

DataSheet

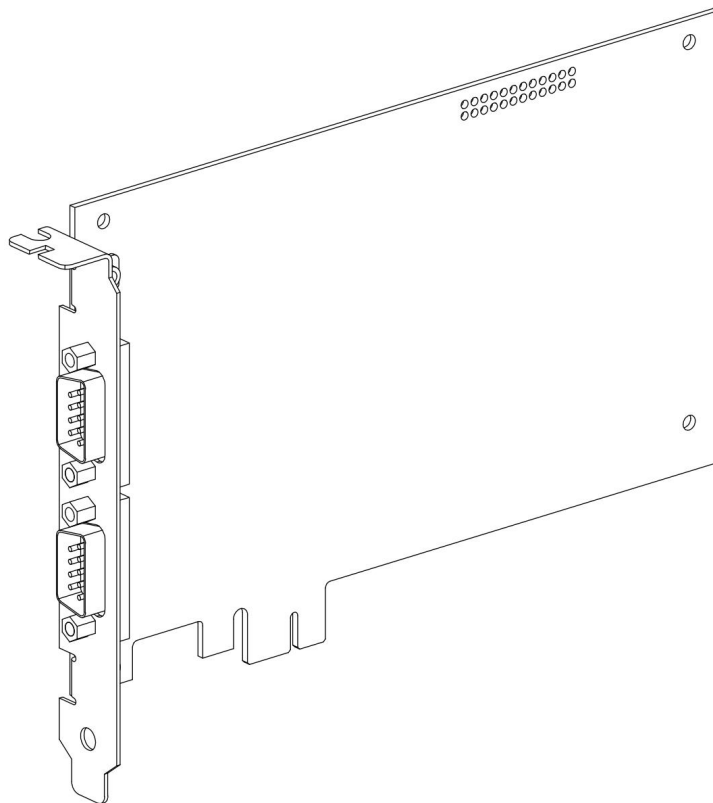
MT-G312

2-Port, RS232 Serial Module

This document contains the specifications for MT-G312. Specifications are typical at 25°C unless otherwise noted.

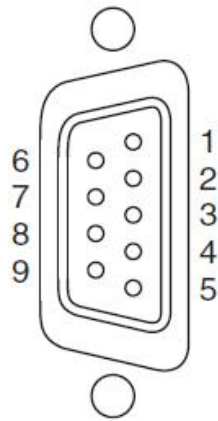


Caution Using the MT-G312 in a manner not described in this document may impair the protection the MT-G312 provides.



MT-G312 Connectivity

Pin assignments for CAN1 and CAN2.

| Connector | Pin | Signal |
|---|-----|--------|
|  | 1 | NC |
| | 2 | RXD |
| | 3 | TXD |
| | 4 | NC |
| | 5 | COM |
| | 6 | NC |
| | 7 | NC |
| | 8 | NC |
| | 9 | NC |

Hardware Overview

The MT-G312 has two independent RS232 ports that are isolated from the other modules in the system. Each port is fully compatible with the ANSI/EIA/TIA-232 standard.

Characteristics

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

| | |
|---|--------------------------------|
| Maximum baud rate | 230.4 kbps |
| Maximum RS232 Receive signal continuous | |
| Voltage | ± 8 V |
| Data line ESD protection | ± 15 kV (human body model) |

Power Requirements

| | |
|--------------------------------|-----------|
| Power consumption from chassis | 0.5 W max |
| Thermal dissipation (at 70 °C) | 1.5 W max |

Safety Voltages

Connect only voltages that are within the following limits:

| | |
|------------------------------|--|
| RS232 Receive Signal-to-COM | $\pm 25\text{V}$ max, Measurement Category I |
| RS232 Transmit Signal-to-COM | $\pm 13.2\text{V}$ 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

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) | 5 g _{rms} , 10 Hz to 500 Hz |
| 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 | 5,000 m |

Indoor use only.

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。



MangoTree官网

Support

MT-Master上手指南:

<https://server.mangotree.cn:9900/WebFile/Downloads/上手指南/MT-Master/>



Master上手指南

MT-Master视频教程:

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



Master视频教程

MT-DAQ上手指南:

<https://server.mangotree.cn:9900/WebFile/Downloads/上手指南/MT-DAQ/>



DAQ上手指南

MT-DAQ视频教程:

<https://server.mangotree.cn:9900/WebFile/Downloads/视频教程/MT-DAQ/>



DAQ视频教程

Dimensions:(mm)

