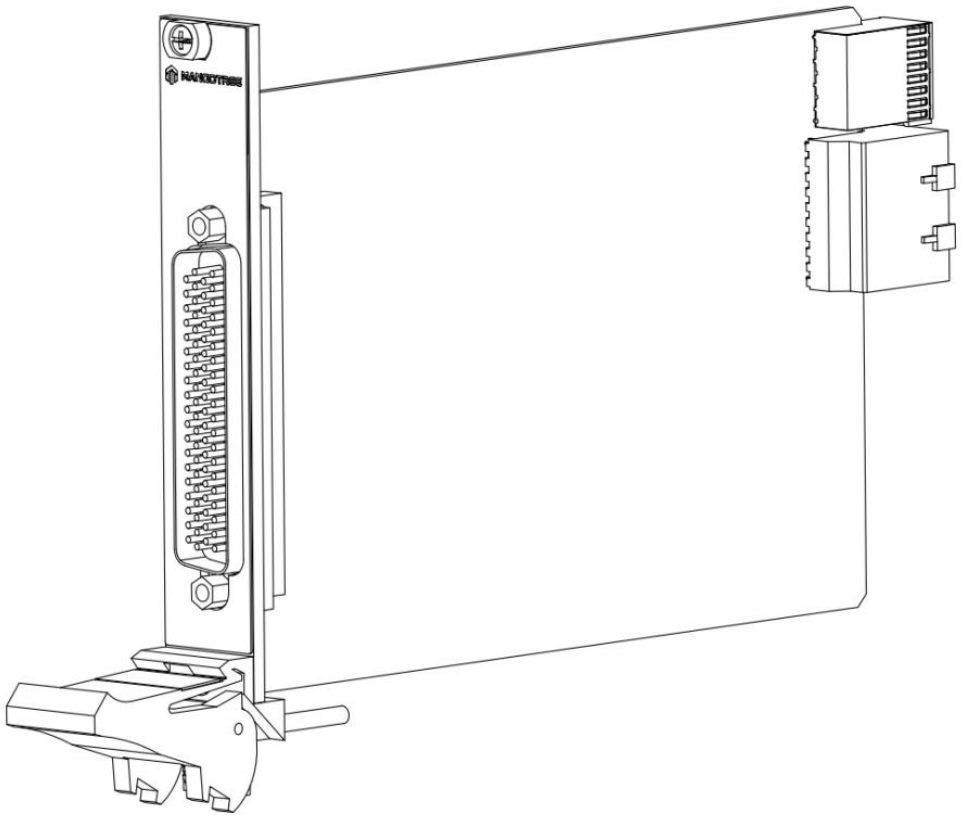
DataSheet

MT-X751

Matrix module, 2-wire,4×16, 250VAC/220VDC, 2A

This document contains the specifications for MT-X751.Specifications are typical at 25°C unless otherwise noted.

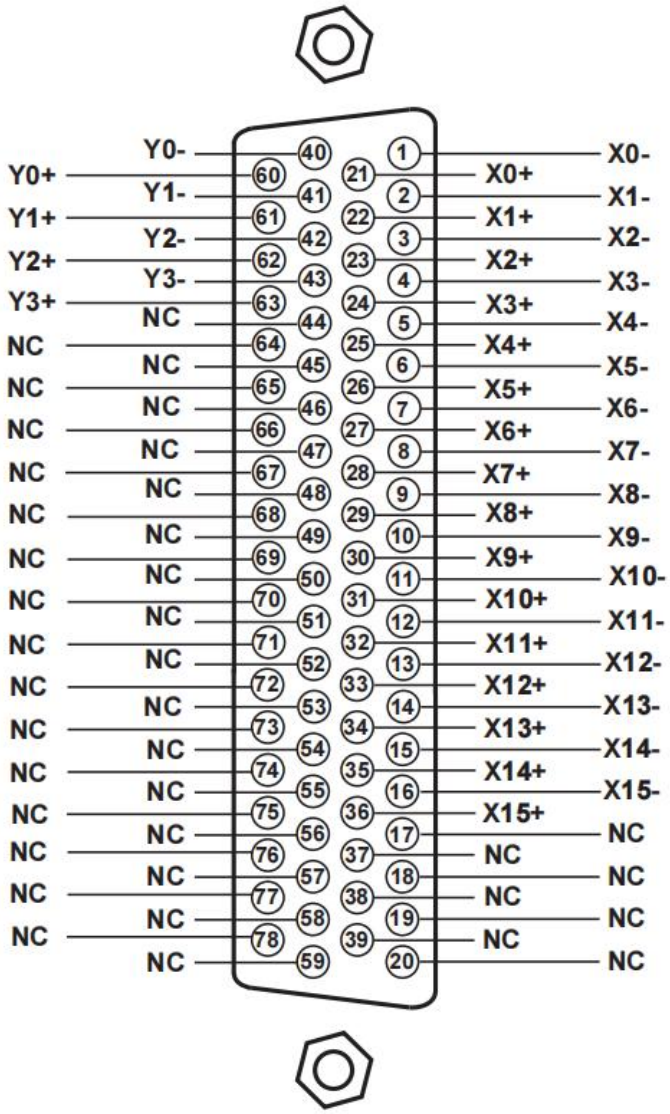
Caution Using the MT-X751 in a manner not described in this document may impair the protection the MT-X751 provides.



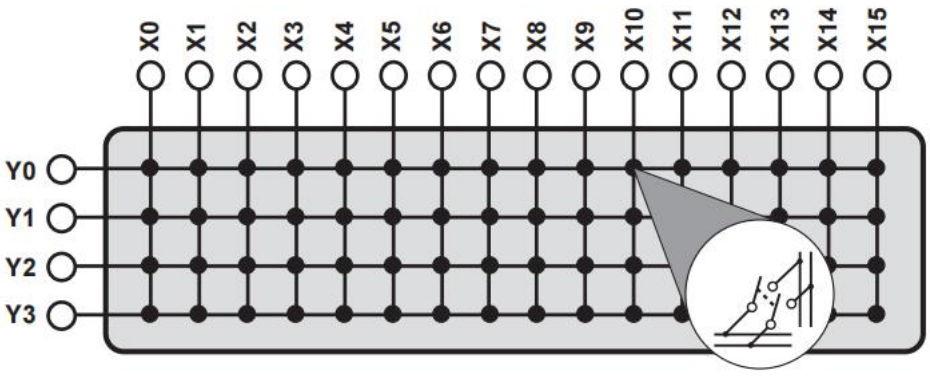
MANGOTREE

MT-X751 Connectivity

Pin definition of DSUB connector.



Hardware Diagram



NO.	Signal Path	Relay Number	NO.	Signal Path	Relay Number
1	Y0+ to X0+ and Y0- to X0-	K0	33	Y2+ to X0+ and Y2- to X0-	K32
2	Y0+ to X1+ and Y0- to X1-	K1	34	Y2+ to X1+ and Y2- to X1-	K33
3	Y0+ to X2+ and Y0- to X2-	K2	35	Y2+ to X2+ and Y2- to X2-	K34
4	Y0+ to X3+ and Y0- to X3-	K3	36	Y2+ to X3+ and Y2- to X3-	K35
5	Y0+ to X4+ and Y0- to X4-	K4	37	Y2+ to X4+ and Y2- to X4-	K36
6	Y0+ to X5+ and Y0- to X5-	K5	38	Y2+ to X5+ and Y2- to X5-	K37
7	Y0+ to X6+ and Y0- to X6-	K6	39	Y2+ to X6+ and Y2- to X6-	K38
8	Y0+ to X7+ and Y0- to X7-	K7	40	Y2+ to X7+ and Y2- to X7-	K39
9	Y0+ to X8+ and Y0- to X8-	K8	41	Y2+ to X8+ and Y2- to X8-	K40
10	Y0+ to X9+ and Y0- to X9-	K9	42	Y2+ to X9+ and Y2- to X9-	K41
11	Y0+ to X10+ and Y0- to X10-	K10	43	Y2+ to X10+ and Y2- to X10-	K42
12	Y0+ to X11+ and Y0- to X11-	K11	44	Y2+ to X11+ and Y2- to X11-	K43
13	Y0+ to X12+ and Y0- to X12-	K12	45	Y2+ to X12+ and Y2- to X12-	K44
14	Y0+ to X13+ and Y0- to X13-	K13	46	Y2+ to X13+ and Y2- to X13-	K45
15	Y0+ to X14+ and Y0- to X14-	K14	47	Y2+ to X14+ and Y2- to X14-	K46
16	Y0+ to X15+ and Y0- to X15-	K15	48	Y2+ to X15+ and Y2- to X15-	K47
17	Y1+ to X0+ and Y1- to X0-	K16	49	Y3+ to X0+ and Y3- to X0-	K48
18	Y1+ to X1+ and Y1- to X1-	K17	50	Y3+ to X1+ and Y3- to X1-	K49
19	Y1+ to X2+ and Y1- to X2-	K18	51	Y3+ to X2+ and Y3- to X2-	K50
20	Y1+ to X3+ and Y1- to X3-	K19	52	Y3+ to X3+ and Y3- to X3-	K51
21	Y1+ to X4+ and Y1- to X4-	K20	53	Y3+ to X4+ and Y3- to X4-	K52
22	Y1+ to X5+ and Y1- to X5-	K21	54	Y3+ to X5+ and Y3- to X5-	K53
23	Y1+ to X6+ and Y1- to X6-	K22	55	Y3+ to X6+ and Y3- to X6-	K54
24	Y1+ to X7+ and Y1- to X7-	K23	56	Y3+ to X7+ and Y3- to X7-	K55
25	Y1+ to X8+ and Y1- to X8-	K24	57	Y3+ to X8+ and Y3- to X8-	K56
26	Y1+ to X9+ and Y1- to X9-	K25	58	Y3+ to X9+ and Y3- to X9-	K57
27	Y1+ to X10+ and Y1- to X10-	K26	59	Y3+ to X10+ and Y3- to X10-	K58
28	Y1+ to X11+ and Y1- to X11-	K27	60	Y3+ to X11+ and Y3- to X11-	K59
29	Y1+ to X12+ and Y1- to X12-	K28	61	Y3+ to X12+ and Y3- to X12-	K60
30	Y1+ to X13+ and Y1- to X13-	K29	62	Y3+ to X13+ and Y3- to X13-	K61
31	Y1+ to X14+ and Y1- to X14-	K30	63	Y3+ to X14+ and Y3- to X14-	K62
32	Y1+ to X15+ and Y1- to X15-	K31	64	Y3+ to X15+ and Y3- to X15-	K63

MT-X751 Specifications

Specifications are valid at 23 °C unless otherwise noted.

Input Characteristics

Topology	2-wire, 4×16 matrix
Maximum switching voltage	220V DC,250V AC
Maximum switching power (per channel)	
AC	62.5 VA
DC (30 V to 220 V)	60 W
Maximum current (per channel)	2 A
DC path resistance	
Initial	<0.8 Ω
End-of-life	≥1.8 Ω
Relay operate time	
Typical	3 ms
Maximum	6 ms

Safety Voltages

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA C22.2 No. 61010-1

CE Compliance CE

This product meets the essential requirements of applicable European Directives, as follows:

- 2014/35/EU; Low-Voltage Directive (safety)
- 2014/30/EU; Electromagnetic Compatibility Directive (EMC)
- 2014/34/EU; Potentially Explosive Atmospheres (ATEX)

Shock and Vibration

To meet these specifications, you must panel mount the system.

Random vibration	
Operating (IEC 60068-2-64)	$0.3g_{rms}$, 5 Hz to 500 Hz
Nonoperating (IEC 60068-2-6)	$2.4g_{rms}$, 5 Hz to 500 Hz
Operating shock (IEC 60068-2-27)	30 g, 11 ms half sine;

Environmental

Refer to the manual for the chassis you are using for more information about meeting these specifications.

Operating temperature	0 °C to 55 °C
Storage temperature	-20°C to 70 °C
Operating humidity (IEC 60068-2-78)	10% RH to 90% RH, noncondensing
Storage humidity (IEC 60068-2-78)	5% RH to 95% RH, noncondensing Pollution
Degree	2
Maximum altitude	2,000 m

Config文本

MT-DAQ设备的开发和使用依赖于Config配置文本，只有正确配置该文本，才能保证设备的正常运行。不同型号的设备或板卡对应的配置参数是不同的。Python、LabVIEW和C#三种编程语言的Config配置文本完全相同。

通用Config配置文本通过MT-Master软件主页导出获得，用户可以根据实际设备或板卡的参数对配置文本进行修改配置，或者按照文本默认参数配置运行。

Config配置文本中的各项参数含义及其具体配置可以参考MT-DAQ上手指南，指南链接附于下文Support板块。

使用MT产品过程中如有任何疑问，可以通过访问官网：http://www.mangotree.cn联系专业客服咨询。

Support

MT-Master上手指南：

http://server.mangotree.cn:9900/WebFile/Downloads/上手指南/MT-Master/

Master上手指南

MT-Master视频教程：

http://server.mangotree.cn:9900/WebFile/Downloads/视频教程/MT-Master/

Master视频教程

MT-DAQ上手指南：

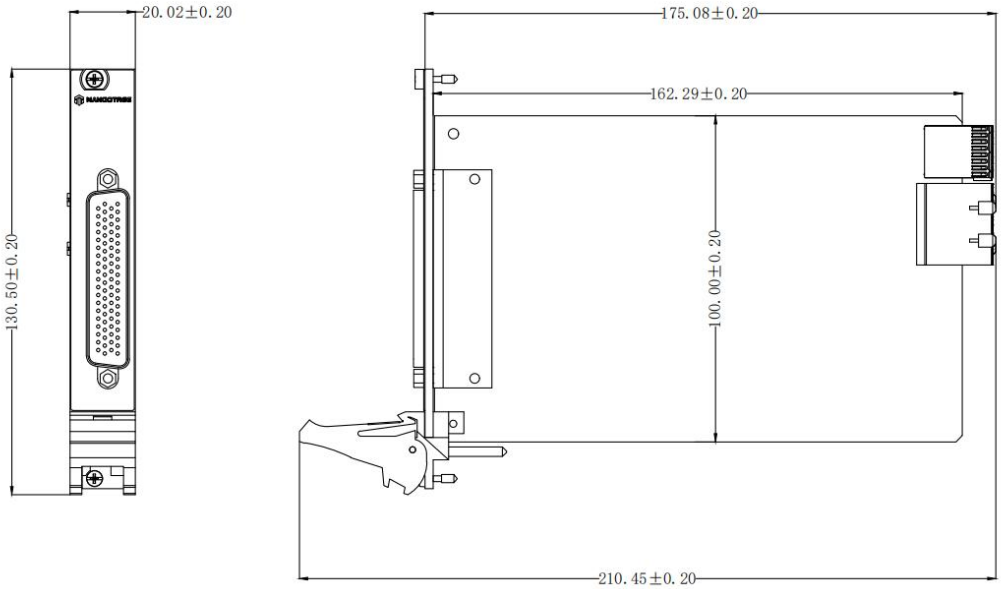
http://server.mangotree.cn:9900/WebFile/Downloads/上手指南/MT-DAQ/

DAQ上手指南

MT-DAQ视频教程：

http://server.mangotree.cn:9900/WebFile/Downloads/视频教程/MT-DAQ/

DAQ视频教程


20.02±0.20
130.50±0.20
175.08±0.20
162.29±0.20
100.00±0.20
210.45±0.20