

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Keithley 2701* at our website: ***Click HERE***

# 7701

# 32-channel Differential Multiplexer Module

- **Configurable for 32 channels of differential measurements, with up to 16 channels of 4-pole measurements**
- **Two female D-shell connectors are standard for secure hook-up and quick teardown**
- **150V, 1A capacity for voltage channels; 60W, 125VA**
- **Relay closures stored in onboard memory**
- **Screw terminal jumpers allow user-configurable DMM connections**

## Ordering Information

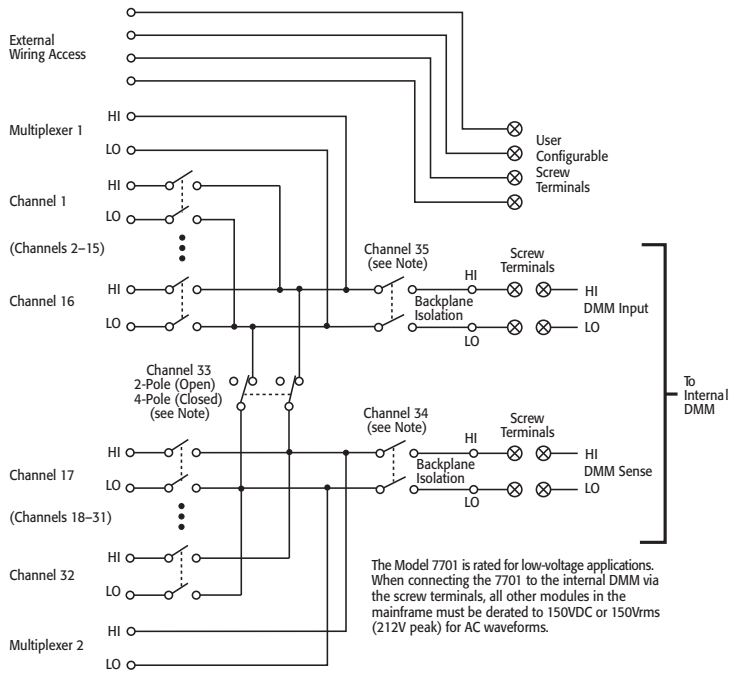
**7701** **32-channel, Differential Multiplexer Module**

## Accessories Supplied

**Two mating IDC connectors for ribbon cable**



The Model 7701 plug-in module offers 32 channels of 2-pole or 16 channels of 4-pole multiplexer switching. Its 32 channels can be configured for common-side 4-wire ohms. They can also be configured as two independent banks of multiplexers. It is ideal for RTD or thermistor temperature applications.




The Model 7701 is rated for low-voltage applications. When connecting the 7701 to the internal DMM via the screw terminals, all other modules in the mainframe must be derated to 150VDC or 150Vrms (212V peak) for AC waveforms.

NOTE: Channels 33–35 in this schematic refer to the designations used for control and not actual available channels.

For more information, refer to the ROUTE:MULT command section in the Model 2700, 2701, or 2750 User's Manual.

### CAPABILITIES

**CHANNELS 1–32:** Multiplex one of 32 2-pole or one of 16 4-pole signals into DMM. Configuration supports dual 1×16 independent multiplexers.

### INPUTS

**MAXIMUM SIGNAL LEVEL: Any channel to Any Channel (1–32):** 150V DC or 150Vrms (212V peak) for AC waveforms, 1A switched, 60W, 125VA maximum.

**SAFETY:** Conforms to European Union Directive 73/23/EEC EN61010-1, CAT I.

**CONTACT LIFE (typ):** $>10^5$ operations at max. signal level. $>10^8$ operations no load[1].

[1] Minimum signal level 10mV, 10μA.

**CONTACT RESISTANCE:** <1Ω any path and additional 1Ω at end of contact life.

**CONTACT POTENTIAL:** <6μV per contact pair.

**OFFSET CURRENT:** <100pA.

**CONNECTOR TYPE:** 50-pin female D-shell, Channels 1–24. 25-pin female D-shell, Channels 25–32. Supplied with male IDC ribbon cable connectors.

**ISOLATION BETWEEN ANY TWO TERMINALS:** $>10^9$Ω, <200pF.

**ISOLATION BETWEEN ANY TERMINAL AND EARTH:** $>10^9$Ω, <400pF.

**CROSS TALK (1MHz, 50Ω Load):** <–35dB.

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

**COMMON MODE VOLTAGE:** 300VDC or 300Vrms (425V peak) for AC waveforms between any terminal and chassis.

### GENERAL

**32 CHANNELS:** 32 channels of 2-pole relay input. All channels configurable to 4-pole.

**RELAY TYPE:** Latching electromechanical.

**ACTUATION TIME:** <3ms.

**FIRMWARE:** Specified for Model 2700 rev. B03, Model 2701 rev. A01, and Model 2750 rev. A01 or higher.

**DMM CONNECTIONS:** Screw terminals provide internal DMM connections to channels 34 and 35 and connections to external wiring access.

### ENVIRONMENTAL

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

**STORAGE ENVIRONMENT:** –25°C to 65°C.

**WEIGHT:** <0.52kg (1.16 lb).

## ACCESSORIES AVAILABLE

| | |
|---|---|
| 7789 | 50/25 Pin Male D-Shell Solder Cup Connectors |
| 7790 | 50/50/25 Pin Female/Male D-Shell IDC Connectors |
| 7705-MTC-2 | 50 Pin Male to Female D-sub Cable, 2m (6.6 ft). |
| 7707-MTC-2 | 25 Pin Male to Female D-sub Cable, 2m (6.6 ft). |

## SERVICES AVAILABLE

| | |
|---|---|
| 7701-3Y-EW | 1-year factory warranty extended to 3 years from date of shipment |

Use with Integra Series mainframes: 2700, 2701, 2750

DIGITAL MULTIMETERS & SYSTEMS

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP