

NXI-4301-1/48 Multiplex Switch Module



Product Introduction

NXI-4301-1/48 is a 48-node multiplex switch module with high reliability and high loading capacity, and its high power signals capacity up to 30W. By matching different accessories, a variety of switching typologies can be realized to flexibly meet the needs of various application scenarios. Meanwhile, its excellent isolation strength ensures the accuracy and reliability of data transmission. NXI-4301-1/48 is widely used in a variety of AC and DC voltage and current signal measurement scenarios, 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

- ▶ Multiple typologies: 1-wire 48×1, 2-wire 24×1, 2-wire double layer 12×1, 2-wire quad layer 6×1, 4-wire 12×1, 2-wire 4×6
- ▶ Support up to 30V AC/60V DC, 1A, 30W
- ▶ Scan Rate: 100CH/s
- ▶ Switch Bandwidth: 10MHz
- ▶ DC Path Resistance: <math><1\Omega</math>
- ▶ Mechanical life up to 5×10^7 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-4301-1/48 | |
|-------------------------|---|---|
| Topological Structure | 1-wire 48×1 multiplexer 2-wire 24×1 multiplexer 2-wire dual 12×1 multiplexer 2-wire quad 6×1 multiplexer 4-wire 12×1 multiplexer 2-wire 4×6 matrix | |
| Hot swap Load | Max. Current | 1A |
| | Max. Voltage | 60VDC/30VAC |
| | Max. Power | 30W |
| Min. Switch Load | 10 μA, 10 mV | |
| DC Path Resistance | Initial <1Ω, Final 2Ω | |
| Thermoelectric Force | <12μV | |
| Bandwidths | ≥10MHz (50Ω termination) | |
| ESD Protection | 4000 VDC | |
| Scan Rate | 100CH/s | |
| Switching Life | Mechanical | Min. operations 5×10 ⁷ times |
| | Electronic | Min. operations 5×10 ⁴ times |
| Dielectric Strength | Coil-Contact | 4000V AC, 50/60Hz 1min |
| | Contact-Contact | 1000V AC, 50/60Hz 1min |
| | Control-Switch | 1000V DC, 50/60Hz 1min |
| Others | | |
| Test Terminal | SCSI connector female, 68pin | |
| 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.