

Low Price High-Speed GPIB Communication
Micro Converter for USB2.0

GP-IB(USB)FL



* Specifications, color and design of the products are subject to change without notice.

Features

Capable to communicate with GPIB communication which is compatible to IEEE-488.1/488.2 standards at 1.5 M byte/sec maximum.

Capable to communicate with any equipment which is compatible to IEEE-488.1/488.2 standards with transfer rate at 1.5 MByte/sec maximum. Capable to set this product to whether a master (controller) or a slave.

Compatible to USB1.1/USB2.0 and not necessary to power this product externally as the bus power is used.

Compatible to USB1.1/USB2.0 and capable to achieve high speed transfer at HighSpeed (480 Mbps).

Not necessary to power this product externally as the bus power of USB is used. With the USB cable (1.8 m) included in this kit, it can be connected to any equipment with GPIB interface without any GPIB cables.

Employs a buffer memory, 2 Kbytes for transmission and 2 Kbytes for reception.

Employs a buffer memory, 2 Kbytes dedicated to transmission and 2 Kbytes dedicated to reception, in order to reduce the load to the CPU when transmitting/receiving.

Windows/LabVIEW compatible driver libraries are attached.

Using the attached driver library API-USBP(WDM) makes it possible to create applications of Windows/LabVIEW. In addition, supplies a diagnostic program to confirm hardware operation and to perform a basic communication test with connected equipment.

Employs a high speed GPIB controller which is self-developed and capable to supply stable.

A self-developed GPIB controller (μ PD7210 registers compatible) is employed so that a stable supply is available.

Embedded Line Monitor Function

With a readout feature for entire control lines (with latches), it is capable to read data from applications.

Built-in SPAS event function (when slaving)

In addition to the functions of the earlier GPIB controller (μ PD7210), the product also supports the SPAS event generated when a serial poll occurs. This gives you a high level of flexibility in constructing your system.

This product is a media converter that converts USB port of a PC to a GPIB communication port compatible to IEEE-488 standard. With the USB cable (1.8 m) included in this kit, it can be connected to any equipment with GPIB interface without any GPIB cables. Furthermore, this product is powered by the bus so that simple and compact GPIB communication system can be established. This product accompanies Windows driver and LabVIEW driver.

Specification

Item	Specifications
GPIB	
Number of channel	1 channel Conforms to IEEE-488.1, 488.2(GPIB)standards
Transfer format	8-bit parallel, 3-wire handshake system
Transfer rate	1.5Mbyte/sec
Data buffer size	2Kbyte send, 2Kbyte receive
Signal logic	Negative logic L level : 0.8V or less, H level : 2.0V or more
Cable length between device	4m or less
Total cable length	20m or less
Connectable number of device	15 devices (Max.)
USB	
Bus specification	USB Specification 2.0/1.1 standard
USB transfer rate	12Mbps(Full-speed), 480Mbps(High-speed) *1
Cable length	1.8m
Power supply	Bus power
Common	
Current consumption	5VDC 450mA (Max.)
Operating conditions	0 - 50°C, 10 - 90%RH (No condensation)
Physical dimensions(mm)	62(W) x 64(D) x 24(H)
Weight	70g (Not including the USB cable, attachment)

*1 For details, see item (2) in Chapter3, "Notes on cable connection".

*2 The response speed is depending on the environment of the host PC (OS, USB host controller) being used.

Support Software

Driver Library API-USBP(WDM) (Bundled)

It is the library software, and which supplies command of hardware produced by our company in the form of standard Win32 API function (DLL). Using programming languages supporting Win32API functions, such as Visual Basic and Visual C++ etc., you can develop high-speed application software with feature of hardware produced by our company. In addition, you can verify the operation of hardware using Diagnostic programs.

< Operating environment >

OS Windows Vista, XP, Server 2003, 2000, Me, 98

Adaptation language Visual Basic, Visual C++, Visual C#, Delphi, C++ Builder

You can download the updated version from the CONTEC's Web site (at <http://www.contec.com/apiusbp/>). For more details on the supported OS, applicable language and new information, please visit the CONTEC's Web site.

API-GPLV(W32) library supporting LabVIEW (Supplied: Stored on the API-USBP(WDM) CD-ROM)

API-GPLV(W32) is a driver created according to the National Instruments Corporation's GPIB function style. The driver is software to control the CONTEC GPIB board using a LabVIEW-based GPIB system or existing application program. It can also be used by the installed diagnosis program to check hardware operations.

< Operating environment >

OS Windows Vista, XP, Server 2003, 2000, Me, 98

Adaptation language LabVIEW, Visual Basic, Visual C++, Visual C#, Delphi, C++ Builder

You can download the updated version from the CONTEC's Web site (at <http://www.contec.com/gplv/>). For more details on the supported OS, applicable language and new information, please visit the CONTEC's Web site.

Cable & Connector

Cable (Option)

GPIB cable (2m) : PCN-T02

GPIB cable (4m) : PCN-T04

Connector (Option)

GPIB Connector : CN-GP/C

Effective if this product interferes with the main unit of the target device when plugging this product into the device.

* Check the CONTEC's Web site for more information on these options.

Packing List

Micro Converter [GP-IB(USB)FL] ...1

USB Cable (1.8m) ...1

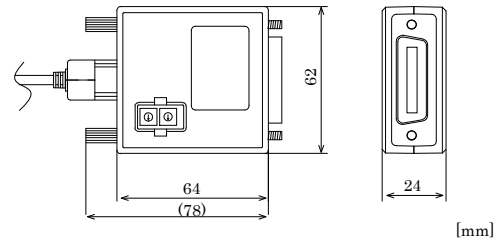
USB Cable Attachment ...1

First step guide ... 1

CD-ROM *1 [API-USBP(WDM)] ...1

*1 The CD-ROM contains the driver software and User's Guide.

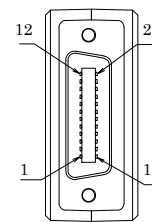
Physical dimensions



How to connect the connectors

Connector shape

To connect an external device to this product, plug the cable from the device into the interface connector (CN1) shown below. When connecting to the external device, fix the converter by tightening the screw.



Applicable connector(cable): GPIB cable(IEEE-488 rated)

Connector Pin Assignment

	(Shield)	GND	-- 12	24	-- Logic GND
	(Attention)	ATN	-- 11	23	-- GND (Ground)
	(Service Request)	SRQ	-- 10	22	-- GND (Ground)
	(Interface Clear)	IFC	-- 9	21	-- GND (Ground)
	(Not Data Accepted)	NDAC	-- 8	20	-- GND (Ground)
	(Not Ready for Data)	NRFD	-- 7	19	-- GND (Ground)
	(Data Valid)	DAV	-- 6	18	-- GND (Ground)
	(Data Valid)	EOI	-- 5	17	-- REN(Remote Enable) Management bus
Management bus	(End or Identify)	EOI	-- 5	16	-- DIO8 Data bus
Handshake bus	Data bus DIO4	-- 4	16	-- DIO8 Data bus	
	Data bus DIO3	-- 3	15	-- DIO7 Data bus	
	Data bus DIO2	-- 2	14	-- DIO6 Data bus	
	Data bus DIO1	-- 1	13	-- DIO5 Data bus	

CN1