

7703 32-channel, High Speed, Differential Multiplexer Module

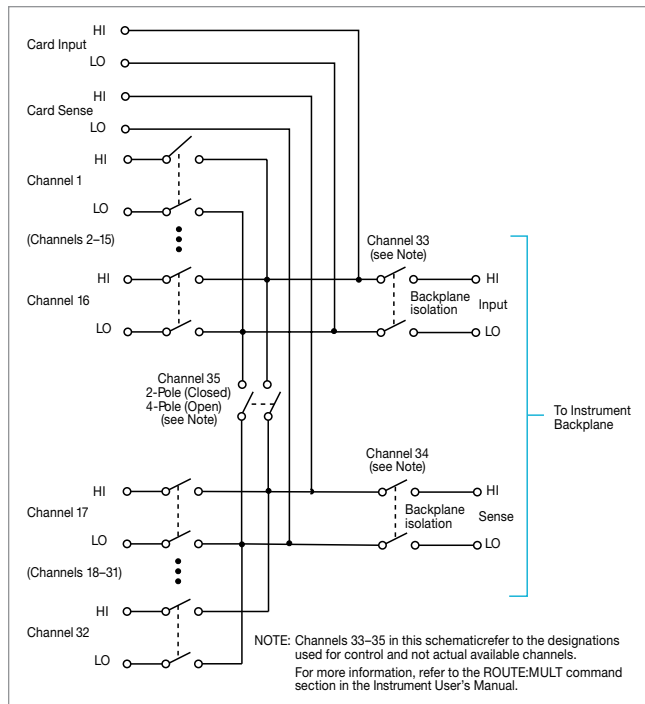
Datasheet



The 7703 plug-in module offers 32 channels of 2-pole or 16 channels of 4-pole multiplexer switching that can be configured as two independent banks of multiplexers. The non-latching reed relays provide high speeds and are designed for 300 volt, 500 mA; 10 VA. The relay closures are stored in onboard memory. The 7703 is ideal for RTD and thermistor temperature applications.

Key Features

- 32 channels for general purpose measurements
- Relay actuation time of less than 1ms for high-speed scanning
- Two- or four-wire measurement
- Two 50-pin female D-sub connectors are standard for secure hook-up and quick teardown



Specifications

Capabilities

Channels 1-32 Multiplex one of 32 2-pole or one of 16 4-pole signals into DMM.

Inputs

Maximum Signal Level

Channels (1-32) 300 V DC or rms, 0.5 A switched, 10 W maximum.

Contact Life (typ.) >5x10⁴ operations at max. signal level.
>10⁸ operations cold switching.

Contact Resistance <1 Ω at end of contact life.

Contact Potential <±3 μV typical per contact, 6 μV max.
<±3 μV typical per contact pair, 6 μV max.

Offset Current <100 pA.

Connector Type 50 pin D-sub ×2.

Relay Drive Current 20 mA per channel.

Isolation Between Any Two Terminals

>10⁹ Ω, <200 pF.

Isolation Between Any Terminal and Earth

>10⁹ Ω, <400 pF.

Cross Talk (1 MHz, 50 Ω Load)

<-40 dB.

Insertion Loss (50 Ω Source, 50 Ω Load)

<0.35 dB below 1 MHz. <3 dB below 2 MHz.

Common Mode Voltage

300 V between any terminal and chassis.

General

32 Channels 32 channels of 2-pole relay input. All channels configurable to 4-pole.

Relay Type Reed.

Actuation Time <1 ms.

Environmental and Safety

Operating Environment: Specified for 0° to 50°C. Specified to 40% 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 0.8 kg (1.75 lbs).

Supplied Accessories

7703-306A 50-pin D-Sub Male Shell Connector Kit, quantity 2

Available Accessories

7705-MTC-2 50 Pin Male to Female D-sub Cable, 2 m (6.6 ft).

7788 50-pin D-Sub male connector kit, quantity 2

7790 50-pin male, 50-pin female, 25-pin male D-shell IDC connectors

Available Services

7703-3Y-EW 1-year factory warranty extended to 3 years from date of shipment

Ordering Information

7703 32-channel, High Speed, Differential Multiplexer Module

Warranty 1 year

Contact Information:

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