

NXI-5102-1000 Programmable Resistance Module



Product Introduction

NXI-5102-1000 is a programmable resistance module for insulation resistance simulation in high voltage circuits, withstanding voltage up to 1,000 VDC, and setting range of 200 k Ω ~ 61 M Ω . NXI-5102-1000 is applicable to NXI chassis or independent use, widely used to insulation resistance simulation in a variety of test systems.

Application Fields



Insulation Resistance Simulation



High Voltage Resistance Box Simulation



BMS Test System



Other ATE Systems

Main Features

- ▶ Operating Voltage Range: 0~1000VDC
- ▶ Insulation Resistance Range: 200k Ω ~61m Ω
- ▶ Setting Resistance Resolution: 100 Ω
- ▶ Resistance maximum power 3W
- ▶ Resistance Accuracy: 5%+Rr
- ▶ Single module with single slot, applicable to NXI-F1000 chassis use
- ▶ Support Modbus-RTU, SCPI protocols
- ▶ Support 12VDC power supply input, LAN/CAN communication for individual control

Technical Data Sheet

Model	NXI-5102-1000
Operating Voltage	0~1000V DC
Resistance Setting Voltage	200kΩ~61MΩ
Setting Resolution	100Ω
Resistance Accuracy	±5%+Rr
Residual Resistance (Rr)	Typical Value: 3.6Ω
Resistance Temperature Drift	200ppm
Resistance Maximum Power ¹	3W
Maximum Switching Current	10mA
Switch Closure Time	<1.1ms
Switch Release Time	<0.1ms
Expected Switching Life Low Load Application	>1×10 ⁵
Expected Switching Life Full Load Application	>1×10 ⁴
Others	
Test Terminal	Banana Socket Connector
Operating Power	12VDC±10%, <1A
Communication Interface	LAN/CAN
Temperature	Operating temperature: 0°C~40°C; Storage temperature: -20°C~60°C
Operating Environment	Altitude: <2000m; Relative humidity: 5%~90%RH (no condensation); Operating air pressure: 80~110kPa
Dimensions	130.5mm(H)*40mm(W)*230.5mm(D)(with puller)

Note 1: In order to ensure the safe use of the equipment, please pay special attention to whether the input voltage exceeds the resistance power $R_{set} = U^2 / P_r$ when setting the resistance.

Note 2: For other specifications, please contact NGI.