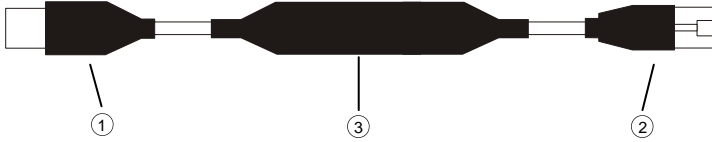


USB-CONVERTERCABLE

Overview

The USB-CONVERTERCABLE provides bi-directional connectivity between any standard USB compliant host system and Hitachi inverters with built in RS-422 interface accessible via the RJ45 modular / interconnect communication port.

Hardware design of the USB-CONVERTERCABLE



- ① USB interface
- ② RJ45 (RS-422) interface
- ③ Converter

Specifications

Operating temperature range: 5 to 40°C
 Storage temperature: -20 to +70°C
 Total cable length: 2 meters
 USB version: version 1.1
 Optical isolation: no
 Serial interface RS-422, RJ45 plug compatible with SJ200 inverters

Max current: 120mA at 5VDC
 Max humidity: 85%

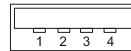
Connections

RJ-45 (RS422) interface



Pin	Name	Description
1	None	
2	A+	Positive TX (RS-422)
3	A-	Negative TX (RS-422)
4	GND	Ground
5	B+	Positive RX (RS-422)
6	B-	Negative RX (RS-422)
7	GND	Ground
8	None	

USB interface



Pin	Name	Description
1	VCC	+5V
2	D-	Data -
3	D+	Data +
4	GND	Ground

Installation

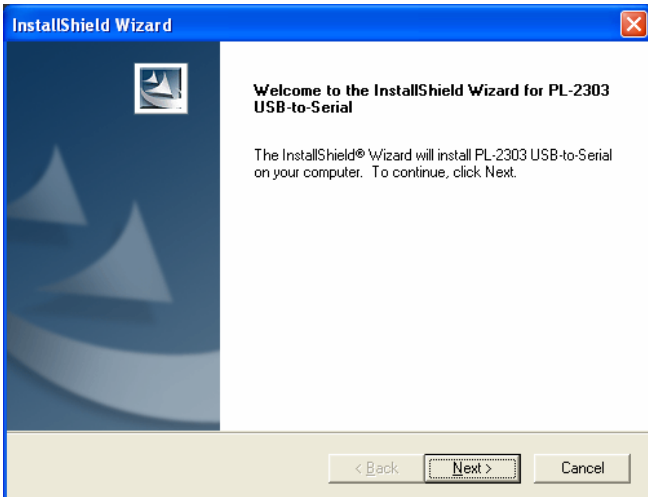
The inverter has a communication port with a RJ45 connector accessible on the front of the device. It may be necessary to remove the keypad, depending on the inverter model. On the personal computer side the cable requires any standard USB type A port compliant with Universal Serial Bus Specification 1.1.

The proper operation of the interface in the computer requires the installation of a device driver. The device driver can be downloaded from the following link:
<http://www.hitachi-ds.com/en/download/software/index.php>
 The file to be downloaded is the one identified with "UR42 driver".

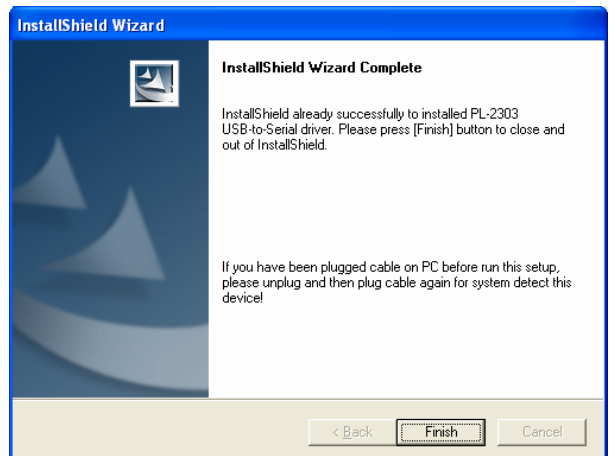
- System requirements for driver installation:
- Pentium II or higher
 - Windows 98/ME/NT/2000/XP
 - 64MB RAM
 - 1GB hard disk space

The driver comes in a self-installing executable file with the name "ur42.exe"; the installation of the driver must be done BEFORE connecting the converter to the USB port of the computer.

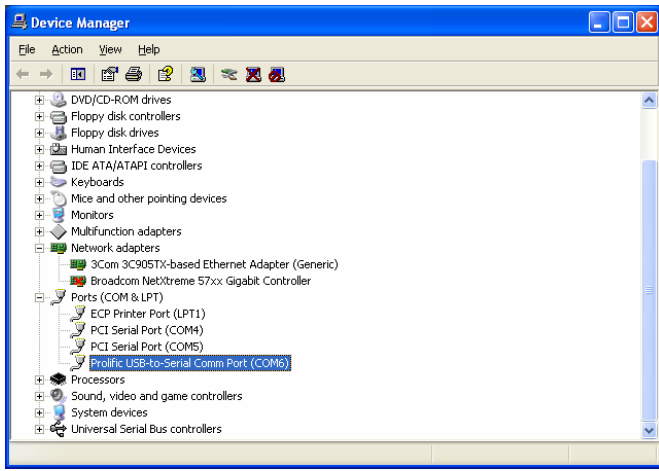
To install the driver, launch the **ur42.exe** executable file, then follow the instructions on screen. You must accept the terms of the license agreement to complete the installation procedure.



Click **Finish** to complete the installation, now you can plug the converter to the USB port of the computer.

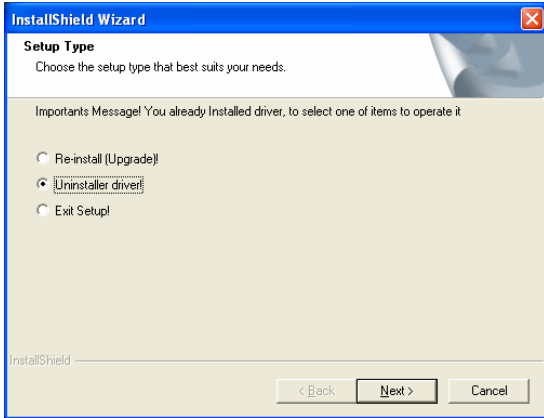


You can check the Device Manager and see the **Prolific USB-to-Serial Comm Port (COM Port)**



Uninstalling the device Driver

If you want to remove the USB-CONVERTERCABLE device driver, follow the steps:
Launch the **ur42.exe** executable file
Select the **Uninstaller Driver!** Option and click on **Next**



MANUSBRS422 V.1.01

5

Working with the USB-CONVERTERCABLE

Technical Safety Notes

Qualified personnel

The device should only be used by qualified personnel. Qualified personnel as referred to in safety guidelines in this documentation are persons who are authorized to commission, ground, and tag circuits, equipment, and systems in accordance with established safety practice.



The equipment/system or the system components may only be used for the applications described in the catalog or the technical description, and only in combination with the equipment, components, and devices of other manufacturers as far as this is recommended or permitted by Hitachi.

The product will function correctly and safely only if it is transported, stored, set up, and installed as intended, and operated and maintained with care.

MANUSBRS422 V.1.01

6

The products have been designed for use in an industrial environment in compliance with the 2004/108/CE directive.

The products have been designed in compliance with:

EN 61000-6-4

EN 61000-6-2

The installation of these devices into the residential, commercial and light-industrial environments is allowed only in the case that special measures are taken in order to get the conformity to EN-61000-6-3.

Note: USB-CONVERTERCABLE is not applicable to WEEE. The converter cable is only used for Industrial INV and not used for IT or consumer products.

Reproduction of the contents of this copyrighted document, in whole or part, without written permission of Hitachi Europe GmbH, is prohibited.

MANUSBRS422
V.1.01 07.07.2008

Copyright © 2008 Hitachi Europe GmbH
Hitachi Europe GmbH - Am Seestern 18, D-40547 Düsseldorf
www.hitachi-ds.com

7

MANUSBRS422 V.1.01

8