

## NXI-4501-4/32 Matrix Switch Module



### Product Introduction

NXI-4501-4/32 is a 128-node matrix switch module with single pole switch and 32x4 configuration, and its high power signals capacity up to 2A/60W. There is a switch at each intersection of rows and columns. When the switch is off, NXI-4501-4/32 can connect any column to any number of rows and any row to any number of columns. NXI-4501-4/32 is widely used in various scenarios such as AC/DC voltage and current signal measurement, making it an ideal choice for system testing.

### Application Fields



Data Scanning Acquisition



Multiple Electrical Signal Measurement



Integrated Test Systems



Electronics Production Testing

### Main Features

- ▶ Topological Structure: 1-wire 32x4 matrix
- ▶ Support up to 250V AC/300V DC, 2A
- ▶ Max. Switching Power: 62.5VA/60W
- ▶ Switching Action Time: <3ms
- ▶ Switch Bandwidth: 10MHz
- ▶ DC Path Resistance: <0.5Ω
- ▶ Mechanical life up to  $5 \times 10^7$  times
- ▶ Single module with single slot, applicable to NXI-F1000 chassis or independent use
- ▶ Support 12V DC power supply input, LAN communication for individual control
- ▶ Support Modbus-RTU, SCPI and CANopen protocols

## Technical Data Sheet

Model	NXI-4501-4/32	
Topological Structure	1-wire 32×4 matrix	
Hot swap Load	Max. Current	2A
	Max. Voltage	300VDC/250VAC
	Max. Power	60W/62.5VA
Min. Switch Load	10 μA, 10 mV	
DC Path Resistance	Initial <0.5Ω, Final 2Ω	
Thermoelectric Force	<12μV	
Bandwidths	≥10MHz (50Ω termination)	
ESD Protection	4000 VDC	
Action Time	<3ms	
Switching Life	Mechanical	Min. operations 5×10 <sup>7</sup> times
	Electronic	Min. operations 5×10 <sup>4</sup> times
Dielectric Strength	Coil-Contact	4000VAC, 50/60Hz 1min
	Contact-Contact	1000VAC, 50/60Hz 1min
	Control-Switch	1000VDC, 50/60Hz 1min
Others		
Test Terminal	D-Shape connector male, 50pin	
Operating Power	12VDC±10%, <2A	
Communication Interface	LAN/CAN	
Temperature	Working temperature: 0°C~40°C; Storage temperature: 20°C~60°C	
Operating Environment	Altitude: <2000m; Relative humidity: 5%~90%RH(no condensation); Atmospheric pressure: 80~110kPa	
Dimensions	130.5mm(H)*20mm(W)*230.5mm(D)(with puller)	

Note 1: For more and latest information, please contact NGI.

Note 2: For other specifications, please contact NGI.