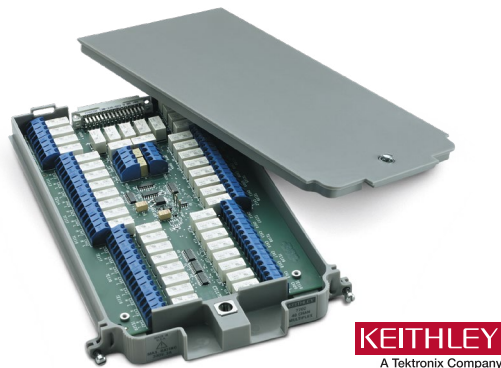


7702 40-channel, Differential Multiplexer Module

with Screw Terminals

Datasheet

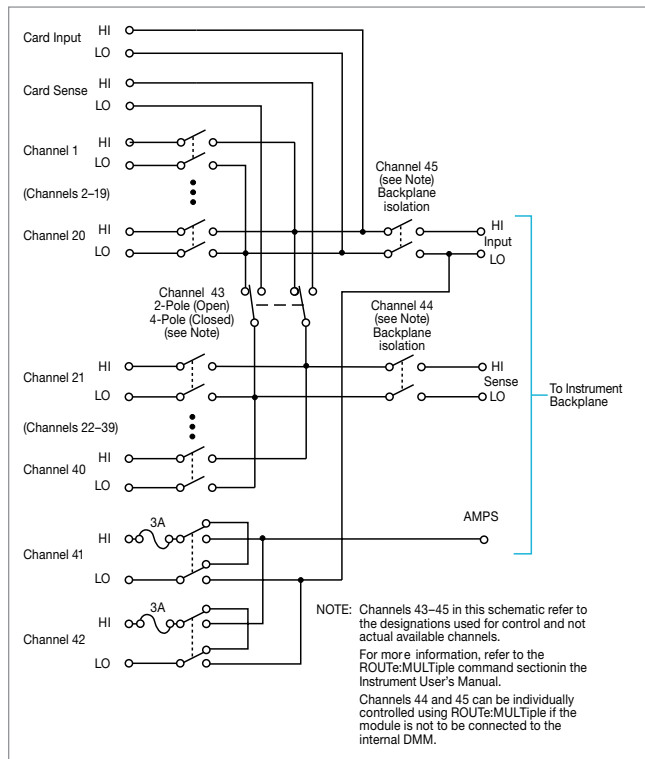


KEITHLEY
A Tektronix Company

The 7702 plug-in module offers 40 channels of 2-pole or 20 channels of 4-pole multiplexer switching that can be configured as two independent banks of multiplexers. The 7702 provides two additional protected channels for current measurements. It is ideal for RTD, thermistor, and thermocouple temperature applications.

Key Features

- 40 channels for general purpose measurements, plus 2 channels to measure current
- Two- or four-wire measurement
- Oversize screw terminal connection blocks are standard for easier connection
- 300 V, 1 A capacity for voltage channels; 60 W, 125 VA
- 3 A capacity for current channels
- Relay closures stored in onboard memory



Specifications

Capabilities

Channels 1-40	Multiplex one of 40 2-pole or one of 20 4-pole signals into DMM.
Channels 41-42	Multiplex one of 2 2-pole current signals into DMM.

Inputs

Maximum Signal Level

Channels (1-40)	300 V DC or rms, 1 A switched, 60 W, 125 VA maximum.
Channels (41-42)	60 V DC or 30 V rms, 3 A switched, 60 W, 125 VA maximum.

Contact Life (typ.)	>10 ⁵ operations at max. signal level. >10 ⁸ operations no load ¹ .
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1. Minimum signal level 10 mV, 10 μ A.

Contact Resistance	<1 Ω at end of contact life.
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Contact Potential	< \pm 500 nV typical per contact, 1 μ V max. < \pm 500 nV typical per contact pair, 1 μ V max.
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Offset Current	<100 pA.
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Connector Type	Screw terminal, #20 AWG wire size.
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Isolation Between Any Two Terminals	>10 ¹⁰ Ω , <100 pF.
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Isolation Between Any Terminal and Earth	>10 ⁹ Ω , <200 pF.
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Cross Talk (10 MHz, 50 Ω Load)	<-40 dB.
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Insertion Loss (50 Ω Source, 50 Ω Load)	<0.1 dB below 1 MHz. <3 dB below 2 MHz.
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Common Mode Voltage	300V between any terminal and chassis.
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General

40 Channels	40 channels of 2-pole relay input. All channels configurable to 4-pole.
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2 Channels	2 channels of current only input.
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Relay Type	Latching electromechanical.
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Actuation Time	<3 ms.
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Environmental and Safety

Operating Environment: Specified for 0° to 50°C. Specified to 80% R.H. at 35°C.

Storage Environment: -25° to 65°C.

EMC: Conforms to European Union EMC Directive.

Safety: Conforms to European Union Low Voltage Directive

RoHS: Conforms to European Union RoHS Directive

Weight	0.5 kg (1.1 lb).
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Supplied Accessories

CC-92-1	Set of 20 Cable Ties
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TL-23	Screwdriver
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Available Services

7702-3Y-EW	1-year factory warranty extended to 3 years from date of shipment
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Ordering Information

7702	40-channel Differential Multiplexer Module with Screw Terminals
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Warranty	1 year
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Contact Information:

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