USB-Serial (RS-232C) Conversion Cable Installation Guide

This product is a conversion cable for using an USB I/F of the Unit (any models of the "Corresponding Units" described in this guide) as the Serial (RS-232C) I/F.

IMPORTANT

- When using this product with GP/ST/LT3000 Series, there are some restrictions for the external devices connecting to the Serial (RS-232C) I/F side of this product. For details, please refer to the following manuals;
  - Maintenance/Troubleshooting
  - Pro-face Home Page
    URL: http://www.pro-face.com/otasuke/

Safety Precautions

⚠ WARNING

- Do not disassemble or remodel this cable in any way. Doing so may cause an electric shock or fire.
- Do not use this cable in areas where flammable gases are present. Doing so may cause an explosion.

■ To Prevent USB-Serial (RS-232C) Conversion Cable Damage

- Do not use the USB-Serial (RS-232C) Conversion Cable at temperatures outside the range specified in this guide.
- Do not use or store this cable at very high temperatures.
- Do not use or store this cable in direct sunlight or excessively dusty or dirty environments.
- Do not use or store this cable in an environment where it may be exposed to chemical vapors or fumes.

- Do not allow water to enter the connector. Also, do not touch the connector if your hands are wet. Doing so may cause an electric shock.
- Do not connect or disconnect the USB-Serial (RS-232C) Conversion Cable during data transfer. Doing so may cause a data communication error.
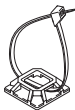
■ Unit Disposal

- When the product is disposed of, it should be done so according to your country's regulations for similar types of industrial waste.

Package Contents

(1) USB-Serial (RS-232C) Conversion Cable (1) (CA6-USB232-01)

(2) Cable Clamp (1 set)
(Holder: 1, Clamp 1)
Hold the Serial connector, then peel the seal of the holder's bottom.

(3) Driver CD (1)
It contains a driver required for using this product with IPC Series (with Windows® installed).

(4) Installation Guide <This Guide>

This product has been carefully packed, with special attention to quality. However, should you find anything damaged or missing, please contact your local distributor immediately.

Corresponding Units

Model		Conditions	Remarks
GP3000 Series ST3000 Series LT3000 Series		A project file of GP-Pro EX Ver1.10 or higher is transferred in advance.(Transfer Tool's version, as well.)	For the detailed information on the corresponding units, refer to the hardware manual of each unit or Pro-face Home Page. URL http://www.proface.com/
IPC Series	PL-X930 Series PL-5910 Series PS Series Type A PS Series Type B	Windows®2000 or Windows®XP is installed. It's necessary to install the driver from the attached Driver CD.	

General Specifications

■ General Specifications

I/F Type	External Device	Serial I/F side: TIA/EIA-232C
	Unit	USB I/F side: USB Specification Rev1.1
Connector Type		Serial I/F side: D-sub 9 pin plug
		USB I/F side: USB (Series A Plug)

■ Electrical Specifications

Power Supply	Rated Voltage	DC5V (Powered from USB bus)
	Allowable Voltage Drop	DC4.75 to 5.25V
	Power Consumption	0.35W (max.)

■ Environmental Specifications

Physical	Ambient Operating Temperature	0 to +50°C
	Storage Temperature	-20 to +60°C
	Ambient Humidity	10 to 90% RH (Wet bulb temperature: 39°C max. - no condensation.)
	Storage Humidity	10 to 90% RH (Wet bulb temperature: 39°C max. - no condensation.)
	Dust	$0.1mg/m^3$ and below (non-conductive levels)

■ External Specifications

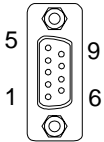| External Dimensions (Cable length)	0.5m (except connection parts)
Weight	80g or less

IMPORTANT

• Extending the length of the cable via a USB extension cord can degrade (weaken) signals, possibly causing an error. As a result, do not extend the length of the USB-Serial (RS-232C) Conversion Cable.

Interface

■ RS-232C

<External Device side (Serial I/F (RS-232C) side)>

Interfit Bracket	#4-40 inch screws are used.

Pin Arrangement	Pin #	RS232C	
		Signal Name	Meaning
	1	CD	Carrier Detect
	2	RD(RXD)	Receive Data
	3	SD(TXD)	Send Data
	4	ER(DTR)	Data Terminal Ready
	5	SG	Signal Ground
	6	DR(DSR)	Data Set Ready
	7	RS(RTS)	Request to Send
	8	CS(CTS)	Clear to Send
	9	CI(RI)	Called status display
	Shell	FG	Frame Ground (Common with SG)

Installing the driver

In order to use this product with IPC Series (with Windows® installed), it's necessary to install the driver from the attached Driver CD.

Connect this product to the USB I/F and install the driver following the instructions displayed on the screen.

CE Marking

- This product is CE marked, EMC compliant product. This product also conforms to EN55011 Class A, EN61000-6-2 directives.

Note