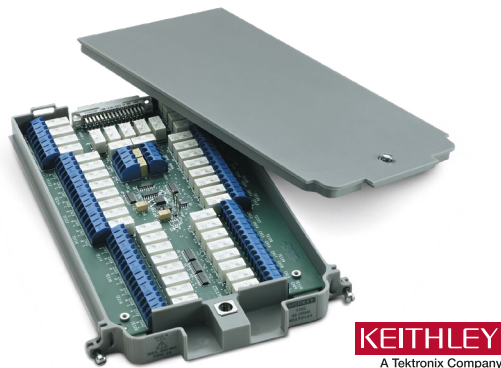


# 7702 40-channel, Differential Multiplexer Module

with Screw Terminals

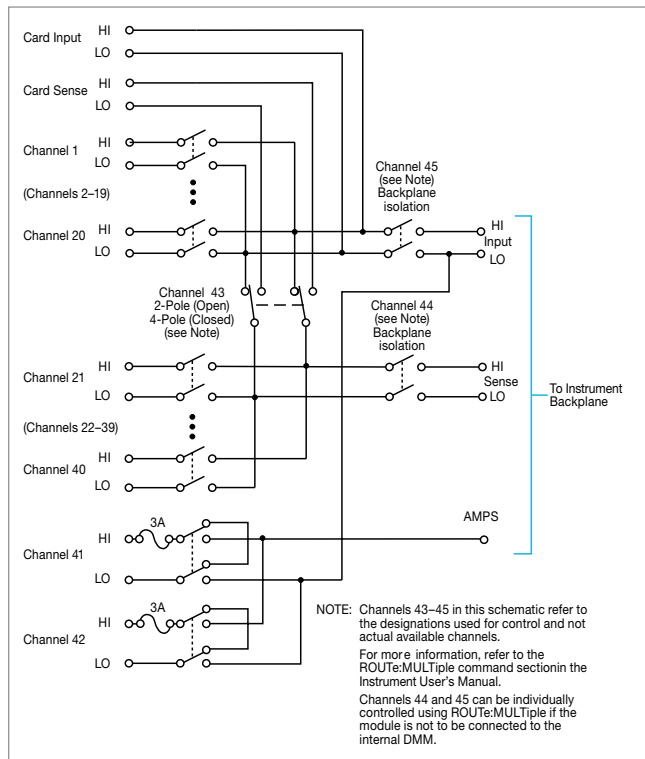
## Datasheet



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

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

#### Inputs

##### Maximum Signal Level

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

<b>Contact Life (typ.)</b>	>10 <sup>5</sup> operations at max. signal level. >10 <sup>8</sup> operations no load <sup>1</sup> .
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1. Minimum signal level 10 mV, 10  $\mu$ A.

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

<b>40 Channels</b>	40 channels of 2-pole relay input. All channels configurable to 4-pole.
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<b>2 Channels</b>	2 channels of current only input.
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<b>Relay Type</b>	Latching electromechanical.
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<b>Actuation Time</b>	<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

<b>Weight</b>	0.5 kg (1.1 lb).
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### Supplied Accessories

<b>CC-92-1</b>	Set of 20 Cable Ties
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<b>TL-23</b>	Screwdriver
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### Available Services

<b>7702-3Y-EW</b>	1-year factory warranty extended to 3 years from date of shipment
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### Ordering Information

<b>7702</b>	40-channel Differential Multiplexer Module with Screw Terminals
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<b>Warranty</b>	1 year
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