

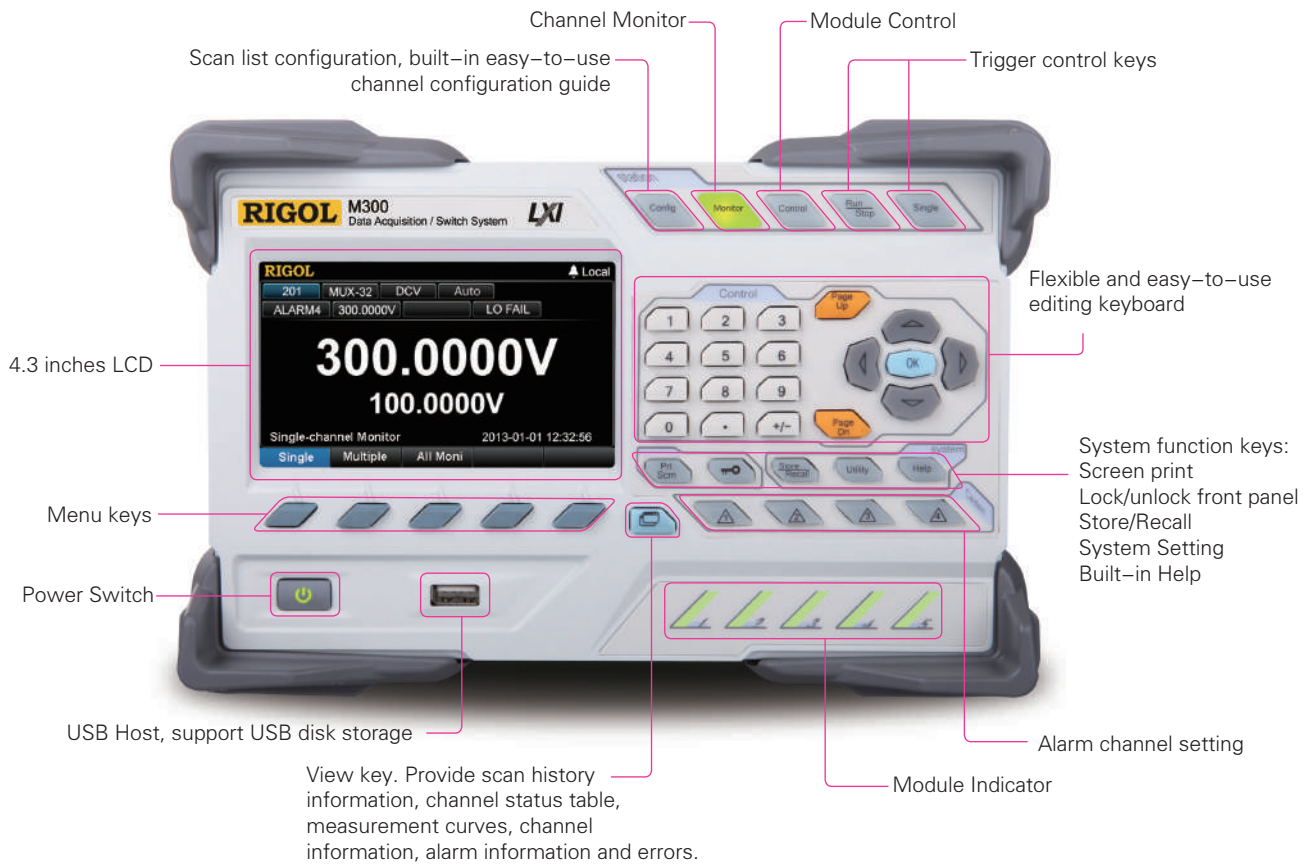


M300 Series Data Acquisition/ Switch System

- Up to 320 switch channels per mainframe, save on cost of ownership
- Can be run without PC
- USB logging
- Interval scanning with storage of up to 100,000 time-stamped readings
- 8 kinds of cards supported
- 6½ digits DMM can be enabled/disabled in any of slots
- Standard SCPI commands
- Math statistics: AVG, MAX, MIN, SDEV
- 4.3" TFT LCD
- Powerful PC software
- Full Interfaces supported: USB Device, USB Host, GPIB, LAN(LXI-Core 2011 Device), RS232

M300 Series Data Acquisition/Switch System with modular structure, which combines precision measurement capability with flexible signal connections, can provide versatile solutions for the applications with multiple points or signals to be tested in product performance test during R&D phase as well as automatic test during production process.

M300 Series Data Acquisition/Switch System



Product Dimensions: Width X Height X Depth=239.0mm×159.0 mm×373.4 mm Weight: 5.7 kg(Without Package)

► Feature and Benefits

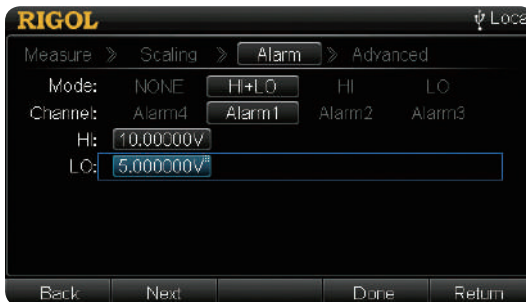
• Channel Configuration Guide



Measurement Configuration



Scaling Configuration



Alarm Configuration

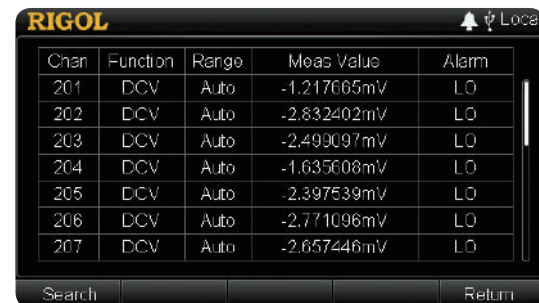


Advanced Configuration

• Channel Monitor

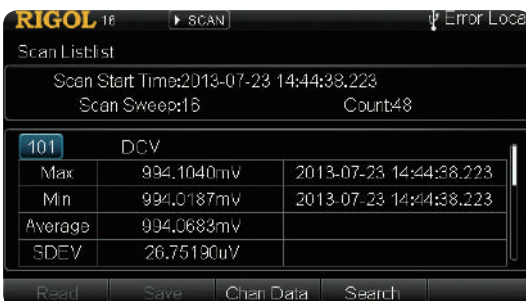


Single Channel Monitor



Multiple/All Channel Monitor

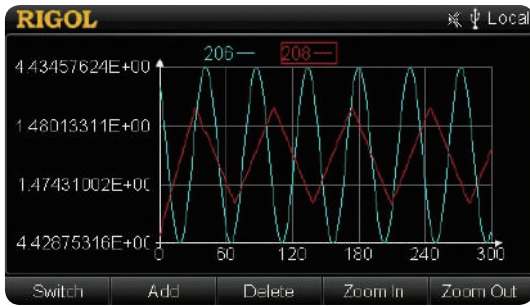
• Multi-View Switch



Display real-time scan information and all the measurement data of the channel selected



Display real-time channel status



Draw scan data curves

312	2938559Cyc	313	2938539Cyc	314	2938537Cyc
315	2938497Cyc	316	2938496Cyc	317	2938788Cyc
318	2938742Cyc	319	2938746Cyc	320	2938727Cyc
321	2938491Cyc	322	2938471Cyc	323	2938684Cyc
324	2938673Cyc	325	2938465Cyc	326	2938470Cyc
327	2938462Cyc	328	2938459Cyc	329	2938457Cyc
330	2938455Cyc	331	2938452Cyc	332	2938453Cyc
397	1422989Cyc	398	0Cyc	399	1418841Cyc

Record each relay cycle on each module

Alarm Data	Time	Channel	Mode	Alarm
994.0293mV	07-23 14:05:05.000	101	HI	1

Alarm Information

No.	Error Info
1	-113, "Undefined header; keyword cannot be found"
2	-113, "Undefined header; keyword cannot be found"
3	-113, "Undefined header; keyword cannot be found"
4	-102, "Syntax error"

Error Information

• Multiple Configuration Copy Functions



Multiple configuration copy function, can configure multiple channels conveniently and quickly



Module Copy

SourceChan	TargetChan
102	102
103	
104	
105	
106	
107	
108	
109	
110	
111	
112	
113	
114	
115	
116	
117	
118	
119	
120	
121	
122	
123	
124	
125	
126	
127	
128	
129	
130	
131	

Channel Copy

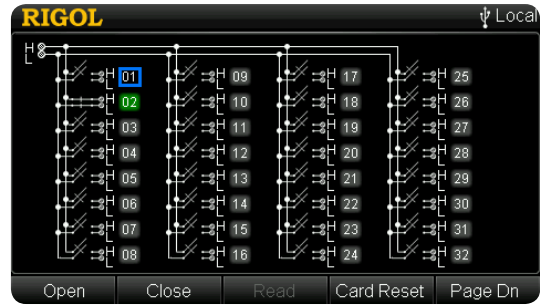


Extended Copy

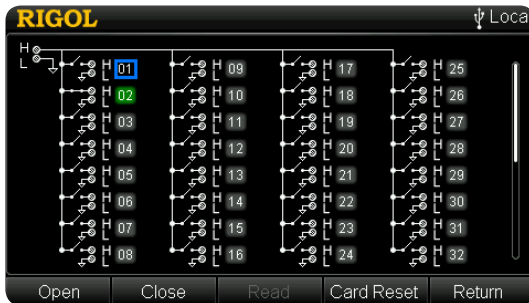
• To Control Each Module Separately



To control each module separately



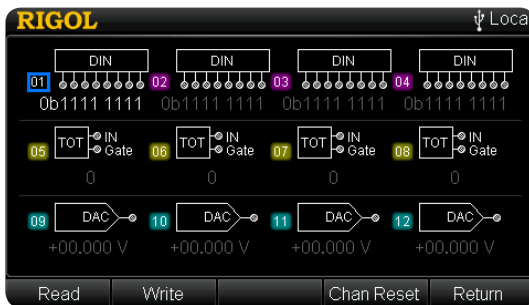
MC3132 Control Interface



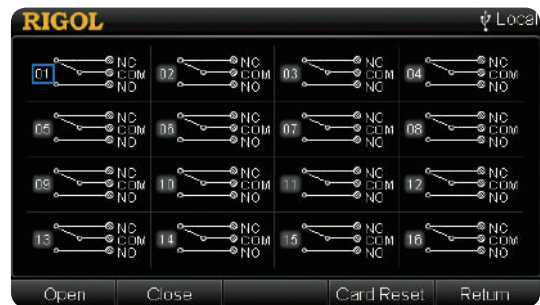
MC3164 Control Interface



MC3648 Control Interface



MC3534 Control Interface

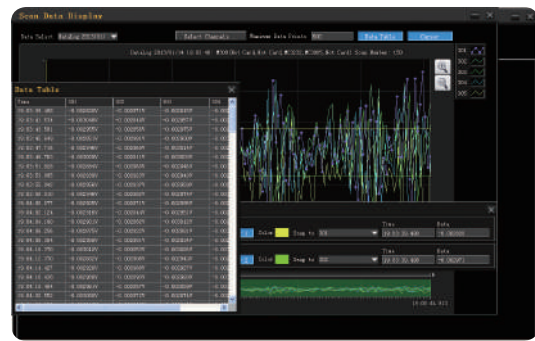


MC3416 Control Interface










• Channel Configuration of Ultra Acquire





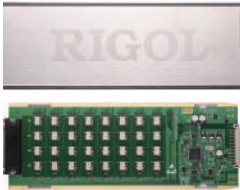



• Data Analysis of Ultra Acquire



Modules/Terminal Block Supported by M300

Module	Terminal Block	Description
 <p>DMM-MC3065</p>	MC3065 doesn't need terminal block	<ul style="list-style-type: none"> 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
 <p>MUX20-MC3120</p>	 <p>M3TB20</p>	<ul style="list-style-type: none"> 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
 <p>MUX32-MC3132</p>	 <p>M3TB32</p>	<ul style="list-style-type: none"> 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
 <p>MUX64-MC3164</p>	 <p>M3TB64</p>	<ul style="list-style-type: none"> 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
 <p>MIX24-MC3324</p>	 <p>M3TB24</p>	<ul style="list-style-type: none"> 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

 <p>ACT-MC3416</p>	 <p>M3TB16</p>	<ul style="list-style-type: none"> • 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
 <p>MFC-MC3534</p>	 <p>M3TB34</p>	<ul style="list-style-type: none"> • 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
 <p>MATRIX-MC3648</p>	 <p>M3TB48</p>	<ul style="list-style-type: none"> • 4 × 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

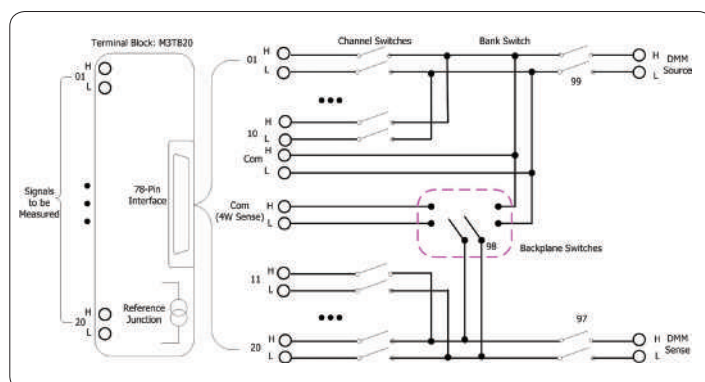
Multiplexers Selection Guide

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		✓	✓	✓	✓
AC Voltage		✓	✓	✓	✓
DC Current					✓
AC Current					✓
2WR		✓	✓	✓	✓
4WR		✓	✓		✓
Frequency		✓	✓	✓	✓
Period		✓	✓	✓	✓
Temperature	TC	✓	✓		✓
	RTD	✓	✓	✓	✓
	RTD 4W	✓	✓		✓
	Thermistor	✓	✓	✓	✓
Any Sensor	DC Voltage	✓	✓	✓	✓
	DC Current				✓
	2WR	✓	✓	✓	✓
	4WR	✓	✓		✓
	Frequency	✓	✓	✓	✓

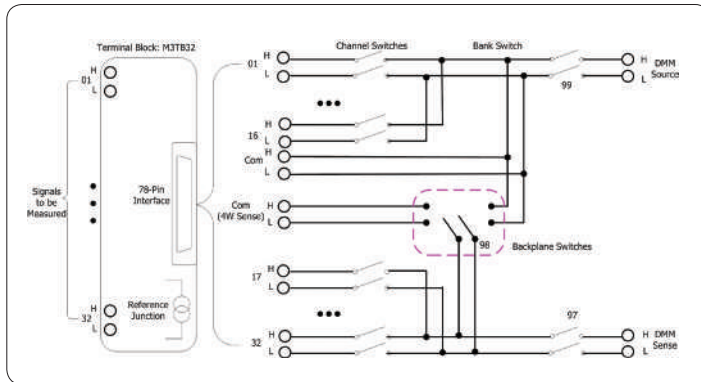
MC3120 20-Channel Multiplexer

- 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



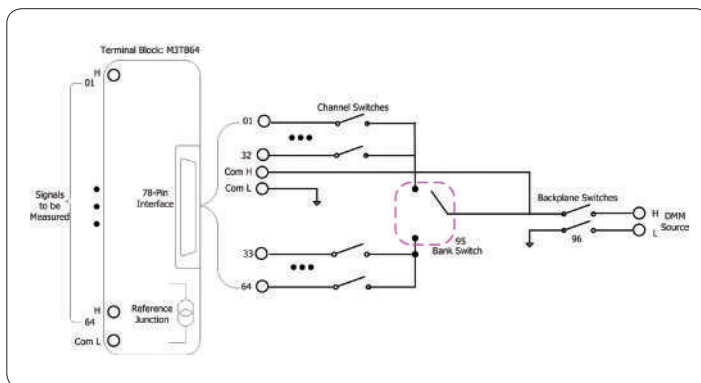
MC3132 32-Channel Multiplexer

- 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



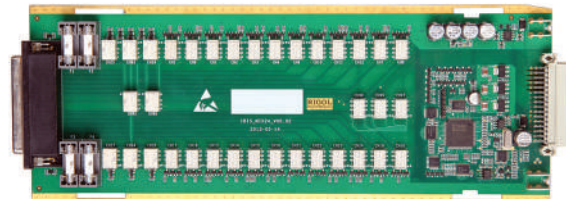
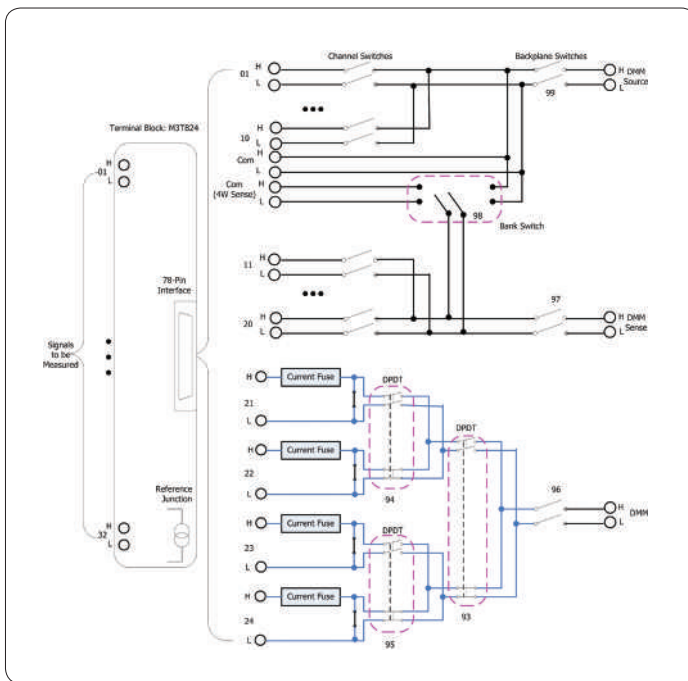
MC3164 64-Channel Single-ended Multiplexer

- 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



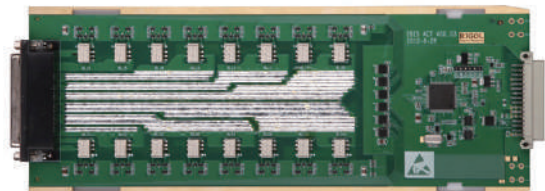
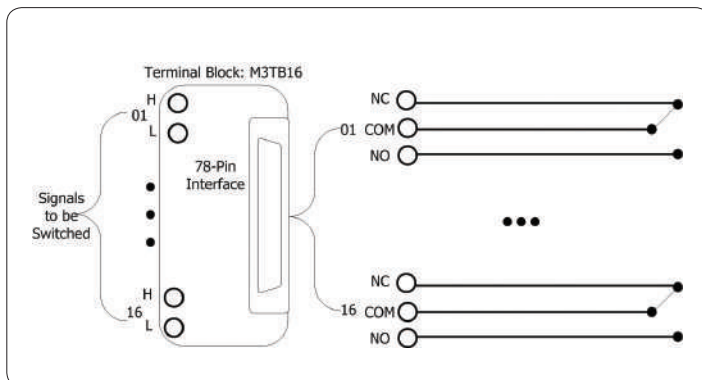
MC3324 20-voltage-channel+4-current-channel Mixed Multiplexer

- 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



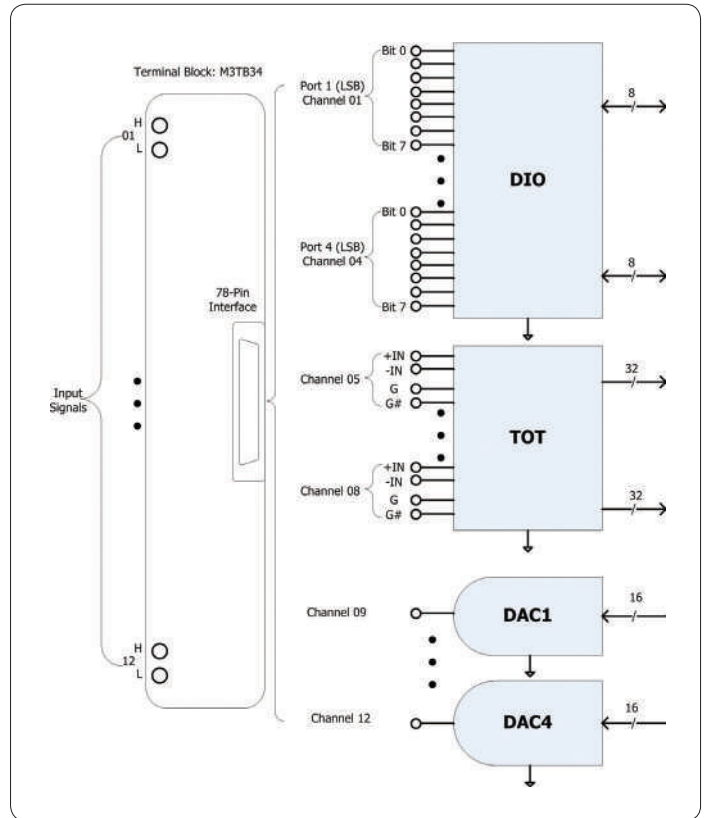
MC3416 16-channel Actuator

- 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



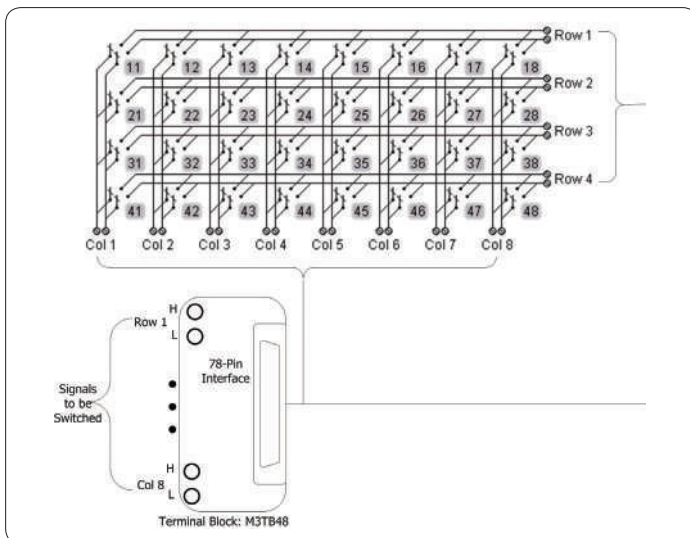
MC3534 Multifunction Module

- 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 4x8 Matrix Switch

- 4x8 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





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