

**Aumictech**

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Data Sheet

August 2, 2026

KEITHLEY

Keithley 7706 All-in-One I/O Module

The Keithley 7706 (7706) is an all-in-one plug-in I/O module for Keithley Integra Series mainframes (Models 2700, 2701, and 2750) and the DAQ6510, combining a 20-channel 2-pole (10-channel 4-pole) multiplexer with automatic cold-junction compensation, 16 digital outputs, two ± 12 V analog outputs, and a totalizer/event counter on screw-terminal connections rated for 300 V, 1 A, 60 W, and 125 VA. Integrated data acquisition with digital control and analog stimulus; temperature scanning with automatic CJC for thermocouple applications; production test requiring mux switching plus digital I/O and DAC outputs; event counting and totalizing in process monitoring.

No photo

MODEL

Keithley 7706

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

7706

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 of 2-pole or 10 channels of 4-pole multiplexer switching
- Automatic cold-junction compensation (CJC)
- 16 digital output channels
- 2 analog voltage outputs (± 12 V, 1 mV resolution)
- Totalizer/event counter input (up to 100 kHz)
- Latching electromechanical relays
- Screw-terminal connections (#22 AWG)
- Rated 300 V, 1 A switched, 60 W, 125 VA maximum
- Compatible with Integra 2700/2701/2750 and DAQ6510

7706 Characteristics / Specifications

PARAMETER	VALUE
Model	7706
Manufacturer	Keithley (Tektronix/Keithley)
Instrument Type	All-in-One I/O Module
Series	7700-Series Plug-In Module
Compatible Mainframes	Keithley 2700, 2701, 2750; DAQ6510
Multiplexer Channels	20 × 2-pole or 10 × 4-pole
Digital Outputs	16 (channels 21–22 bank)
Analog Outputs	2 (±12 V at 1 mA max; ±10 V at 5 mA max); 1 mV resolution
Totalizer Input	1 (channel 25); up to 100 kHz; 32-bit count range
Relay Type	Latching electromechanical
Actuation Time	less than 3 ms
Maximum Signal Level (mux)	300 V DC or rms; 1 A switched; 60 W; 125 VA maximum
Safety Category	CAT 1
Connector Type	Screw terminal, #22 AWG wire size
Contact Resistance	less than 1 Ω at end of contact life
Common Mode Voltage	300 V between any terminal and chassis
Digital Output Levels	Vout(L) less than 0.8 V at 400 mA; Vout(H) greater than 2.4 V at 1 mA
Analog Output Accuracy (1 year)	±0.15% of output + 19 mV (±5°C)
Write Speed (digital/analog)	50/s Standard Operating Conditions Specified for 0°C to 50°C operating per Keithley Integra/7700-series environmental specifications. Digital outputs, analog outputs, and totalizer channels are referenced to chassis ground.
Channels	25 (digital, analog, totalizer) are chassis-referenced and not isolated from the mux channels. Minimum contact life signal level 10 mV, 10 μA for latching relay wear specifications. Automatic CJC supports thermocouple temperature measurements when configured with appropriate scan lists. Confirm screw-terminal wiring torque and wire gauge before energizing high-voltage mux paths.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Channels	25 (digital, analog, totalizer) are chassis-referenced and not isolated from the mux channels. Minimum contact life signal level 10 mV, 10 µA for latching relay wear specifications. Automatic CJC supports thermocouple temperature measurements when configured with appropriate scan lists. Confirm screw-terminal wiring torque and wire gauge before energizing high-voltage mux paths.

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	
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Write Speed (digital/analog)	50/s
Standard Operating Conditions	
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Operational Notes	
Channels 21–25 (digital, analog, totalizer) are chassis-referenced and not isolated from the mux channels. Minimum contact life signal level 10 mV, 10 μA for latching relay wear specifications. Automatic CJC supports thermocouple temperature measurements when configured with appropriate scan lists. Confirm screw-terminal wiring torque and wire gauge before energizing high-voltage mux paths.	

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>

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