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Data Sheet

August 13, 2026

RIGOL

Rigol MC3132 32 channel differential Multiplexer module for use with M300 DAQ

Rigol MC3132 32 Channel Multiplexer for M300 The MC3132 is a 32 channel multiplexer module for the Rigol M300 data acquisition / switch system. All 32 channels switch both HI and LO. It supports 2-wire mode (32 channels) or 4-wire mode (16 channels) and connects to the MC3065 6.5 digit DMM module. Signals connect through M3TB32 or M3TB32T (temperature sensor) terminal blocks. Scan speed is 60 channels/s; open/close is 200 channels/s. Ratings are 300 Vrms, 1 Arms, 50 VA, 1 MHz bandwidth, 5 uV offset, closed resistance less than 1 ohm, isolation greater than 10 GOhm. The MC3132 is a 32 channel multiplexer module for the Rigol M300 data acquisition / switch system. All 32 channels switch both HI and LO. It supports 2-wire mode (32 channels) or 4-wire mode (16 channels) and connects to the MC3065 6.5 digit DMM module. Signals connect through M3TB32 or M3TB32T (temperature sensor) terminal blocks. Scan speed is 60 channels/s; open/close is 200 channels/s. Ratings are 300 Vrms, 1 Arms, 50 VA, 1 MHz bandwidth, 5 uV offset, closed resistance less than 1 ohm, isolation greater than 10 GOhm. Scanned DCV, ACV, 2WR, 4WR, frequency, period, and temperature



MODEL

Rigol MC3132

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MC3132

LISTING

<https://aumictechlabs.com/products/mc3132-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rigol MC3132 is a 32-channel differential multiplexer module that expands the input capacity of the Rigol M300 Data Acquisition System Mainframe. By switching both HI and LO inputs across all 32 channels, the module delivers fully isolated signals to connected measurement instruments such as the MC3065 DMM module. It accommodates both 2-wire and 4-wire measurement configurations, with automatic channel pairing for resistance testing.

Technical Specifications

Channels: 32 differential inputs organized into two 16-channel banks (A and B)

Channel Architecture: Break-before-make switching on all channels; fully isolated inputs

Measurement Modes: 2-wire and 4-wire configurations supported

4-Wire Pairing: Channel n automatically pairs with channel n+16 for resistance measurements

Signal Isolation: -40 dB isolation within banks

Temperature Support: Capable of supporting temperature sensor measurements

Input Protection: 300 V on all ranges

Physical Dimensions: 17.00 in (L) × 9.00 in (W) × 6.00 in (H)

Key Features

- Fully differential switching expands M300 system measurement points without signal compromise
- Break-before-make architecture eliminates transient cross-talk between channels
- Dual-bank topology simplifies 4-wire resistance and temperature measurement setup
- M3TB32 terminal block interface provides secure signal routing

Typical Applications

- Multi-channel analog signal acquisition in production test environments
- Resistance and temperature measurement networks requiring 4-wire kelvin sensing
- High-channel-count data logging with integrated DMM analysis
- Distributed sensor monitoring systems leveraging modular M300 architecture

Compatibility & Integration

The MC3132 integrates directly into the Rigol M300 Data Acquisition/Switch System Mainframe and pairs with the MC3065 DMM module for synchronized measurement. Signal connections use the M3TB32 terminal block. The module operates as a transparent switching layer, preserving signal integrity to downstream measurement electronics.

MC3132 Characteristics / Specifications

PARAMETER	VALUE
Model	MC3132
Manufacturer	Rigol
Instrument Type	32 channel multiplexer module
Alias	MC 3132; RIGOL MC3132; MUX32 MC3132
Host Mainframe	M300 series data acquisition / switch system
Number of Channels	32
Wiring Mode	2 wire (32 ch) or 4 wire (16 ch)
HI LO Switching	both HI and LO on all 32 channels
Connect to DMM Module	yes (MC3065)
Scanning Speed	60 channels/s
Open Close Speed	200 channels/s
Maximum Voltage	300 Vrms DC or AC rms
Maximum Current	1 Arms DC or AC rms
Maximum Power	50 VA
Isolation Voltage	300 Vrms channel to channel and channel to earth
Offset Voltage	5 uV
Closed Channel Resistance	less than 1 ohm
Isolation Resistance	greater than 10 GOhm
Bandwidth	1 MHz
Crosstalk at 1 MHz	minus 45 dB (50 ohm load)
Capacitance HI LO	100 pF
Capacitance LO Earth	200 pF
Volt Hertz Limit	1e8
Thermocouple Cold Junction Typical	0.8 C
Switch Life No Load Typical	100 million

PARAMETER	VALUE
Switch Life Rated Load Typical	100 000 (resistive)
Operating Temperature	0 C to 55 C
Storage Temperature	minus 20 C to 70 C
Humidity	40 C / 80 percent RH non-condensing
Terminal Block Standard	M3TB32
Terminal Block Temperature	M3TB32T (supports temperature sensor)
Scan Speed Conditions	0.02 PLC, channel delay 0, auto zero off, DCV, internal memory
Supported DMM Functions	DCV, ACV, 2WR, 4WR, FREQ, PERIOD, TEMP
Sibling 20 ch Mux	MC3120
Sibling Matrix	MC3648 (no DMM connection)
Mainframe Analog Bus Limit	300 Vdc or 300 Vrms with DMM fitted Notes Specs from Rigol M300 Series Data Acquisition/Switch System datasheet. Confirm M3TB32 versus M3TB32T and MC3065 in another slot. Do not exceed 300 V / 1 A / 50 VA.

General Specifications & Supplementary Characteristics

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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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Notes
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

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

Aumictech

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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.