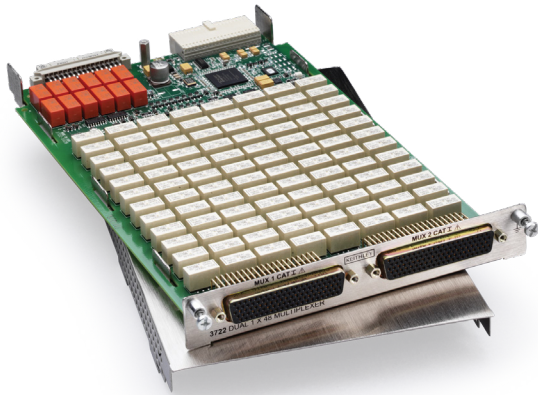


3722 Dual 1×48, High Density, Multiplexer Card

96 differential channels, 300 Volts/1 Amp

DATA SHEET

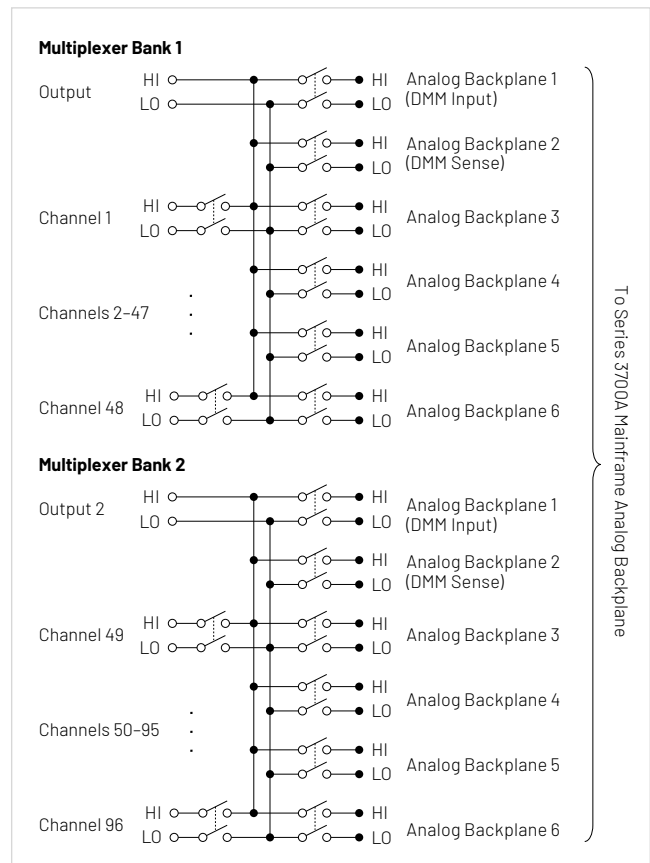


The 3722 offers two independent banks of 1×48 two-pole multiplexers, which is ideal for applications that require a high channel count. The two banks can automatically be connected to the Series 3700A mainframe backplane and optional DMM through the analog backplane connection relays. This connection allows the mainframe to reconfigure the card as a single 1×96 two-pole multiplexer or to enable card-to-card expansion for even larger configurations. Another feature of this card is the latching electromechanical relays. They can accommodate 300 V, 1 A switched signal levels.

The 3722 uses two 104-pin D-sub connectors for signal connections. A solder style connector kit (3792-KIT104-R) and pre-assembled cables (3722-MTC-1.5 and 3722-MTC-3) are available for card connections.

Key Features

- 96 two-pole or 48 four-pole channels for general purpose measurements
- Analog backplane connection relays provide easy bank and card interconnections
- 300 V, 1 A switched or 2 A carry signal capacity; 60 Ω, 125VA
- 1 μV and 100 pA offsets
- 25 MHz bandwidth
- Relay closures stored in onboard memory
- Latching electromechanical relays
- Scan and measure over 110 channels/second



Specifications

Multiplexer Configuration	Two independent 1×48 2-pole multiplexers. Banks can be connected together via relays creating a single 1×96 multiplexer. Banks can be isolated from the backplane by relays. Card can be configured for 2- and 4-wire mode.
Contact Configuration	2-pole form A.
Connector Type	Two 104-pin female D-shells.
Maximum Signal Level	300 V DC or RMS, 1 A switched (2 A carry), 60 Ω, 125 VA.
Common Mode Voltage	300 V DC or RMS between any terminal and chassis.
Volt-Hertz Limit	8×10^7 .
Contact Life	$>10^5$ operations at maximum signal level. $>10^8$ operations no load. ¹

		Dual 1×48 ²	Single 1×96
Channel Resistance (end of contact life)		<1.5 Ω	<2.5 Ω
Contact Potential (differential)		<±1 μV	<±2 μV
Offset Current		<100 pA	<100 pA
Isolation	Differential	5×10^9 Ω, 200 pF	5×10^9 Ω, 400 pF
	Bank-Bank	10^9 Ω, 50 pF	—
	Channel-Channel	10^9 Ω, 50 pF	10^9 Ω, 50 pF
	Common Mode	10^{10} Ω, 200 pF	10^{10} Ω, 400 pF
Crosstalk Channel-channel	300 kHz	<-65 dB	<-65 dB
	1 MHz	<-55 dB	<-55 dB
	20 MHz	<-30 dB	<-30 dB
	Bandwidth	25 MHz	15 MHz

Typical Scanning Speeds

Switch Only³	Sequential scanning, single channel, immediate trigger advance	>120 ch/s.
--------------------------------	--	------------

With Measurements Into Memory⁴

DCV (10 V range) or 2W Ohms (1 kΩ range)

>110 ch/s.

3- or 4-Wire RTD

>100 ch/s.

4-Wire Ohms (1 kΩ range)

>100 ch/s.

ACV (10 V, 400 Hz range)

>110 ch/s.

Notes

- Minimum signal level 10 mV, 10 μA.
- 3706A mainframe with all DMM backplane relays disconnected. Maximum two card backplane relays closed.
- Scanning script local to 3706A mainframe, within same bank, and break before make switching.
- 3706A mainframe with autorange off, limits off, dmm.autozero=0, dmm.autodelay=0, 4½ digits (NPLC=.006), for ACV dmm.detectorbandwidth=300, for OHMs dmm.offsetcompensation=off. Scanning script local to mainframe, sequential scan within same bank (2-pole) or card (4-pole), and break before make switching.

General

ACTUATION TIME	4 ms.
RELAY TYPE	Latching electromechanical.
RELAY DRIVE SCHEME	Matrix.
OPERATING ENVIRONMENT	Specified for 0° to 50°C. Specified to 70% R.H. at 35°C.
STORAGE ENVIRONMENT	-25° to 65°C.
WEIGHT	2.5 lbs.
SAFETY	Conforms to European Union Directive 73/23/EEC, EN61010-1.
EMC	Conforms to European Union Directive 2004/108/EC, EN61326-1.

Ordering Information

3722	Dual 1×48, High Density, Multiplexer Card
-------------	---

Available Accessories

3722-MTC-1.5-KIT	104-pin, male-to-female D-sub cable assembly, 1.5 m (4.9 ft) 104-pin, male, D-sub connector kit (solder-cup contacts) 104-pin, female, D-sub connector kit (solder-cup contacts)
3722-MTC-1.5/MM	104-pin D-sub Male to Male Cable, 1.5 m (5 ft.)
3722-MTC-3	104-pin D-sub Male to Female Cable, 3 m (10 ft.)

Available Services

3722-3Y-EW-STD	1-year factory warranty extended to 3 years from date of shipment
3722-5Y-EW-STD	1-year factory warranty extended to 5 years from date of shipment
C/3722-3Y-STD	3 (Z540-1 compliant) calibrations within 3 years of purchase*

*Not available in all countries

Contact Information:

Australia 1 800 709 465
Austria* 00800 2255 4835
Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777
Belgium* 00800 2255 4835
Brazil +55 (11) 3530-8901
Canada 1 800 833 9200
Central East Europe / Baltics +41 52 675 3777
Central Europe / Greece +41 52 675 3777
Denmark +45 80 88 1401
Finland +41 52 675 3777
France* 00800 2255 4835
Germany* 00800 2255 4835
Hong Kong 400 820 5835
India 000 800 650 1835
Indonesia 007 803 601 5249
Italy 00800 2255 4835
Japan 81(3) 6714 3086
Luxembourg +41 52 675 3777
Malaysia 1 800 22 55835
Mexico, Central/South America and Caribbean 52 (55) 88 69 35 25
Middle East, Asia, and North Africa +41 52 675 3777
The Netherlands* 00800 2255 4835
New Zealand 0800 800 238
Norway 800 16098
People's Republic of China 400 820 5835
Philippines 1 800 1601 0077
Poland +41 52 675 3777
Portugal 80 08 12370
Republic of Korea +82 2 565 1455
Russia / CIS +7 (495) 6647564
Singapore 800 6011 473
South Africa +41 52 675 3777
Spain* 00800 2255 4835
Sweden* 00800 2255 4835
Switzerland* 00800 2255 4835
Taiwan 886 (2) 2656 6688
Thailand 1 800 011 931
United Kingdom / Ireland* 00800 2255 4835
USA 1 800 833 9200
Vietnam 12060128

* European toll-free number. If not accessible, call: +41 52 675 3777

Rev. 02.2022



Find more valuable resources at TEK.COM

Copyright © Tektronix. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

061824 SBG 1KW-74084-1

