GINGKO

EVC9001B
Full Speed USB Isolator
Reference Manual

1.Product Information

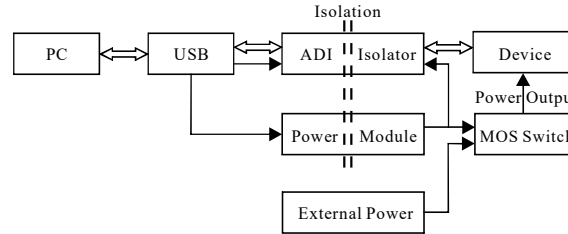|	
Isolation voltage	3000Vrms
Isolation scheme	ADI magnetically coupled isolator
Speed	Support USB low or full speed mode,but not high speed mode (Note: 1)
Isolation power	Isolation voltage: 3000V, power: 1 W
Current-output	Inner current: 180mA External current: Determined by the external power supply
Power filter	Double inductor filter
USB- protection	TVS protection（Upstream &Downstream）
Output- protection	Switch-level short-circuit protection
Power	USB power (upstream supply), External power
Operating indication	Blue light indicates the upstream power supply, Red light indicates the external power supply
Operating system	Windows / Linux / Mac
Driver	Auto installation
Mechanical installation mode	Adam module , rail mounting
Weight(isolator)	About 70g
Weight(ADAM)	About 15g
Dimensions(LxWxH)	102.5 mm x72 mm x25.5mm

Note: 1
   According to the USB interface standard, low speed is 1.5Mbps, full speed is 12 Mbps, high speed is 480 Mbps. This device does not support high speed devices.

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2.Operational Principle

   EVC9001B adopts iCoupler isolators magnetic coupling scheme based on chip-scale transformers proposed by Analog Device Company, achieves USB bidirectional isolation, and the isolation voltage is 3000V.
   There are two power supply modes: USB power supply and external power supply. If the external voltage is not connected, USB power supply works, otherwise the external power source is automatically selected as the power supply mode by a MOS switch.
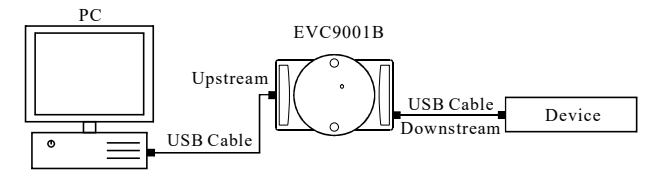
3.Features

① Downstream :
   Connected to the USB device (a USB_A type port , noted as "DOWNSTREAM").
② Speed selection switch :
   Select the USB speed mode as "LOW"or "FULL",according to the device speed ("LOW " indicates a low speed device, "FULL "indicates a full speed device).
③ External power port :
   Connected to a 5V power.
④ Upstream :
   Connected to the PC by a usb cable (a USB_B type port, noted as "UPSTREAM").
⑤ LED Indication:
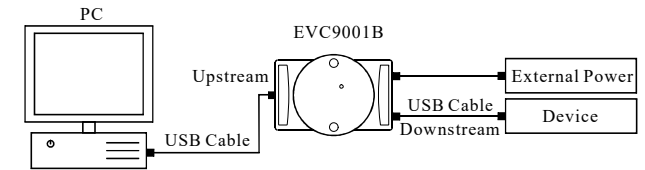   Red and blue indicate different satuses respectively.

4.Operation method

① Wiring diagram

(a) USB power supply

(b) External power supply

② Speed selection switch

   The USB speed mode "LOW" or "FULL" is selected based on the device speed. ("LOW" indicates a low speed device, "FULL "indicates a full speed device). For example, the mouse is a low speed device and many other facilities are full speed, so the switch mostly should be selected to the "FULL " position.

5. Inventory

① EVC9001B

② Rail clips and screws

③ 5V, 1A power adapter

④ High-quality USB cable

⑤ Instructions in Chinese and English