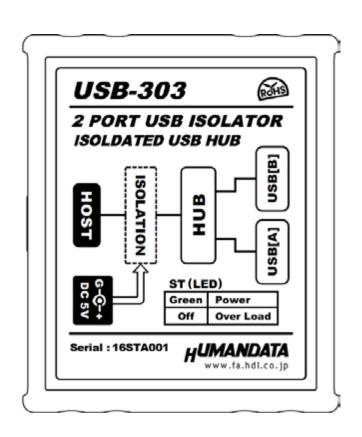


2 Port USB Isolator USB-303



User's Manual

Ver. 1.0



HUMANDATA LTD.

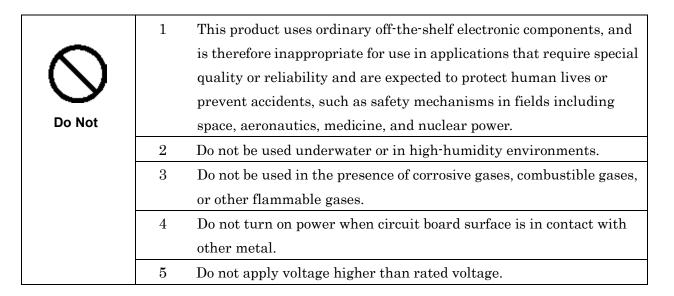


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Precautions



| • | 6 | This manual may be revised in the future without notice owing to |
|--------------------|----|--|
| $\mathbf{\Lambda}$ | | improvements. |
| /! \ | 7 | All efforts have been made to produce the best manual possible, but |
| Attention | | if users notice an error or other problem, we ask that they notify us. |
| Attention | 8 | Item 7 notwithstanding, HuMANDATA cannot be held liable for the |
| | | consequences arising from use of this product. |
| | 9 | HuMANDATA cannot be held liable for consequences arising from |
| | | using this product in a way different from the uses described herein, |
| | | or from uses not shown herein. |
| | 10 | This manual, circuit diagrams, sample circuits, and other content |
| | | may not be copied, reproduced, or distributed without permission. |
| | 11 | If the product emits smoke, catches fire, or becomes unusually hot, |
| | | cut the power immediately. |
| | 12 | Do not install the control cables or communication cables together |
| | | with the main circuit lines or power cables. In such an environment, |
| | | it may result in malfunction due to noise. |
| | 13 | Be careful of static electricity. |

USB-303 (Ver.1.0)



Revision History

| Date | Revision | Description |
|--------------|----------|-----------------|
| Oct. 5, 2016 | v1.0 | Initial release |

Introduction

Thank you very much for purchasing our product.

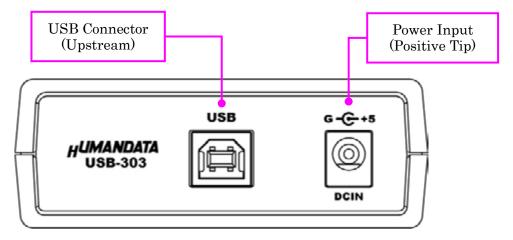
USB-303 is a USB 2.0 Full Speed(12Mbps) and Low Speed(1.5Mbps) compliant isolator that isolates between a USB host and a USB peripheral device.

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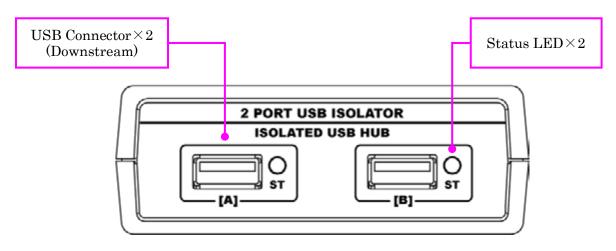
USB-303 (Ver.1.0)



1. Overview



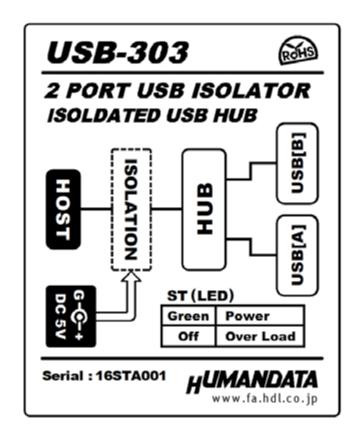
USB Host side



Status LED Green: Power

 $Red: Over\ Load$

USB Target side



TOP side (Block diagram)

2. Feature

USB-303 is a USB 2.0 Full Speed(12Mbps) and Low Speed(1.5Mbps) compliant USB hub which isolates between a USB host and two downstream ports with 3000VDC. Each of the two downstream ports are also isolated independently. With USB-303, it can be expected to eliminate ground loops that can cause measurement errors and equipment from surges, common-mode voltage, static discharge, magnetic fields, and radio frequency interference. There is no need to install any drivers. It works with every operating system such as Windows, Linux, Mac OS X.



3. Connection

You can use an included USB cable to the host side connector to the host (such as a personal computer), and connect a USB peripheral device to the target side connector.

4. Power Supply

USB-303 is powered through a USB port(Bus-powered) or an AC adapter (Self-powered). An AC adapter has priority when both supplies are applied.



5. Specifications

5.1. Product Specification

| Item | Description | Remarks | |
|---|--|--|--|
| Model | USB-303 | | |
| Input Power | 5VDC Supplied through a USB port(Bus-powered) or AC | Recommend the use of an AC adapter for stably supply An AC adapter supply to the | |
| adapter(Self-powered) Supplied Current to Target device 500mA/port max. | | host side. | |
| Support OS | OS-Independent (No drivers required) | | |
| HOST interface | USB 2.0 Compliant (Supports Full and Low Speed) | USB 1.1 compatible High Speed is not supported. ESD protection | |
| Port number | 2 ports | | |
| USB Connector | Host: Standard Type B Female Target: Standard Type A Female ×2 | | |
| Isolation Method | Bus Isolation(Independent isorated) | | |
| Isolation Protection 3000VDC | | Designed value | |
| LED | ST: Status LED×2 | | |
| Operating Ambient Temperature | t -20 to 60 °C | | |
| Operating Ambient Humidity | 30 to 85%RH | No condensation permitted | |
| Storage Ambient Temperature | -20 to 60 °C | tvo condensation permitted | |
| Storage Ambient Humidity | 30 to 85%RH | | |
| Dimensions | 69 x 82.5 x 30 [mm] (2.638" x 3.248" x 1.181") | Without projections | |
| Weight | Approx. 120 [g] | Only main body | |

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5.2. Optional Accessories

| Model | Image | Description |
|-------------|-------|---|
| PEN-003 | | USB series Attachment with clamping screw JAN: 4937920800709 |
| PEN-003-DIN | | USB series Attachment for 35mm DIN rail JAN : 4937920800716 |
| PEN-003-MG | | USB series Attachment with neodymium magnet JAN: 4937920801201 |

6. Additional Documentation and User Support

The following documents and other supports are available at http://www.hdl.co.jp/en/faspc/USB/usb-303

• User's Manual ... and more.

7. Attachment Documentations

Outline drawing

8. Warranty and Compensation

Please refer to the following URL for the warranty. http://www.fa.hdl.co.jp/en/fa-warranty.html

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