

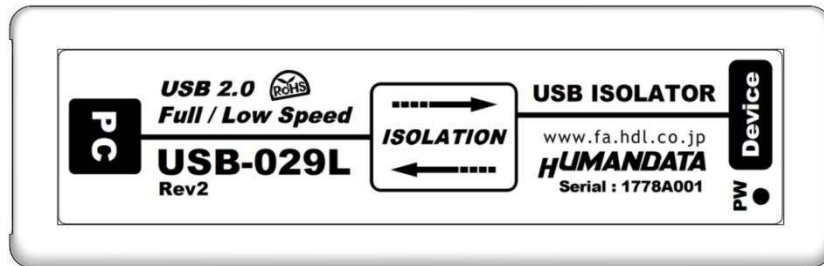


**USB Isolator Compact**

**USB-029L (Rev2)**

**User's Manual**

**Ver. 1.0**







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● **Precautions**

 <b>Do Not</b>	1	This product uses ordinary off-the-shelf electronic components, and is therefore inappropriate for use in applications that require special quality or reliability and are expected to protect human lives or prevent accidents, such as safety mechanisms in fields including space, aeronautics, medicine, and nuclear power.
	2	Do not be used underwater or in high-humidity environments.
	3	Do not be used in the presence of corrosive gases, combustible gases, or other flammable gases.
	4	Do not turn on power when circuit board surface is in contact with other metal.
	5	Do not apply voltage higher than rated voltage.

 <b>Attention</b>	6	This manual may be revised in the future without notice owing to improvements.
	7	All efforts have been made to produce the best manual possible, but if users notice an error or other problem, we ask that they notify us.
	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.

- **Revision History**

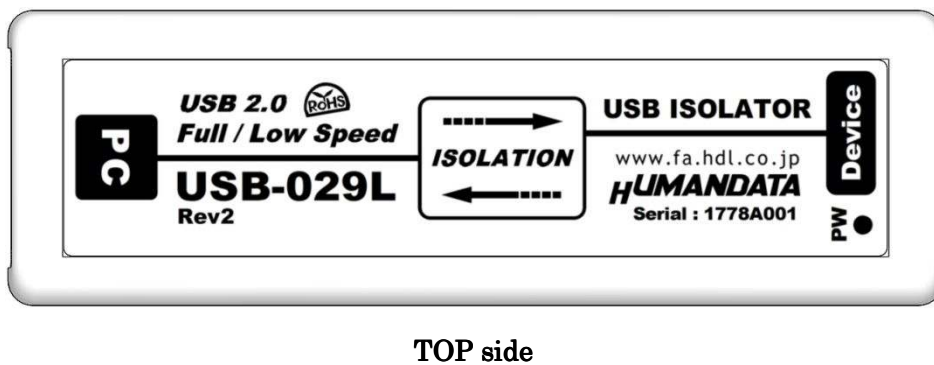
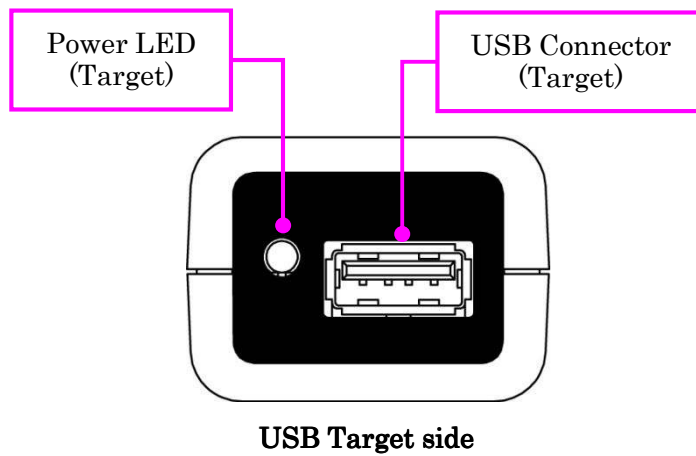
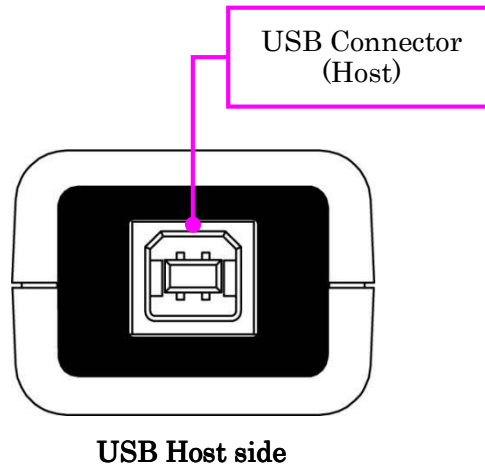
Date	Revision	Description
Oct. 5, 2016	v1.0	Initial release

- **Introduction**

Thank you very much for purchasing our product USB-029L.

USB-029L 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.

# 1. Overview



## 2. Feature

USB-029L is a USB 2.0 Full Speed(12Mbps) and Low Speed(1.5Mbps) compliant isolator which isolates between a USB host and a USB peripheral device.

With USB-029L, 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-029L is powered through a USB port(Bus-powered).

## 5. Specifications

### 5.1. Product Specification

Item	Description	Remarks
<b>Model</b>	USB-029L	
<b>Input Power</b>	5VDC Supplied through a USB port (Bus-powered)	No external power supply required
<b>Current Consumption</b>	Less than 100mA + current of the target device	Target device : 400mA max. (Lower than the supply capacity of the host side)
<b>HOST interface</b>	USB 2.0 Compliant (Supports Full and Low Speed)	USB 1.1 compatible High Speed is not supported ESD protection
<b>Isolation Method</b>	Bus isolation	
<b>Isolation Protection</b>	2500VDC	Designed value
<b>Support OS</b>	OS-Independent (No drivers required)	
<b>LED</b>	PW: Power	
<b>Operating Ambient Temperature</b>	-20 to 60°C	No condensation permitted
<b>Operating Ambient Humidity</b>	30 to 85%RH	
<b>Storage Ambient Temperature</b>	-20 to 60 °C	
<b>Storage Ambient Humidity</b>	30 to 85%RH	
<b>Weight</b>	Approx. 75 [g]	Only main body
<b>Dimensions</b>	114 x 36 x 26 [mm] (4.488" x 1.417" x 1.023")	Without projections



## 6. Additional Documentation and User Support

The following documents and other supports are available at

<http://www.hdl.co.jp/en/faspc/USB/usb-029l>

- User's Manual  
... and more.

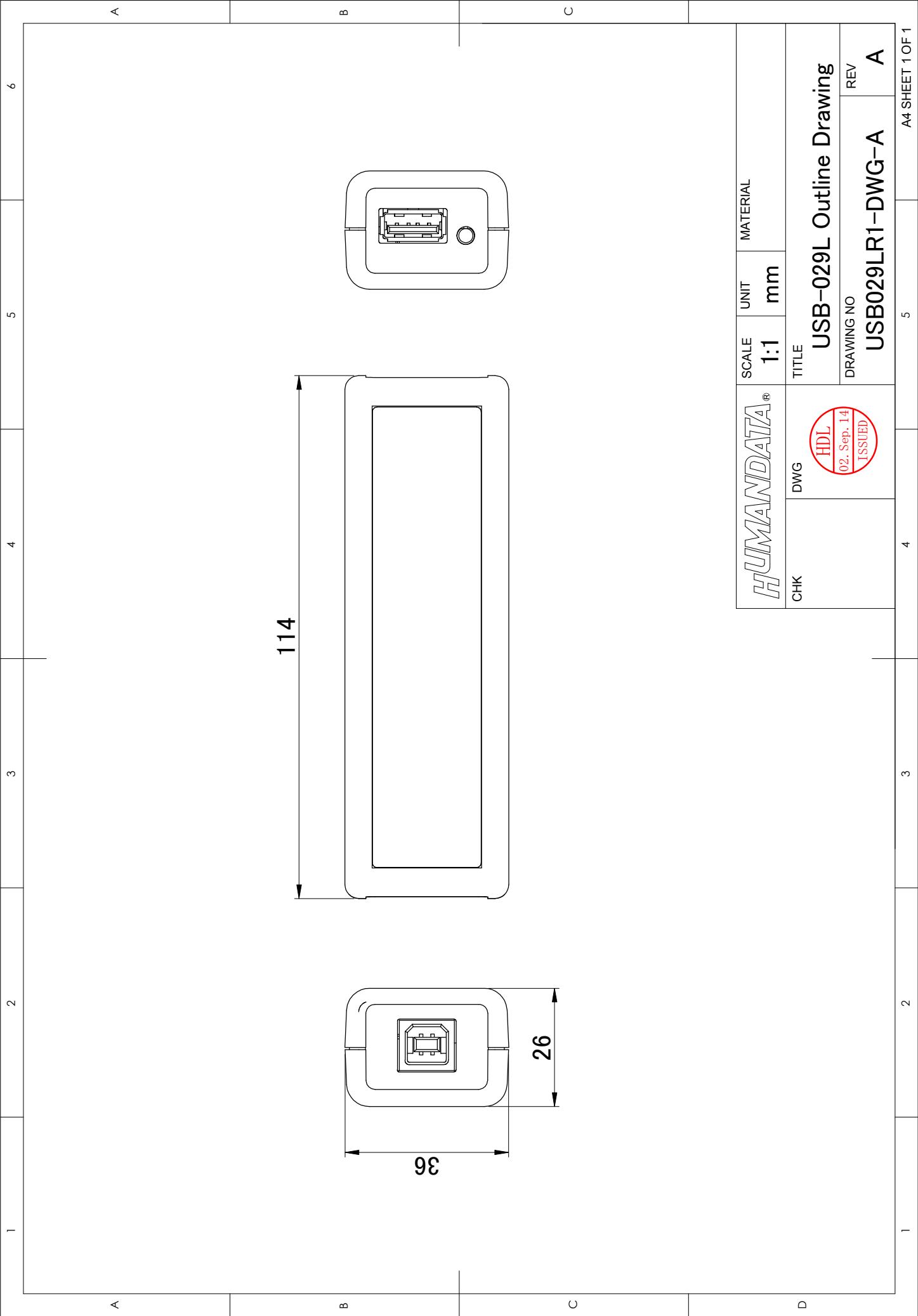
## 7. Attachment Documentations


- 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>



<b>HUMANDATA<sup>®</sup></b>		SCALE	UNIT	MATERIAL
CHK		1:1	mm	
DWG		TITLE		
		USB-029L Outline Drawing		
		DRAWING NO		REV
		USB029LR1-DWG-A		A

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# USB Isolator Compact

USB-029L Rev2

## User's Manual

Ver. 1.0 .....Oct. 5, 2016

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