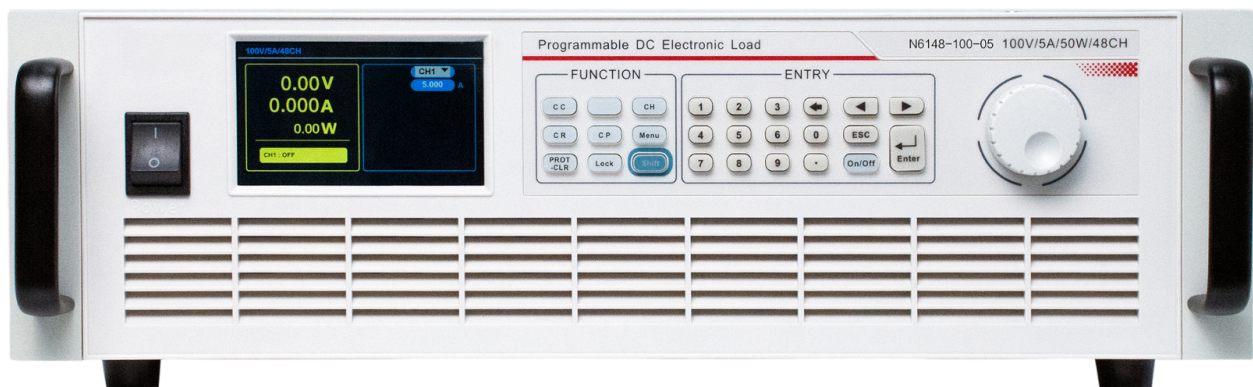


Datasheet: N6180 Series

Electronic multi-channel micro power DC load of the N6180 series



Version: 04.03.2025

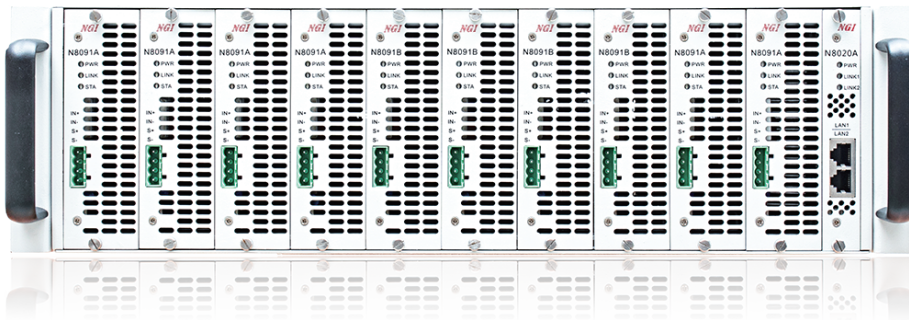
Official partner of NGI: Service and sales directly through ET System electronic GmbH.

THE WORLD OF POWER

Your Partner for: DC & AC power supplies, bidirectional AC / DC solutions, conventional & regenerative loads, and battery cell simulators.



N6180 Series Multi-channel Micro Power DC Electronic Load



Product Introduction

N6180 series is developed based on NGI's years of experience in testing for power supply, battery and electrochemistry. It is with high accuracy, high reliability, high integration, high cost performance and full features in CC, CV, CP and CR. N6180 consists of N8091 electronic load card, adopts NXI structure, with 10/19 channels in a single device, and supports unlimited channel expansion. N6180 series is tailored for integrated applications, featuring in easy integration and high stability. In most integrated applications, N6180 series can replace low-power standalone electronic loads and save much cost for users, especially suitable for mass production of consumer electronics and applications in universities and research institutes.

Application Fields

R&D, production, aging and QC of low power supplies, DC converters, mobile chargers, battery, UPS, BMS, etc. ; Manufacturing test of battery pack, BMS balanced discharge, electric tools, LED power board, etc.

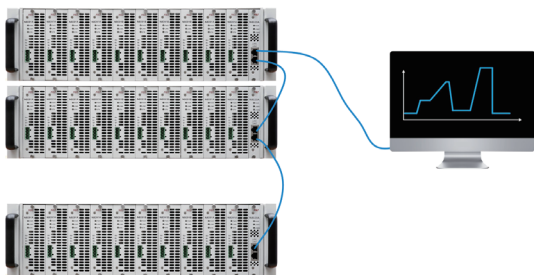
Main Features

- ▶ Power range: 25W/50W
- ▶ Current range: 0-1A/0-5A/0-10A
- ▶ Dynamic mode
- ▶ Auto test function
- ▶ Multiple protection: OCP/OVP/OPP/OTP
- ▶ High reliability, long MTBF(mean time between failure)
- ▶ Voltage range: 0-20V/0-60V/0-100V
- ▶ Operation mode: CC、CV、CP、CR、CCD
- ▶ Remote/local sense
- ▶ High-speed LAN port
- ▶ Each channel isolated

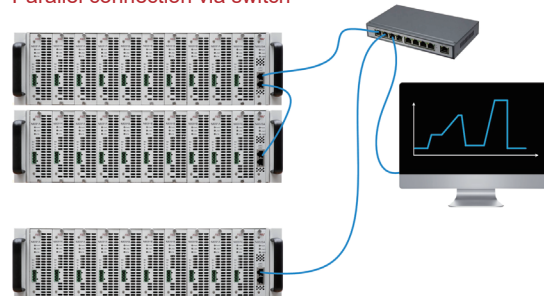
Unlimited channel expansion

NXI gets rid of the shackles of IPC. The amount of channels is no longer limited to the number of slots. The channels can be expanded by stacking master devices. In a system with low bandwidth demand, master cascade can be achieved by connecting to the PC via a network cable. Multiple devices in parallel system with high bandwidth demand can be connected to the PC via a high-speed switch and multiple network cables.

Series connection



Parallel connection via switch



Technical Data Sheet

Model	N6180A	N6180B	N6180C	N6180E	N6180L	N6180H						
Voltage	60V	60V	20V	20V	60V	100V						
Current	5A	1A	5A	10A	1A	1A						
Power	50W	50W	50W	50W	50W	25W						
Channels	10CH (N8091A)	10CH (N8091B)	10CH (N8091C)	10CH (N8091E)	10CH (N8091L)	19CH (N8091H)						
CC Mode												
Range	0-250mA	0-5A	0-50mA	0-1A	0-250mA	0-5A	0-500mA	0-10A	0-50mA	0-1A	0-50mA	0-1A
Setting Resolution	16bits											
Setting Accuracy (23±5℃)	0.02%+0.05%F.S.											
CV Mode												
Range	0-60V	0-60V	0-20V	0-20V	0-60V	0-100V						
Setting Resolution	16bits											
Setting Accuracy (23±5℃)	0.02%+0.05%F.S.											
CR Mode												
Range	0.2~10000Ω	1~60000Ω	0.2~4000Ω	0.1~2000Ω	1~60000Ω	2.0~10000Ω						
Setting Resolution	16bits											
Setting Accuracy (23±5℃)	0.1%+0.1%F.S.											
CP Mode												
Range	0-50W	0-50W	0-50W	0-50W	0-50W	0-25W						
Setting Resolution	16bits											
Setting Accuracy (23±5℃)	0.1%+0.1%F.S.											
Current Measurement												
Range	0-250mA	0-5A	0-50mA	0-1A	0-250mA	0-5A	0-500mA	0-10A	0-50mA	0-1A	0-50mA	0-1A
Readback Resolution	16bits											
Readback Accuracy (23±5℃)	0.02%+0.02%F.S.											
Voltage Measurement												
Range	0-60V	0-60V	0-20V	0-20V	0-60V	0-100V						
Readback Resolution	16bits											
Readback Accuracy (23±5℃)	0.02%+0.02%F.S.											
Others												
Interface	LAN											
AC Input	Single phase, 220V AC±10%, frequency 47Hz-63Hz											
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. 13kg											
Dimension	3U, 132.5(H)*482.6(W)*360(D)mm											

Note: For other specifications, please contact us.

Product Dimension

