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DATASHEET

Technical Documentation

N65500 Series

THE WORLD OF POWER



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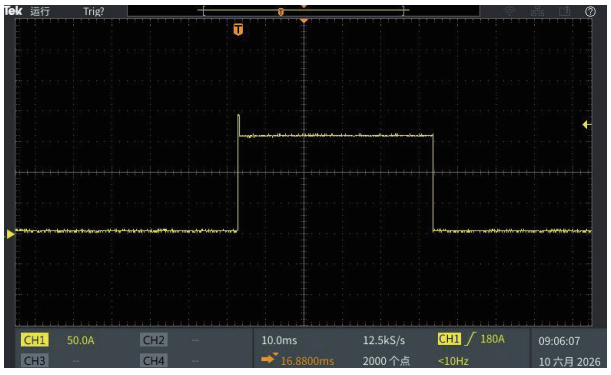
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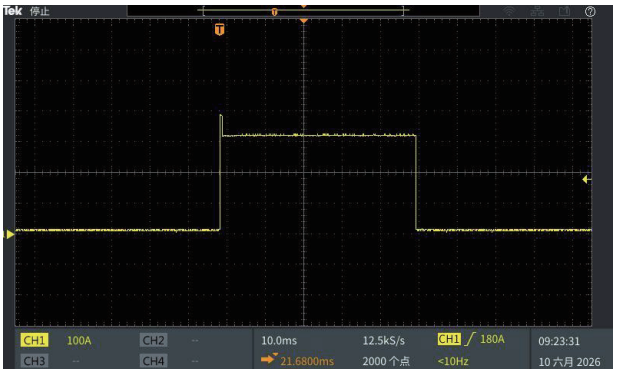
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EDPP Test Waveform

The EDPP standard waveform test scenario commonly used in the AIDC industry requires rapid power transitions: from low load (e.g., 10% of rated power) to overload (e.g., 180% peak power) in a short time, then falling back to a higher load level (e.g., 150% peak power). The N65500 series cyclic loading waveforms are shown below:



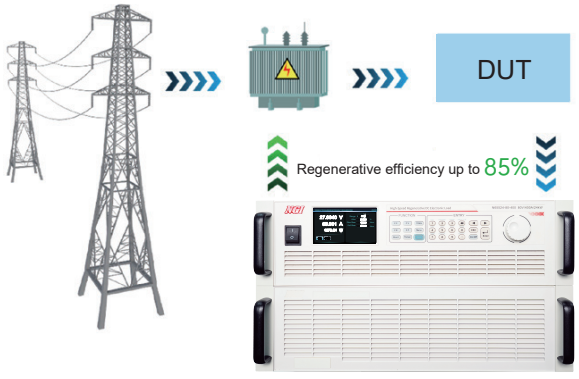
198A (180%, 0.5ms) → 165A (150%, 50ms) → 11A (10%, 60ms)
current slew rate ≥ 12.34A/μs



396A (180%, 0.5ms) → 330A (150%, 50ms) → 22A (10%, 60ms)
current slew rate ≥ 12.44A/μs

High Regenerative Efficiency and High-Precision Measurement

With a maximum static regenerative efficiency of up to 85%, the N65500 series significantly reduces thermal losses during power testing in AI server data centers, lowering environmental control and energy costs.

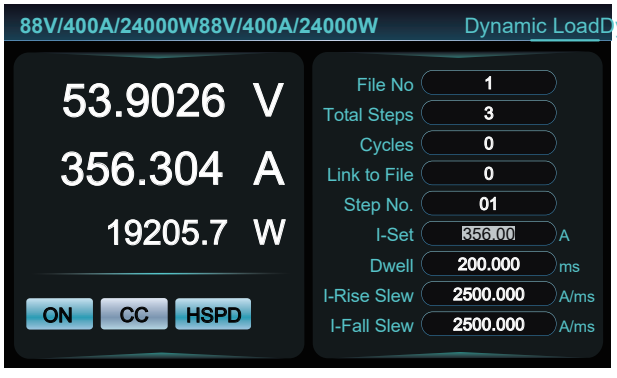


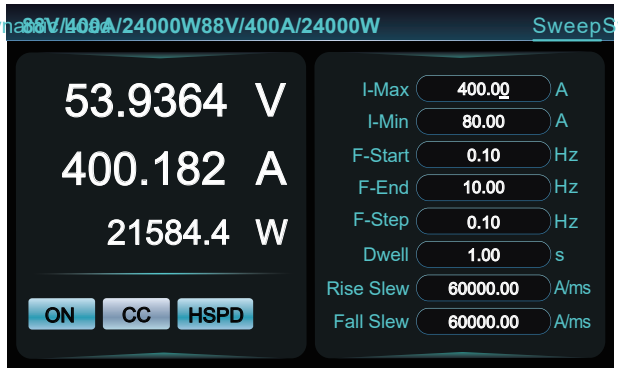


The N65500 series delivers industry-leading measurement accuracy, with voltage accuracy up to 0.02% + 0.02% of F.S. and current accuracy up to 0.05% + 0.05% of F.S. This makes it ideally suited for demanding applications such as server power supply efficiency testing, dynamic response characterization, and stability verification, ensuring full data traceability throughout the entire test process.

High-Speed Dynamic Load Mode and Dynamic Sweep Mode

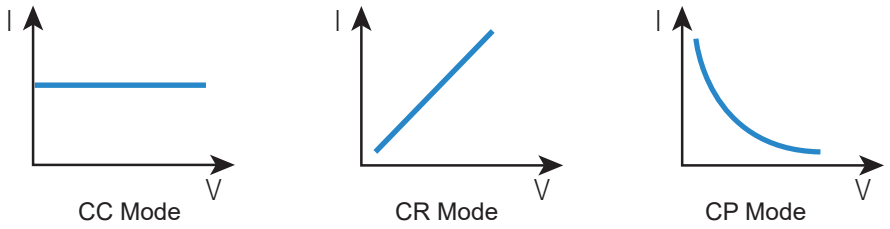
The N65500 series features a high-speed dynamic mode that simulates dynamic load behavior of power supplies, allowing comprehensive testing of DC power supply dynamic characteristics. The series provides high-speed, microsecond-programmable dynamic load modes with configurable high/low levels, rise/fall slew rates, duration, and cycle count. The voltage and current sampling rate in dynamic sweep mode is 500kHz, supporting linear variation of load current frequency up to 30kHz, and capturing peak voltage (Vpk+), valley voltage (Vpk−), and the frequency point at which they occur.



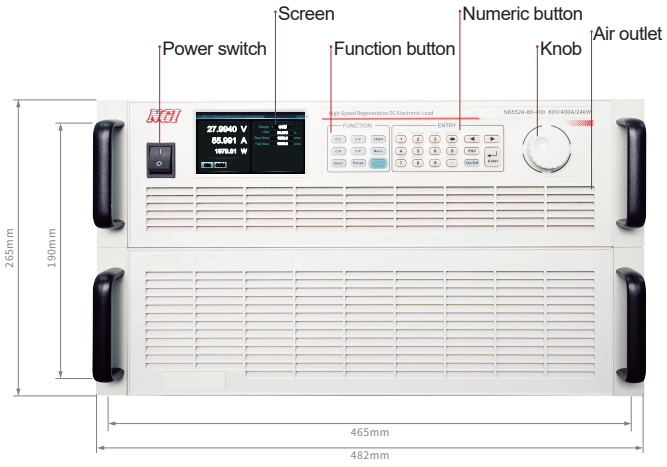


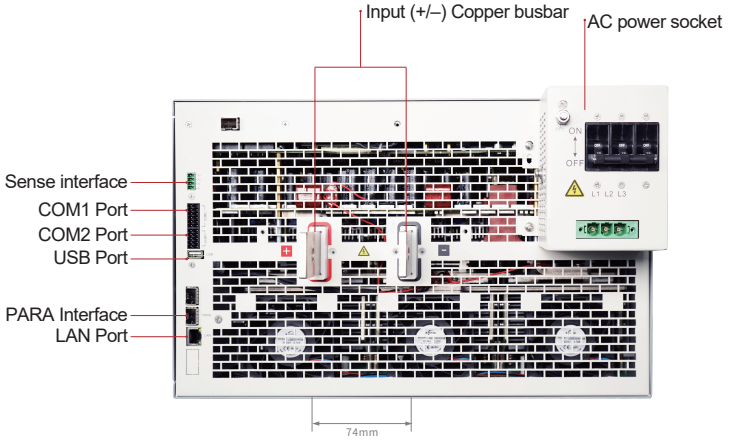
Multiple Operating Modes

The N65500 series supports CC, CP, CR, as well as composite modes such as CR+CC and CP+CC, meeting complex test requirements across a wide range of applications.



Product Dimension







Technical Data Sheet(1)

Model		N65524-80-400
Rating Range	Input Voltage	80V
	Input Current	400A
	Input Power	Rated: 24kW; Peak: 32kW (30s)
CC Mode		
Range		0~400A
Setting Resolution		10mA
Setting Accuracy		0.05%+0.05%F.S.
Readback Resolution		1mA
Readback Accuracy		0.04%+0.04%F.S.
CR Mode		
Range		0.01Ω~40Ω
Setting Resolution		1mΩ
Setting Accuracy		1%+1%F.S.
Readback Resolution		0.1mΩ
Readback Accuracy		1%+1%F.S.
CP Mode		
Range		0~24kW
Setting Resolution		1W
Setting Accuracy		0.1%+0.1%F.S.
Readback Resolution		0.1W
Readback Accuracy		0.1%+0.1%F.S.
CCD Dynamic Mode		
T1&T2		0.025ms~3600s
Rise/Fall Slew Rate		1mA~60A/μs
Minimum Settling Time		6μs
Current Accuracy		0.2%F.S.
Others		
AC Input	Voltage	Three-phase four-wire, 340V~480V AC
	Frequency/Factor	47Hz~63Hz； ≥0.99
Regenerative Efficiency		85%
Communication Interfaces		LAN/USB/CAN/RS232/RS485
Communication Protocols		MODBUS-RTU, CAN-Open, SCPI protocol
Protection Functions		Overvoltage/Undervoltage, Overcurrent/Undercurrent, Overpower, Overtemperature, Reverse Polarity Alarm
Temperature		Operating temperature: 0℃~40℃, storage temperature: -20℃~70℃
Operating Environment		Altitude: <2000 m; Relative Humidity: ≤80%, non-condensing
Dimension		265.0mm(H)*428.0mm(W)*770.0mm(D)
Net Weight		Approx.75kg

Note 1: For other specifications, please contact NGI.
Note 2: All specifications are subject to change without notice.

Technical Data Shee(2)

Model		N65535-1000-80
Rating Range	Input Voltage	1000V
	Input Current	80A
	Input Power	Rated: 35kW; Peak: 40kW (30s)
CC Mode		
Range		0~80A
Setting Resolution		1mA
Setting Accuracy		0.05%+0.05%F.S.
Readback Resolution		0.1mA
Readback Accuracy		0.04%+0.04%F.S.
CR Mode		
Range		0.01Ω~40Ω
Setting Resolution		1mΩ
Setting Accuracy		1%+1%F.S.
Readback Resolution		0.1mΩ
Readback Accuracy		1%+1%F.S.
CP Mode		
Range		0~35kW
Setting Resolution		1W
Setting Accuracy		0.1%+0.1%F.S.
Readback Resolution		0.1W
Readback Accuracy		0.1%+0.1%F.S.
CCD Dynamic Mode		
T1&T2		0.025ms~3600s
Rise/Fall Slew Rate		1mA~8A/μs
Minimum Settling Time		8μs
Others		
AC Input	Voltage	Three-phase four-wire, 340V~480V AC
	Frequency/Factor	47Hz~63Hz；≥0.99
Regenerative Efficiency		85%
Communication Interfaces		LAN/USB/CAN/RS232/RS485
Communication Protocols		MODBUS-RTU, CAN-Open, SCPI protocol
Protection Functions		Overvoltage/Undervoltage, Overcurrent/Undercurrent, Overpower, Overtemperature, Reverse Polarity Alarm
Temperature		Operating temperature: 0℃~40℃, storage temperature: -20℃~70℃
Operating Environment		Altitude: <2000 m; Relative Humidity: ≤80%, non-condensing
Dimension		265.0mm(H)*428.0mm(W)*770.0mm(D)
Net Weight		Approx.75kg

Note 1: For other specifications, please contact NGI.
Note 2: All specifications are subject to change without notice.