

M300 Series Data Acquisition/ Switch System

Modules/Terminal Block Supported by M300

System LXI

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Auto LO FAIL

300.000V

100.0000V

RIGOL M300

201 MUX-32 DCV ALARM4 300.0000V

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DMM-MC3065	MC3065 doesn't need terminal block	 DMM module Used to measure the signal 6½ digits Support the following functions: DCV, ACV, DCI, ACI, 2WR, 4WR, FREQ, PERIOD, TEMP and any sensor After connecting the DMM module, make sure that the signal under test connected to the analog bus is no greater than 300 Vdc or 300 Vrms 		
RIGOL MUX20-MC3120	RIGOL M3TB20	 20-channel multiplexer All 20 channels switch both HI and LO inputs Support 4-wire measurement The signal to be tested is connected through the M3TB20 terminal block Can be connected with MC3065 		
RIGOL MUX32-MC3132	RIGOL M3TB32	 32–channel multiplexer All 32 channels switch both HI and LO inputs Support 4–wire measurement The signal to be tested is connected through the M3TB32 terminal block Can be connected with MC3065 		
RIGOL MUX64–MC3164	RIGOL M3TB64	 64-channel single-ended multiplexer All 64 channels can switch HI input only Doesn't support 4-wire measurement The signal to be tested is connected through the M3TB64 terminal block Can be connected with MC3065 		
MIX24–MC3324	RIGOL M3TB24	 Mixed multiplexer with 20 voltage channels and 4 current channels All 20 voltage channels switch both HI and LO inputs 20 voltage channels support 4-wire measurement 4 current channels are used to measure DC current or AC current The signal to be tested is connected through the M3TB24 terminal block Can be connected with MC3065 		

ACT-MC3416	RIGOL M3TB16	 16-channel actuator Can connect signal to the device under test or enable external device Any of the 16 channels can switch to Normally-Open (NO) and Normally-Closed (NC) states The signal is connected through the M3TB16 terminal block
MFC-MC3534	RIGOL M3TB34	 Multifunction module DIO: four 8-bit digital input/output ports TOT: four totalizer input terminals DAC: four analog output terminals The signal is connected through the M3TB34 terminal block
MATRIX-MC3648	RIGOL M3TB48	 4 x 8 two-wire matrix switch Used to connect multiple devices to multiple points on the device under test 32 two-wire cross points which can connect any combination of inputs and outputs at the same time The signal is connected through the M3TB48 terminal block

Multiplexers Selection Guide

M300 provides five kinds of multiplexers and five kinds of external terminal blocks which are used to connect signals. These multiplexers support three types of connection modes: 1-wire mode, 2-wire mode and 4-wire mode. You can select your desired multiplexer and terminal block by referring to the following table.

		MC3120	MC3132	MC3164	MC3324
Number of Channels		20	32	64	20+4
		2–wire mode or 4–wire mode	2–wire mode or 4–wire mode	1–wire mode	2–wire mode or 4–wire mode
Scan Speed		60Ch/s	60Ch/s	60Ch/s	60Ch/s
Terminal Block		M3TB20	M3TB32	M3TB64	M3TB24
DC Voltage		\sim	\checkmark	\checkmark	\checkmark
AC Voltage		\sim			\checkmark
DC Current					\checkmark
AC Current					\checkmark
2WR		\sim		\checkmark	\checkmark
4WR		\sim	\checkmark		\checkmark
Frequency		\sim	\checkmark	\checkmark	\checkmark
Period		\sim	\checkmark	\checkmark	\checkmark
Temperature	TC	\sim	\checkmark		\checkmark
	RTD	\sim	\checkmark	\checkmark	\sim
	RTD 4W	\sim	\checkmark		\checkmark
	Thermistor	\sim	\checkmark		\checkmark
Any Sensor	DC Voltage	\sim	\checkmark		\checkmark
	DC Current				\checkmark
	2WR	\sim	\checkmark		\checkmark
	4WR	\sim			
	Frequency	\sim	\checkmark	\sim	\sim

MC3120 20-Channel Multiplexer

- 20-channel multiplexer
- All 20 channels switch both HI and LO inputs
- Support 4-wire measurement
- The signal to be tested is connected through the M3TB20 terminal block
- Can be connected with MC3065







MC3132 32-Channel Multiplexer

- 32-channel multiplexer
- All 32 channels switch both HI and LO inputs
- Support 4-wire measurement
- The signal to be tested is connected through the M3TB32 terminal block
- Can be connected with MC3065







MC3164 64-Channel Single-ended Multiplexer

- · 64-channel single-ended multiplexer
- · All 64 channels can switch HI input only
- Doesn't support 4-wire measurement
- The signal to be tested is connected through the M3TB64 terminal block
- Can be connected with MC3065







MC3324 20-voltage-channel+4-current-channel Mixed Multiplexer

- Mixed multiplexer with 20 voltage channels and 4 current channels
- · All 20 voltage channels switch both HI and LO inputs
- 20 voltage channels support 4-wire measurement
- 4 current channels are used to measure DC current or AC current
- The signal to be tested is connected through the M3TB24 terminal block
- Can be connected with MC3065





MC3416 16-channel Actuator

- · 16-channel actuator
- Can connect signal to the device under test or enable external device
 Any of the 16 channels can switch to Normally-Open (NO) and
- Normally-Closed (NC) states
- The signal is connected through the M3TB16 terminal block







MC3534 Multifunction Module

- Multifunction module
- DIO: four 8-bit digital input/output ports
- TOT: four totalizer input terminals
- DAC: four analog output terminals
- The signal is connected through the M3TB34 terminal block









MC3648 4×8 Matrix Switch

- 4×8 two-wire matrix switch
- $\boldsymbol{\cdot}$ Used to connect multiple devices to multiple points on the device under test
- 32 two-wire cross points which can connect any combination of inputs and outputs at the same time
- The signal is connected through the M3TB48 terminal block







RIGOL

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