

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 6, 2026

KEITHLEY

Keithley 7710 20 Channel Solid State/Long Life Differential Multiplexer Card with Auto CJC

Keithley 7710 20 Channel Solid State/Long Life Differential Multiplexer Card with Auto CJC The Keithley 7710 is a 20-channel solid-state differential multiplexer plug-in module for Integra Series DAQ mainframes (2700/2701/2750/DAQ6510 class). Opto-coupled FET solid-state relays provide long life ($>10^{10}$ operations) and fast actuation (<0.5 ms). Automatic cold-junction compensation (CJC) supports thermocouple temperature measurements. Configured as 20 channels of 2-pole or 10 channels of 4-pole switching; two independent banks. The Keithley 7710 is a 20-channel solid-state differential multiplexer plug-in module for Integra Series DAQ mainframes (2700/2701/2750/DAQ6510 class). Opto-coupled FET solid-state relays provide long life ($>10^{10}$ operations) and fast actuation (<0.5 ms). Automatic cold-junction compensation (CJC) supports thermocouple temperature measurements. Configured as 20 channels of 2-pole or 10 channels of 4-pole switching; two independent banks. Long-term data logging; high-speed scanning; thermocouple/RTD/thermistor temperature; mixed-signal multipoint monitoring.

No photo

MODEL

Keithley 7710

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

7710

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- 20 channels 2-pole or 10 channels 4-pole
- Solid-state opto-coupled FET relays
- Automatic CJC for thermocouples
- Signal: 60 VDC or 42 Vrms, 100 mA switched; 6 W / 4.2 VA max
- Common mode: 300 VDC or 300 Vrms (425 V peak) to chassis
- Contact life: $>10^{10}$ operations (cold or max signal, by design)
- Actuation: <0.5 ms (100 mA load)
- Crosstalk: <-40 dB (CH-CH, 500 kHz, 50 Ω)
- Insertion loss: <1 dB below 500 kHz
- Scanning: >800 ch/s DCV into memory (mainframe dependent); >400 alternating DCV/2W Ω
- Removable screw terminals; weight ~ 0.45 kg

7710 Characteristics / Specifications

PARAMETER	VALUE
Model	7710
Manufacturer	Keithley Instruments (Tektronix)
Instrument Type	Solid-State Differential Multiplexer Module
Family	Integra Series Plug-In Modules
Alias	7710 Switching 20×2-pole / 10×4-pole; solid-state; auto CJC; 60 V / 100 mA Operational Notes
Prefer Keithley 7710 DAQ card datasheet. Host	2700-series / DAQ6510 class.
Signal	60 VDC or 42 Vrms, 100 mA switched; 6 W / 4.2 VA max
Common mode	300 VDC or 300 Vrms (425 V peak) to chassis
Contact life	>10^10 operations (cold or max signal, by design)
Actuation	<0.5 ms (100 mA load)
Crosstalk	<-40 dB (CH-CH, 500 kHz, 50 Ω)
Insertion loss	<1 dB below 500 kHz
Scanning	>800 ch/s DCV into memory (mainframe dependent); >400 alternating DCV/2WΩ

7710 Specifications

PARAMETER	VALUE
Key Features	- 20 channels 2-pole or 10 channels 4-pole
Technical Specifications	Model: 7710
Switching	20×2-pole / 10×4-pole; solid-state; auto CJC; 60 V / 100 mA
Operational Notes	Prefer Keithley 7710 DAQ card datasheet. Host: 2700-series / DAQ6510 class.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

PARAMETER	VALUE
Model	7710
Manufacturer	Keithley Instruments (Tektronix)
Instrument Type	Solid-State Differential Multiplexer Module
Family	Integra Series Plug-In Modules
Alias	7710

Switching

20×2-pole / 10×4-pole; solid-state; auto CJC; 60 V / 100 mA

Operational Notes

Prefer Keithley 7710 DAQ card datasheet. Host: 2700-series / DAQ6510 class.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 6, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.