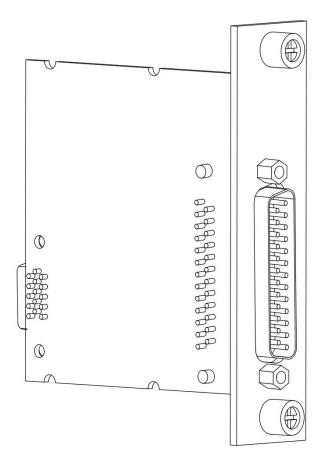
# DataSheet

### 4-Port, Half-Duplex, RS485/RS422 Serial Module

This document contains the specifications for MT-E790.Specifications are typical at 25°C unless otherwise noted.



**Caution** Using the MT-E790 in a manner not described in this document may impair the protection the MT-E790 provides.





# MT E790 Connectivity

NC	14	PORT0_A
NC	15 2	PORT0_B
	3	PORT1_A
NC	16 4	PORT1_B
NC	17 5	COM
COM	18 6	СОМ
COM	19 7	PORT2 A
NC	20 8	PORT2 B
NC	21 9	PORT3 A
NC	22 10	PORT3 B
NC	23 11	COM
COM	24 12	
COM	25	COM

Pin definition of DSUB connector and Spring Terminal connector.

# MT E790 Hardware Overview

The MT E790 has four independent RS485/RS422 ports that are isolated from the other modules in the system. Each port is fully compatible with the ANSI/EIA/TIA-485 standard.

# MT E790 Specifications

The following specifications are typical for the range -40 °C to 70 °C unless otherwise noted.

Maximum baud rate	115.2 Kbps
Maximum cable length	1.2 km
Data line ESD protection	$\pm 15 kV$ (human body model)

# **Power Requirements**

Power consumption from chassis	500 mW max
Thermal dissipation (at 70 °C)	1500 mW max

# Safety Voltages

Connect only voltages that are within the following limits:

RS485/RS422 Port-to-COM	-8 to +13 VDC max, Measurement Category I
Isolation Voltages	
Port-to-earth ground	
Continuous	60 VDC, Measurement Category I up to
	5,000 m in altitude
Withstand up to 2,000 m	1,000 Vrms, verified by a 5 s dielectric
	withstand test
Withstand up to 5,000 m	500 Vrms, verified by a 5 s dielectric
	withstand test

Measurement Category I is for measurements performed on circuits not directly connected to the electrical distribution system referred to as MAINS voltage. MAINS is a hazardous live electrical supply system that powers equipment. This category is for measurements of voltages from specially protected secondary circuits. Such voltage measurements include signal levels, special equipment, limited-energy parts of equipment, circuits powered by regulated low- voltage sources, and electronics.

# CE Compliance $\mathbf{C}\mathbf{\epsilon}$

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.

#### Operating vibration

Random (IEC 60068-2-64)

Sinusoidal (IEC 60068-2-6)	5 g, 10 Hz to 500 Hz
Operating shock (IEC 60068-2-27)	30 g, 11 ms half sine; 50 g, 3 ms half sine;
	18 shocks at 6 orientations

# Environmental

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

Operating temperature	-40 °C to 70 °C (IEC 60068-2-1, IEC 60068-2-2)
Storage temperature	-40 °C to 85 °C (IEC 60068-2-1, IEC 60068-2-2)
Ingress protection	IP40
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	
For MT-E721 with DSUB	2,000 m
For MT-E721 with DSUB	2,000 m

Indoor use only.

# Support

MT-RIO上手指南:

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



RI0上手指南

MT-RIO视频教程:

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



RI0视频教程

MT-Master上手指南:

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



MT-Master视频教程:

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



## Dimensions:(mm)

