

7703

32-Channel, High-Speed, Differential Multiplexer Module

- 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

Ordering Information

7703 32-Channel, High-Speed, Differential Multiplexer Module

Accessories Supplied

Two mating connectors with solder cup (Model 7788)



The Model 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, 500mA; 10VA. The relay closures are stored in onboard memory. The Model 7703 is ideal for RTD and thermistor temperature applications.

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): 300V DC or rms, 0.5A switched, 10W maximum.

Contact Life (typ): >5×10⁴ operations at max signal level.
>10⁸ operations cold switching.

CONTACT RESISTANCE: <1Ω at end of contact life.

CONTACT POTENTIAL:

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

OFFSET CURRENT: <100pA.

CONNECTOR TYPE: 50 pin D-sub ×2.

RELAY DRIVE CURRENT: 20mA per channel.

ISOLATION BETWEEN ANY TWO TERMINALS: >10⁹Ω, <200pF.

ISOLATION BETWEEN ANY TERMINAL AND EARTH: >10⁹Ω, <400pF.

CROSS TALK (1 MHz, 50Ω Load): <-40dB.

INSERTION LOSS (50Ω Source, 50Ω Load): <0.35dB below 1MHz. <3dB below 2MHz.

COMMON MODE VOLTAGE: 300V 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: <1ms.

FIRMWARE: Specified for Model 2700 rev. A01, 2701 rev. A01, and 2750 rev. A01 or higher.

ENVIRONMENTAL

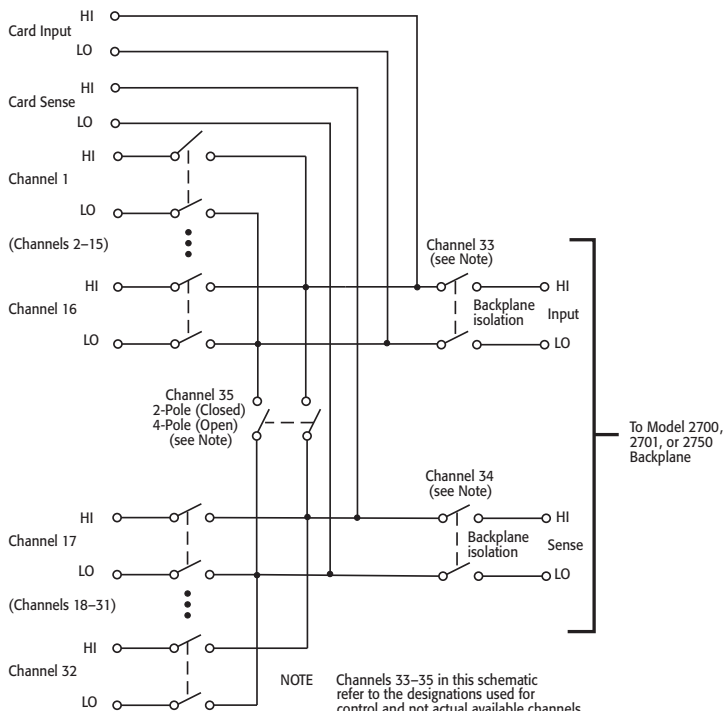
OPERATING ENVIRONMENT: Specified for 0°C to 50°C.
Specified to 80% R.H. at 35°C.

STORAGE ENVIRONMENT: -25°C to 65°C.

WEIGHT: 0.8kg (1.75 lbs).

ACCESSORIES AVAILABLE

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



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