DC power supply with dual quadrant, integrating bidirectional power supply and regenerative load to supply and absorb current. With the design of wide range and high power density, voltage range 0~2250V, output power up to 42kW in 3U chassis, it covers a wide range of DUT test applications. N35500 series are equipped with fast dynamic response, high accuracy output and measurement functions, and can also be configured with photovoltaic simulation, battery simulation and other software to help users realize accurate and efficient testing in multiple scenarios.

Application Fields

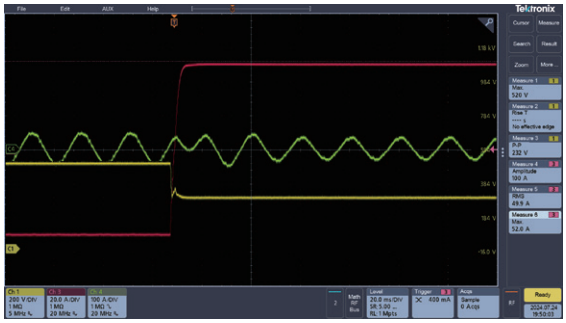
- Laboratory, production line ATE automatic test system
- Photovoltaic inverter, hydrogen fuel cell, solar cell matrix and other new energy fields
- Energy storage converter, UPS, photovoltaic storage machine and other energy storage fields
- BOBC, DC-DC, motor drive, charging pile and other automotive fields
- Charge/discharge test for power batteries, lead batteries, supercapacitors, etc.
- Test for aerospace electronics, high-power communications equipment, drones, etc.

Main Features

- High power density, up to 42kW output in 3U chassis
- Wide output range, one can be used as multiple
- High-speed dynamic response, voltage rise and fall time ≤ 5ms
- Voltage accuracy: 0.02%+0.02%F.S.; Current accuracy: 0.1%+0.1%F.S.
- CC&CV Priority suitable for all types of test item
- Master/Master parallel up to MW level
- Load mode support CC/CV/CP/CR function
- Battery simulation, charge/discharge test, sequence test, waveform function etc.
- PV array I-V curve simulation function
- 6.8 inch LCD screen for clear test information
- Standard with LAN/RS232/RS485/CAN communication
- Modbus-RTU, SCPI, CANopen protocol supportable

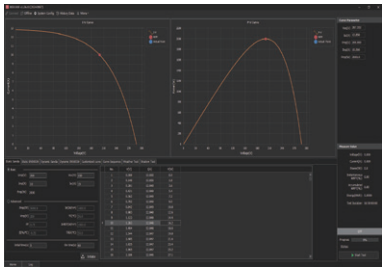
Seamless switch between source and load to regenerate energy

With the integration of power supply and regenerative load, N35500 series bidirectional power supply can be converted continuously seamlessly between the output and absorbed current, effectively avoiding voltage or current overshoot. N35500 series can not only provide external power, but also absorb power, and return electric energy to the grid cleanly, the regenerative efficiency up to 93%. It is widely used in lithium battery, UPS, BOBC and other equipment testing.

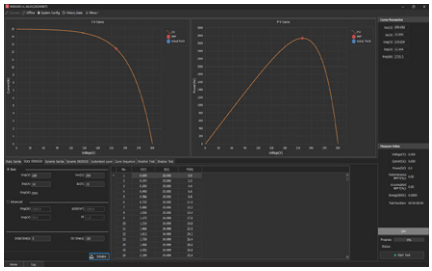


PV Cell Simulation

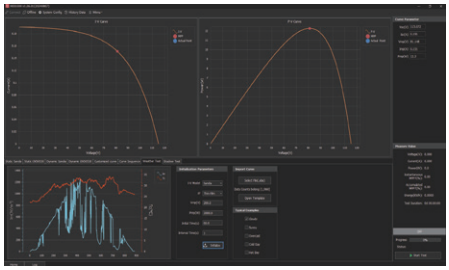
With the characteristics of accurate measurement, high stability, fast response speed, N35500 series DC power supply with NS91000 can accurately simulate the I-V, P-V curve of the solar cell matrix. After setting Vmp, Pmp and other parameters, it can generate reports in compliance with regulations, which is used to test the static and dynamic maximum power tracking efficiency of PV inverters, and also can provide support for system simulation and core equipment testing of microgrids, distributed photovoltaic and other power systems.



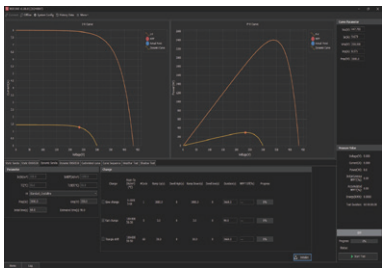
▲ Static Sandia



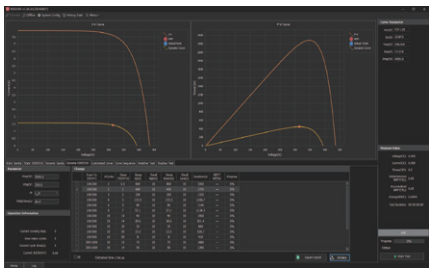
▲ Static EN50530



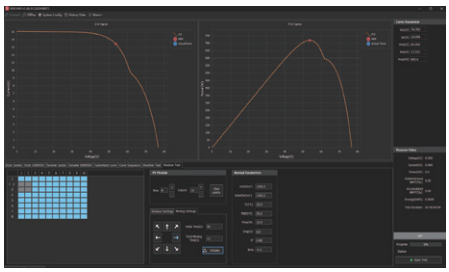
▲ Weather Test



▲ Dynamic Sandia



▲ Dynamic EN50530

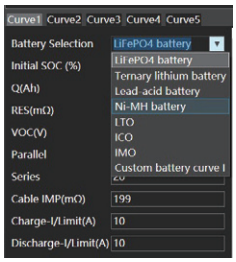


▲ Shadow Test

Battery Simulation

N35500 series with NS81000 battery simulator software to meet the user's needs for different types of battery simulation, and improve the test efficiency. NS81000 has 7 standard battery model libraries, users only need to select the corresponding battery type, configure the basic capacity and protection parameters, the software can quickly generate the corresponding type of battery characteristic curve; And there are 2 types of custom battery characteristic curve, engineers can be based on the actual measurement of the battery curve data, import the data into the software and carry out simulation.

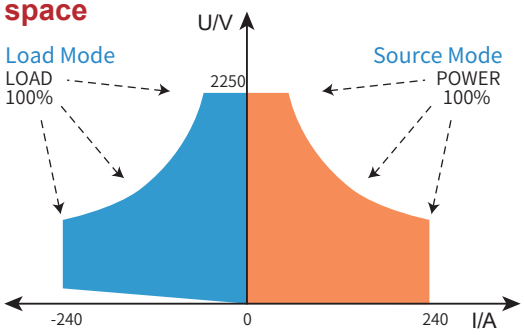
▲ Master Computer Interface



▲ Battery Type

Wide range, high power density for saving cost and space

N35500 series DC power supply adopts systematic heat dissipation design, optimised device selection, main circuit topology, system heat dissipation, to achieve 42kW power output in 3U chassis, and adopts wide range output design, voltage up to 2250V, current up to 240A. With wide range and high power density design, N35500 series satisfy engineers' test application scenarios for products of various voltage/ current levels, and greatly reducing purchase cost and space occupancy in laboratory or automated test systems.

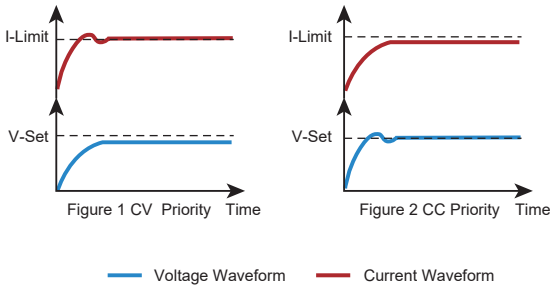


CC&CV priority function

N35500 series has the function of setting voltage-control priority or current-control loop priority, it can adopt the optimal working mode for testing according to the characteristics of DUT, so as to better protect DUT.

As shown in Figure 1, when it needs to reduce voltage overshoot during testing, such as powering a DC-DC power module, the voltage priority mode should be used to obtain a fast and smooth rising voltage.

As shown in Figure 2, when it needs to reduce current overshoot during testing or the component to be measured is low impedance such as in the battery charging scenario, the current priority mode should be used to obtain a fast and smooth rising current.



Quick Selection

360V Model	Specification	Size
N35514-360-80	360V/80A/14kW	3U
N35522-360-160	360V/160A/22kW	3U
N35532-360-240	360V/240A/32kW	3U
N35542-360-240	360V/240A/42kW	3U
N35584-360-480	360V/480A/84kW	6U
N355126-360-720	360V/720A/126kW	22U
N355168-360-960	360V/960A/168kW	22U
N355210-360-1200	360V/1200A/210kW	32U
N355252-360-1440	360V/1440A/252kW	32U
N355294-360-1680	360V/1680A/294kW	32U
N355336-360-1920	360V/1920A/336kW	42U
N355378-360-2160	360V/2160A/378kW	42U
N355420-360-2400	360V/2400A/420kW	42U

500V Model	Specification	Size
N35514-500-65	500V/65A/14kW	3U
N35522-500-130	500V/130A/22kW	3U
N35532-500-180	500V/180A/32kW	3U
N35542-500-195	500V/195A/42kW	3U
N35584-500-390	500V/390A/84kW	6U
N355126-500-585	500V/585A/126kW	22U
N355168-500-780	500V/780A/168kW	22U
N355210-500-975	500V/975A/210kW	32U
N355252-500-1170	500V/1170A/252kW	32U
N355294-500-1365	500V/1365A/294kW	32U
N355336-500-1560	500V/1560A/336kW	42U
N355378-500-1755	500V/1755A/378kW	42U
N355420-500-1950	500V/1950A/420kW	42U

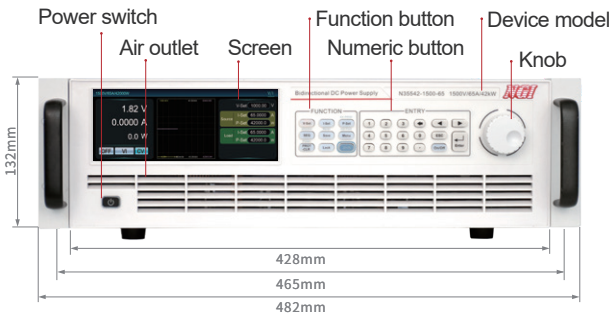
750V Model	Specification	Size
N35514-750-65	750V/65A/14kW	3U
N35522-750-130	750V/130A/22kW	3U
N35532-750-180	750V/180A/32kW	3U
N35542-750-195	750V/195A/42kW	3U
N35584-750-390	750V/390A/84kW	6U
N355126-750-585	750V/585A/126kW	22U
N355168-750-780	750V/780A/168kW	22U
N355210-750-975	750V/975A/210kW	32U
N355252-750-1170	750V/1170A/252kW	32U
N355294-750-1365	750V/1365A/294kW	32U
N355336-750-1560	750V/1560A/336kW	42U
N355378-750-1755	750V/1755A/378kW	42U
N355420-750-1950	750V/1950A/420kW	42U

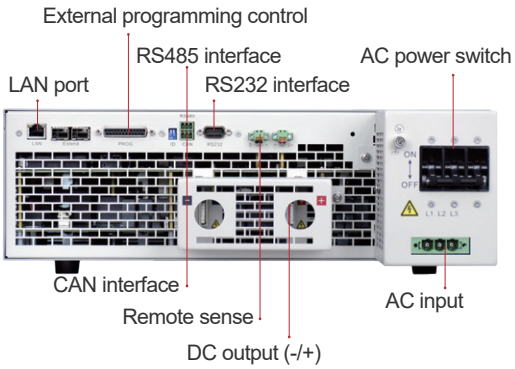
1000V Model	Specification	Size
N35522-1000-80	1000V/80A/22kW	3U
N35528-1000-65	1000V/65A/28kW	3U
N35532-1000-80	1000V/80A/32kW	3U
N35542-1000-80	1000V/80A/42kW	3U
N35556-1000-130	1000V/130A/56kW	6U
N35584-1000-195	1000V/195A/84kW	22U
N355112-1000-260	1000V/260A/112kW	22U
N355140-1000-325	1000V/325A/140kW	32U
N355168-1000-390	1000V/390A/168kW	32U
N355196-1000-455	1000V/455A/196kW	32U
N355224-1000-520	1000V/520A/224kW	42U
N355252-1000-585	1000V/585A/252kW	42U
N355280-1000-650	1000V/650A/280kW	42U

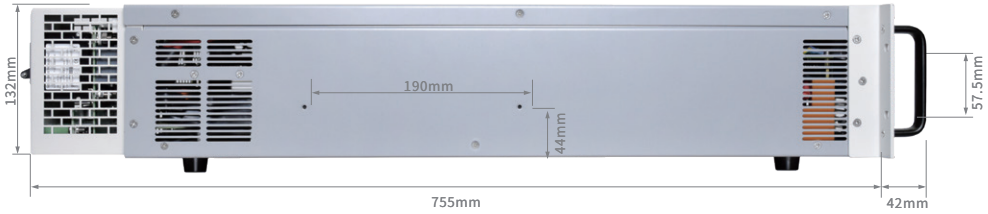
1500V Model	Specification	Size
N35522-1500-60	1500V/60A/22kW	3U
N35532-1500-60	1500V/60A/32kW	3U
N35542-1500-65	1500V/65A/42kW	3U
N35584-1500-130	1500V/130A/84kW	6U
N355126-1500-195	1500V/195A/126kW	22U
N355168-1500-260	1500V/260A/168kW	22U
N355210-1500-325	1500V/325A/210kW	32U
N355252-1500-390	1500V/390A/252kW	32U
N355294-1500-455	1500V/455A/294kW	32U
N355336-1500-520	1500V/520A/336kW	42U
N355378-1500-585	1500V/585A/378kW	42U
N355420-1500-650	1500V/650A/420kW	42U

2250V Model	Specification	Size
N35522-2250-60	2250V/60A/22kW	3U
N35532-2250-60	2250V/60A/32kW	3U
N35542-2250-65	2250V/65A/42kW	3U
N35584-2250-130	2250V/130A/84kW	6U
N355126-2250-195	2250V/195A/126kW	22U
N355168-2250-260	2250V/260A/168kW	22U
N355210-2250-325	2250V/325A/210kW	32U
N355252-2250-390	2250V/390A/252kW	32U
N355294-2250-455	2250V/455A/294kW	32U
N355336-2250-520	2250V/520A/336kW	42U
N355378-2250-585	2250V/585A/378kW	42U
N355420-2250-650	2250V/650A/420kW	42U

Product Dimension







Technical Data Sheet(1)

Model		N35514-360-80	N35522-360-160	N35532-360-240	N35542-360-240
Rated	Voltage	0~360V			
	Current	-80A~+80A	-160A~+160A	-240A~+240A	-240A~+240A
	Power	-14kW~+14kW	-22kW~22kW	-32kW~+32kW	-42kW~+42kW
CV Mode					
Range		0~360V			
Setting Resolution		1mV			
Setting Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Voltage Ripple(20Hz-20MHz)		≤0.72Vp-p			
		≤400mVrms			
CC Mode					
Range		-80A~+80A	-160A~+160A	-240A~+240A	-240A~+240A
Setting Resolution		0.1mA	1mA		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Current Ripple(20Hz-20MHz)		≤1.4Ap-p			
		≤200mArms			
CP Mode					
Range		-14kW~+14kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
Setting Resolution		0.1W			
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Voltage Measurement					
Range		0~360V			
Readback Resolution		1mV			
Readback Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Temperature Coefficient		≤15ppm/°C			
Current Measurement					
Range		-80A~+80A	-160A~+160A	-240A~+240A	-240A~+240A
Readback Resolution		0.1mA	1mA		
Readback Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Temperature Coefficient		≤30ppm/°C			
Dynamic Characteristics					
Voltage Rise Time (no load 10%~90%)		≤5ms			
Voltage Rise Time (full load 10%~90%)		≤5ms			
Voltage Fall Time (no load 90%~10%) [1]		≤10ms			
Voltage Fall Time (full load 90%~10%)		≤5ms			
Transient Response Time		The recovery time of load varying from 10% to 60% and output voltage recovering within 0.75% of rated voltage is less than 1ms.			
Line Regulation					
Voltage		<0.01%F.S.			
Current		<0.02%F.S.			
Load Regulation					
Voltage		<0.01%F.S.			
Current		<0.05%F.S.			
Others					
Isolation (Output to ground)		1000V DC			
Output Efficiency		93.5%	95%	95%	95%
Feedback Efficiency		93%	94.5%	94.5%	94.5%
Power Factor		0.99			
Protection		OVP/OCP/OPP/UVP/UCP			
Interface		LAN/RS232/RS485/CAN			
Communication Response Time		5ms			
AC Input		Three phase 340VAC~480VAC,47Hz~63Hz,≤25A	Three phase 340VAC~480VAC,47Hz~63Hz,≤40A	Three phase 340VAC~480VAC,47Hz~63Hz,≤55A	Three phase 340VAC~480VAC,47Hz~63Hz,≤70A
Temperature		Operating temperature: 0°C~50°C (>35°C derating output); Storage temperature: -10°C~70°C			
Operating Environment		Altitude <2000m; relative humidity:5%~90%RH(non-condensing); atmospheric pressure: 80~110kPa			
Dimension		132.0mm(H)*482.0mm(W)*755.0(D)(with shield)			
Net Weight		Approx. 34kg	Approx. 42kg		

Note 1: Voltage fall time in ON state.
Note 2: For other specifications, please contact NGI.
Note 3: All specifications are subject to change without notice.

Technical Data Sheet(2)

Model		N35514-500-65	N35522-500-130	N35532-500-180	N35542-500-195
Rated	Voltage	0~500V			
	Current	-65A~+65A	-130A~+130A	-180A~+180A	-195A~+195A
	Power	-14kW~+14kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
CV Mode					
Range		0~500V			
Setting Resolution		1mV			
Setting Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Voltage Ripple(20Hz-20MHz)		≤1Vp-p			
		≤400mVrms			
CC Mode					
Range		-65A~+65A	-130A~+130A	-180A~+180A	-195A~+195A
Setting Resolution		0.1mA	1mA		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Current Ripple(20Hz-20MHz)		≤1.4Ap-p	≤2Ap-p		
		≤200mArms			
CP Mode					
Range		-14kW~+14kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
Setting Resolution		0.1W			
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Voltage Measurement					
Range		0~500V			
Readback Resolution		1mV			
Readback Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Temperature Coefficient		≤15ppm/°C			
Current Measurement					
Range		-65A~+65A	-130A~+130A	-180A~+180A	-195A~+195A
Readback Resolution		0.1mA	1mA		
Readback Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Temperature Coefficient		≤30ppm/°C			
Dynamic Characteristics					
Voltage Rise Time (no load 10%~90%)		≤5ms			
Voltage Rise Time (full load 10%~90%)		≤5ms			
Voltage Fall Time (no load 90%~10%) [1]		≤10ms			
Voltage Fall Time (full load 90%~10%)		≤5ms			
Transient Response Time		The recovery time of load varying from 10% to 60% and output voltage recovering within 0.75% of rated voltage is less than 1ms.			
Line Regulation					
Voltage		<0.01%F.S.			
Current		<0.02%F.S.			
Load Regulation					
Voltage		<0.01%F.S.			
Current		<0.05%F.S.			
Others					
Isolation (Output to ground)		1000V DC			
Output Efficiency		93.5%	95%	95%	95%
Feedback Efficiency		93%	94.5%	94.5%	94.5%
Power Factor		0.99			
Protection		OVP/OCP/OPP/UVP/UCP			
Interface		LAN/RS232/RS485/CAN			
Communication Response Time		5ms			
AC Input		Three phase 340VAC~480VAC,47Hz~63Hz,≤25A	Three phase 340VAC~480VAC,47Hz~63Hz,≤40A	Three phase 340VAC~480VAC,47Hz~63Hz,≤55A	Three phase 340VAC~480VAC,47Hz~63Hz,≤70A
Temperature		Operating temperature: 0°C~50°C (>35°C derating output); Storage temperature: -10°C~70°C			
Operating Environment		Altitude <2000m; relative humidity:5%~90%RH(non-condensing); atmospheric pressure: 80~110kPa			
Dimension		132.0mm(H)*482.0mm(W)*755.0(D)(with shield)			
Net Weight		Approx. 34kg	Approx. 42kg		

Note 1: Voltage fall time in ON state.
Note 2: For other specifications, please contact NGI.
Note 3: All specifications are subject to change without notice.

Technical Data Sheet(3)

Model		N35514-750-65	N35522-750-130	N35532-750-180	N35542-750-195
Rated	Voltage	0~750V			
	Current	-65A~+65A	-130A~+130A	-180A~+180A	-195A~+195A
	Power	-14kW~+14kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
CV Mode					
Range		0~750V			
Setting Resolution		1mV			
Setting Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Voltage Ripple(20Hz-20MHz)		≤1.5Vp-p			
		≤400mVrms			
CC Mode					
Range		-65A~+65A	-130A~+130A	-180A~+180A	-195A~+195A
Setting Resolution		0.1mA	1mA		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Current Ripple(20Hz-20MHz)		≤1.4Ap-p	≤2Ap-p		
		≤200mArms			
CP Mode					
Range		-14kW~+14kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
Setting Resolution		0.1W			
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Voltage Measurement					
Range		0~750V			
Readback Resolution		1mV			
Readback Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Temperature Coefficient		≤15ppm/°C			
Current Measurement					
Range		-65A~+65A	-130A~+130A	-180A~+180A	-195A~+195A
Readback Resolution		0.1mA	1mA		
Readback Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Temperature Coefficient		≤30ppm/°C			
Dynamic Characteristics					
Voltage Rise Time (no load 10%~90%)		≤5ms			
Voltage Rise Time (full load 10%~90%)		≤5ms			
Voltage Fall Time (no load 90%~10%) [1]		≤10ms			
Voltage Fall Time (full load 90%~10%)		≤5ms			
Transient Response Time		The recovery time of load varying from 10% to 60% and output voltage recovering within 0.75% of rated voltage is less than 1ms.			
Line Regulation					
Voltage		<0.01%F.S.			
Current		<0.02%F.S.			
Load Regulation					
Voltage		<0.01%F.S.			
Current		<0.05%F.S.			
Others					
Isolation (Output to ground)		1500V DC			
Output Efficiency		93.5%	95%	95%	95%
Feedback Efficiency		93%	94.5%	94.5%	94.5%
Power Factor		0.99			
Protection		OVP/OCP/OPP/UVP/UCP			
Interface		LAN/RS232/RS485/CAN			
Communication Response Time		5ms			
AC Input		Three phase 340VAC~480VAC,47Hz~63Hz,≤25A	Three phase 340VAC~480VAC,47Hz~63Hz,≤40A	Three phase 340VAC~480VAC,47Hz~63Hz,≤55A	Three phase 340VAC~480VAC,47Hz~63Hz,≤70A
Temperature		Operating temperature: 0°C~50°C (>35°C derating output); Storage temperature: -10°C~70°C			
Operating Environment		Altitude <2000m; relative humidity:5%~90%RH(non-condensing); atmospheric pressure: 80~110kPa			
Dimension		132.0mm(H)*482.0mm(W)*755.0(D)(with shield)			
Net Weight		Approx. 34kg	Approx. 42kg		

Note 1: Voltage fall time in ON state.
Note 2: For other specifications, please contact NGI.
Note 3: All specifications are subject to change without notice.

Technical Data Sheet(4)

Model		N35528-1000-65	N35522-1000-80	N35532-1000-80	N35542-1000-80
Rated	Voltage	0~1000V			
	Current	-65A~+65A	-80A~+80A		
	Power	-28kW~+28kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
CV Mode					
Range		0~1000V			
Setting Resolution		10mV			
Setting Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Voltage Ripple(20Hz-20MHz)		≤2Vp-p			
		≤400mVrms			
CC Mode					
Range		-65A~+65A	-80A~+80A		
Setting Resolution		0.1mA			
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Current Ripple(20Hz-20MHz)		≤1.4Ap-p			
		≤200mArms			
CP Mode					
Range		-28kW~+28kW	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
Setting Resolution		0.1W			
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Voltage Measurement					
Range		0~1000V			
Readback Resolution		10mV			
Readback Accuracy(23±5°C)		≤0.02%+0.02%F.S.			
Temperature Coefficient		≤15ppm/°C			
Current Measurement					
Range		-65A~+65A	-80A~+80A		
Readback Resolution		0.1mA			
Readback Accuracy(23±5°C)		≤0.1%+0.1%F.S.			
Temperature Coefficient		≤30ppm/°C			
Dynamic Characteristics					
Voltage Rise Time (no load 10%~90%)		≤5ms			
Voltage Rise Time (full load 10%~90%)		≤5ms			
Voltage Fall Time (no load 90%~10%) [1]		≤10ms			
Voltage Fall Time (full load 90%~10%)		≤5ms			
Transient Response Time		The recovery time of load varying from 10% to 60% and output voltage recovering within 0.75% of rated voltage is less than 1ms.			
Line Regulation					
Voltage		<0.01%F.S.			
Current		<0.02%F.S.			
Load Regulation					
Voltage		<0.01%F.S.			
Current		<0.05%F.S.			
Others					
Isolation (Output to ground)		1500V DC			
Output Efficiency		94.5%	95%	95%	95%
Feedback Efficiency		93%	94.5%	94.5%	94.5%
Power Factor		0.99			
Protection		OVP/OCP/OPP/UVP/UCP			
Interface		LAN/RS232/RS485/CAN			
Communication Response Time		5ms			
AC Input		Three phase 340VAC~480VAV,47Hz~63Hz,≤50A	Three phase 340VAC~480VAV,47Hz~63Hz,≤40A	Three phase 340VAC~480VAV,47Hz~63Hz,≤55A	Three phase 340VAC~480VAV,47Hz~63Hz,≤70A
Temperature		Operating temperature: 0°C~50°C(>35°C derating output); Storage temperature: -10°C~70°C			
Operating Environment		Altitude <2000m; relative humidity: 5%~90%RH(non-condensing); atmospheric pressure: 80~110kPa			
Dimension		132.0mm(H)*482.0mm(W)*755.0(D)(with shield)			
Net Weight		Approx. 38kg	Approx. 42kg		

Note 1: Voltage fall time in ON state.
Note 2: For other specifications, please contact NGI.
Note 3: All specifications are subject to change without notice.

Technical Data Sheet(5)

Model		N35522-1500-60	N35532-1500-60	N35542-1500-65
Rated	Voltage	0~1500V		
	Current	-60A~+60A		-65A~+65A
	Power	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
CV Mode				
Range		0~1500V		
Setting Resolution		10mV		
Setting Accuracy(23±5°C)		≤0.02%+0.02%F.S.		
Voltage Ripple(20Hz-20MHz)		≤3Vp-p		
		≤400mVrms		
CC Mode				
Range		-60A~+60A		-65A~+65A
Setting Resolution		0.1mA		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.		
Current Ripple(20Hz-20MHz)		≤1.4Ap-p		
		≤200mArms		
CP Mode				
Range		-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
Setting Resolution		0.1W		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.		
Voltage Measurement				
Range		0~1500V		
Readback Resolution		10mV		
Readback Accuracy(23±5°C)		≤0.02%+0.02%F.S.		
Temperature Coefficient		≤15ppm/°C		
Current Measurement				
Range		-60A~+60A		-65A~+65A
Readback Resolution		0.1mA		
Readback Accuracy(23±5°C)		≤0.1%+0.1%F.S.		
Temperature Coefficient		≤30ppm/°C		
Dynamic Characteristics				
Voltage Rise Time (no load 10%~90%)		≤5ms		
Voltage Rise Time (full load 10%~90%)		≤5ms		
Voltage Fall Time (no load 90%~10%) [1]		≤10ms		
Voltage Fall Time (full load 90%~10%)		≤5ms		
Transient Response Time		The recovery time of load varying from 10% to 60% and output voltage recovering within 0.75% of rated voltage is less than 500μs.		
Line Regulation				
Voltage		<0.01%F.S.		
Current		<0.02%F.S.		
Load Regulation				
Voltage		<0.01%F.S.		
Current		<0.05%F.S.		
Others				
Isolation (Output to ground)		2250V DC		
Output Efficiency		95%	95%	95%
Feedback Efficiency		94.5%	94.5%	94.5%
Power Factor		0.99		
Protection		OVP/OCP/OPP/UVP/UCP		
Interface		LAN/RS232/RS485/CAN		
Communication Response Time		5ms		
AC Input		Three phase 340VAC~480VAC,47Hz~63Hz,≤40A	Three phase 340VAC~480VAC,47Hz~63Hz,≤55A	Three phase 340VAC~480VAC,47Hz~63Hz,≤70A
Temperature		Operating temperature: 0°C~50°C(>35°C derating output); Storage temperature:-10°C~70°C		
Operating Environment		Altitude <2000m; relative humidity: 5%~90%RH(non-condensing); atmospheric pressure: 80~110kPa		
Dimension		132.0mm(H)*482.0mm(W)*755.0(D)(with shield)		
Net Weight		Approx. 42kg		

Note 1: Voltage fall time in ON state.
Note 2: For other specifications, please contact NGI.
Note 3: All specifications are subject to change without notice.

Technical Data Sheet(6)

Model		N35522-2250-60	N35532-2250-60	N35542-2250-65
Rated	Voltage	0~2250V		
	Current	-60A~+60A		-65A~+65A
	Power	-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
CV Mode				
Range		0~2250V		
Setting Resolution		10mV		
Setting Accuracy(23±5°C)		≤0.02%+0.02%F.S.		
Voltage Ripple(20Hz-20MHz)		≤3Vp-p		
		≤400mVrms		
CC Mode				
Range		-60A~+60A		-65A~+65A
Setting Resolution		0.1mA		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.		
Current Ripple(20Hz-20MHz)		≤1.4Ap-p		
		≤200mArms		
CP Mode				
Range		-22kW~+22kW	-32kW~+32kW	-42kW~+42kW
Setting Resolution		0.1W		
Setting Accuracy(23±5°C)		≤0.1%+0.1%F.S.		
Voltage Measurement				
Range		0~2250V		
Readback Resolution		10mV		
Readback Accuracy(23±5°C)		≤0.02%+0.02%F.S.		
Temperature Coefficient		≤15ppm/°C		
Current Measurement				
Range		-60A~+60A		-65A~+65A
Readback Resolution		0.1mA		
Readback Accuracy(23±5°C)		≤0.1%+0.1%F.S.		
Temperature Coefficient		≤30ppm/°C		
Dynamic Characteristics				
Voltage Rise Time (no load 10%~90%)		≤5ms		
Voltage Rise Time (full load 10%~90%)		≤5ms		
Voltage Fall Time (no load 90%~10%) [1]		≤10ms		
Voltage Fall Time (full load 90%~10%)		≤5ms		
Transient Response Time		The recovery time of load varying from 10% to 60% and output voltage recovering within 0.75% of rated voltage is less than 500μs.		
Line Regulation				
Voltage		<0.01%F.S.		
Current		<0.02%F.S.		
Load Regulation				
Voltage		<0.01%F.S.		
Current		<0.05%F.S.		
Others				
Isolation (Output to ground)		2250V DC		
Output Efficiency		95%	95%	95%
Feedback Efficiency		94.5%	94.5%	94.5%
Power Factor		0.99		
Protection		OVP/OCP/OPP/UVP/UCP		
Interface		LAN/RS232/RS485/CAN		
Communication Response Time		5ms		
AC Input		Three phase 340VAC~480VAC,47Hz~63Hz,≤40A	Three phase 340VAC~480VAC,47Hz~63Hz,≤55A	Three phase 340VAC~480VAC,47Hz~63Hz,≤70A
Temperature		Operating temperature: 0°C~50°C(>35°C derating output); Storage temperature:-10°C~70°C		
Operating Environment		Altitude <2000m; relative humidity: 5%~90%RH(non-condensing); atmospheric pressure: 80~110kPa		
Dimension		132.0mm(H)*482.0mm(W)*755.0(D)(with shield)		
Net Weight		Approx. 42kg		

Note 1: Voltage fall time in ON state.
Note 2: For other specifications, please contact NGI.
Note 3: All specifications are subject to change without notice.