Description of

IS1+ Virtual COM Port

for

IS1+ field stations

IS1+ Virtual COM Port

Content:

IS1+ Virtual COM Port

1 General

The IS1+ CPU 9442 Ethernet ports X2 P1 and X2 P2 both can be used with the IS1+ Virtual COM Port driver. It allows to establish a connection of tools that only support serial interfaces without the need of an additional serial connector. The serial port is emulated by software and communication is done via an Ethernet UDP connection.
This document explains shortly the functionality of IS1+ Virtual COM Port. All illustrating images were created with IS1+ Virtual COM Port V1.0.2.

List of abbreviations

2 System requirements

IS1+ Hardware requirements:

- IS1+ field station with CPU 9442/3x-xx-xx, socket 9496/.. and Power Module PM 9445/..

IS1+ Software requirements:

- 9442 CPU Firmware V1.0.21 or above

Computer requirements:

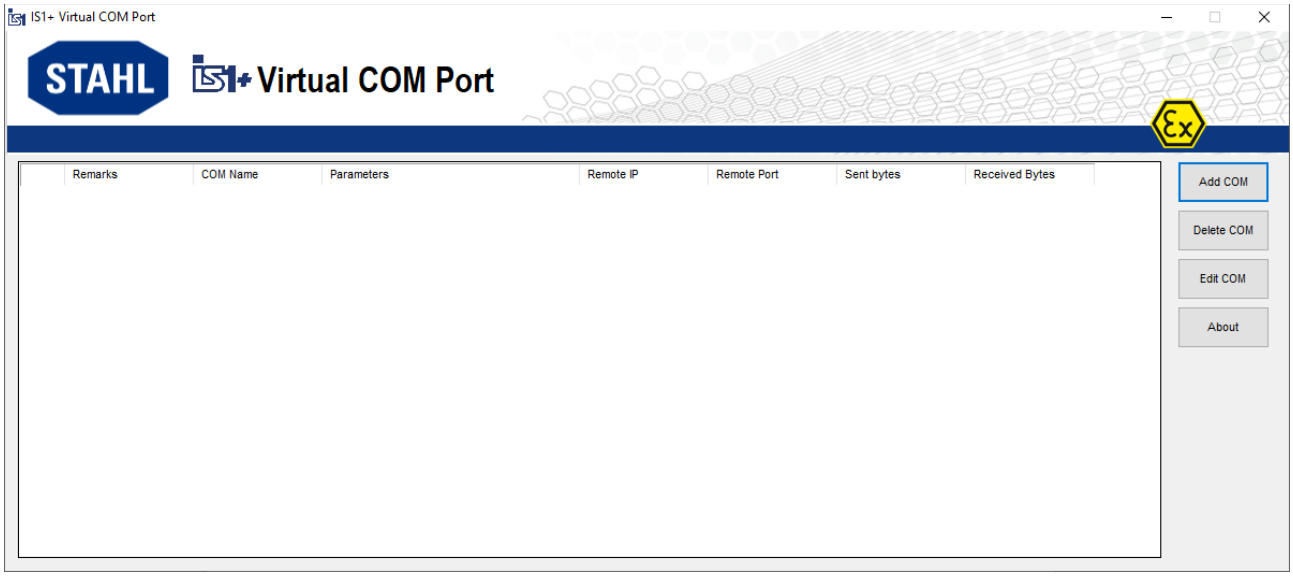
- Microsoft Windows 7 or above
- IS1+ Virtual COM Port V1.0.2 or above (download: www.r-stahl.com)

3 Installation

To install IS1+ Virtual COM Port, please start the downloaded ‘IS1+ Virtual COM Port Setup.exe’. A wizard will guide you through installation process. To start the installation, you need to have admin rights. Please follow the steps of the wizard to complete the installation. If you have already installed IS1+ Virtual COM Port and want to update to a newer version, no uninstallation is required. The installation wizard is able to close all running applications using files that need to be updated.

4 Create a Virtual COM Port

To create a virtual COM Port, please click on the ‘Add COM’ button in main window.

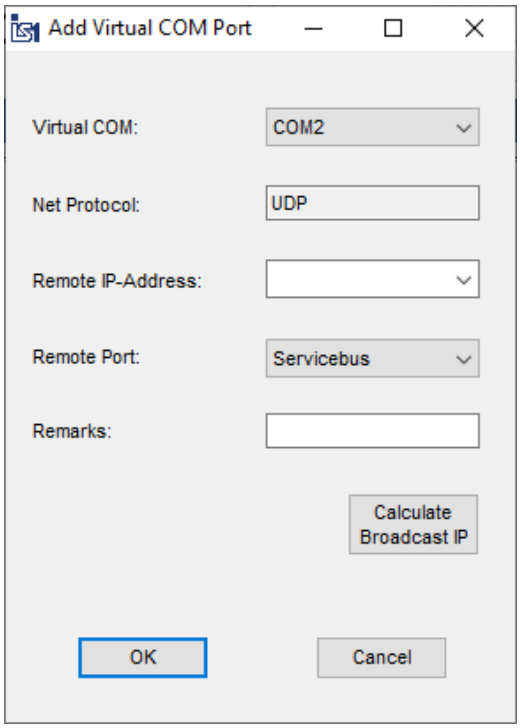


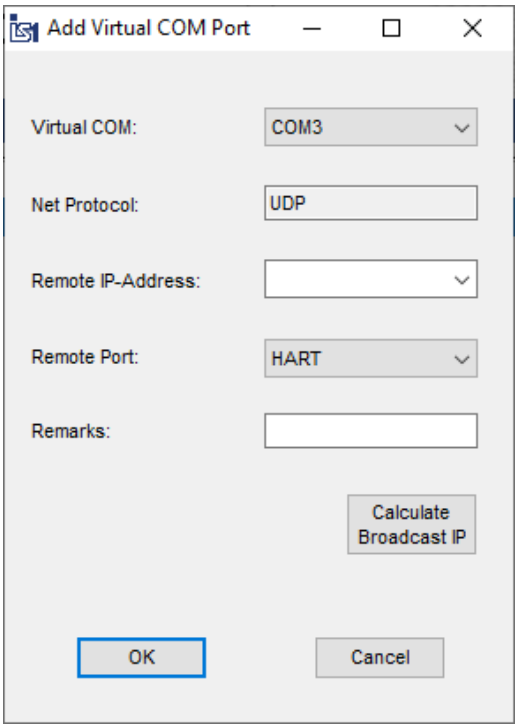
In the next dialog, you are able to set all required connection parameters. First, you need to choose a COM Port number from your PC. All free ports are shown in the dropdown menu. As a network protocol, UDP is used for all connections. In the next step the configured service bus IP (IP-SB) of the IS1+ CPU has to be entered as the ‘Remote IP-Address’. If you don’t know this IP address, you can identify it by using the IS1+ Detect tool (download www.r-stahl.com). To create a broadcast communication, just click ‘Calculate Broadcast IP’. The correct broadcast address will be calculated and inserted as Remote IP-Address automatically.
In case you have more than one Ethernet adapter installed, you have to select one in the list. With broadcast communication, you are able to connect to all IS1+ field stations in one network with a single COM port.

When using broadcast, please ensure that every IS1+ field station needs to have a unique RS485 Address.

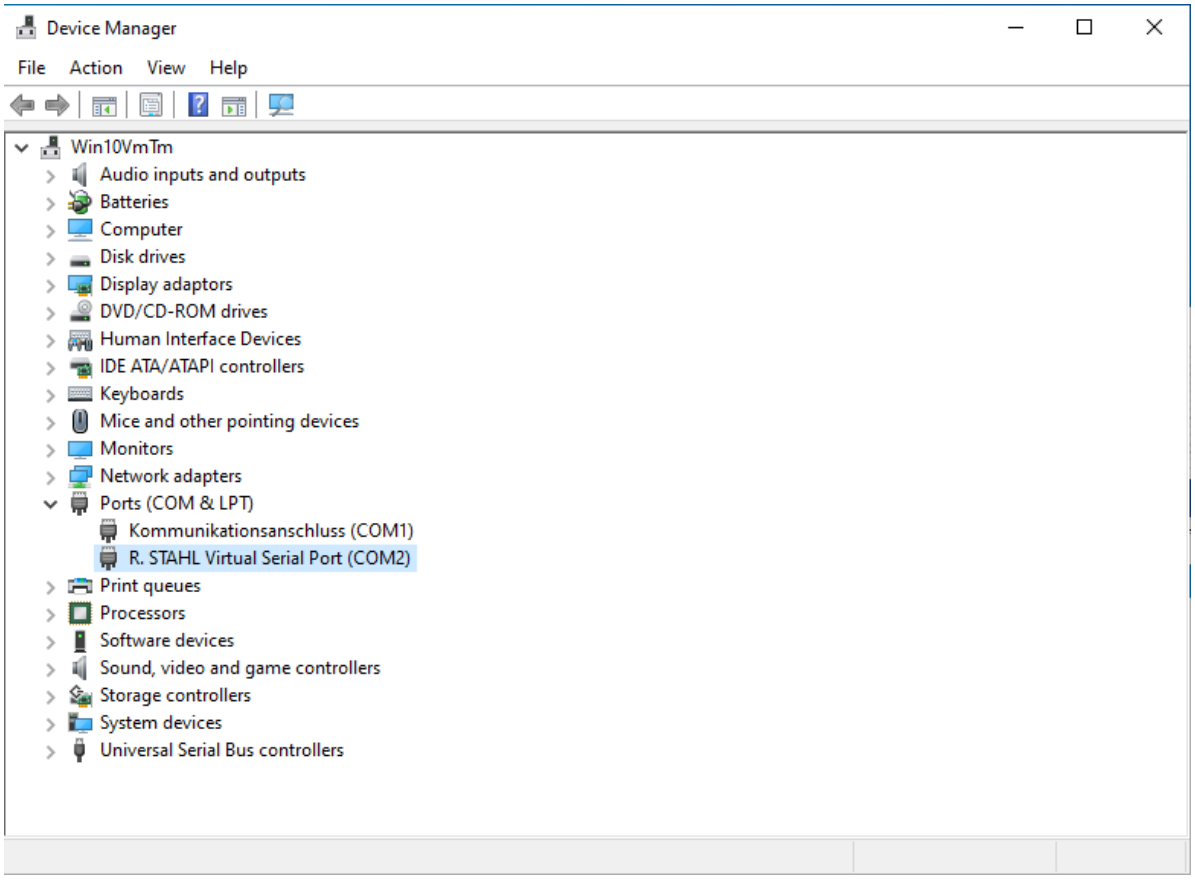
In the ‘Remote Port’ section, the type of connection is set. Choose ‘Servicebus’ to configure and monitor the IS1+ CPU with IS Wizard or similar applications.
If you want to use Emerson AMS Device Manager (Asset Management Software) or ‘STAHL HART over RS485’ DTM, please use the ‘HART’ option instead.
Optionally, remarks can be added to the port.

IS1+ Virtual COM Port



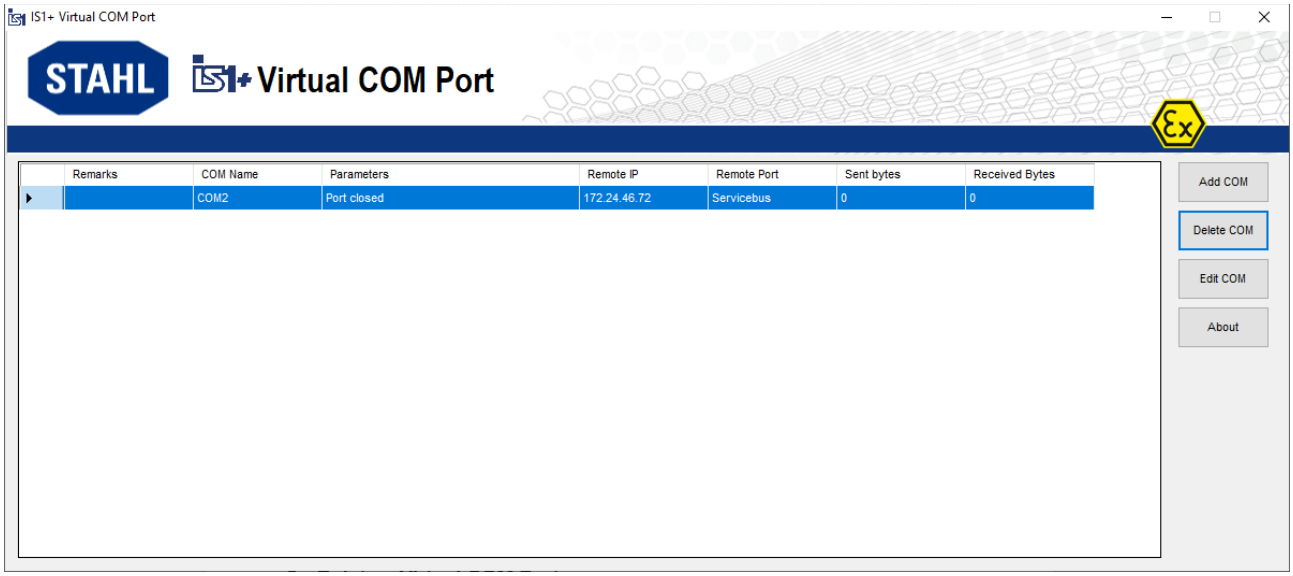


After successfully adding the Virtual COM Port, it should be visible in the Windows Device Manager in the 'Ports' section as 'R. STAHL Virtual Serial Port'.



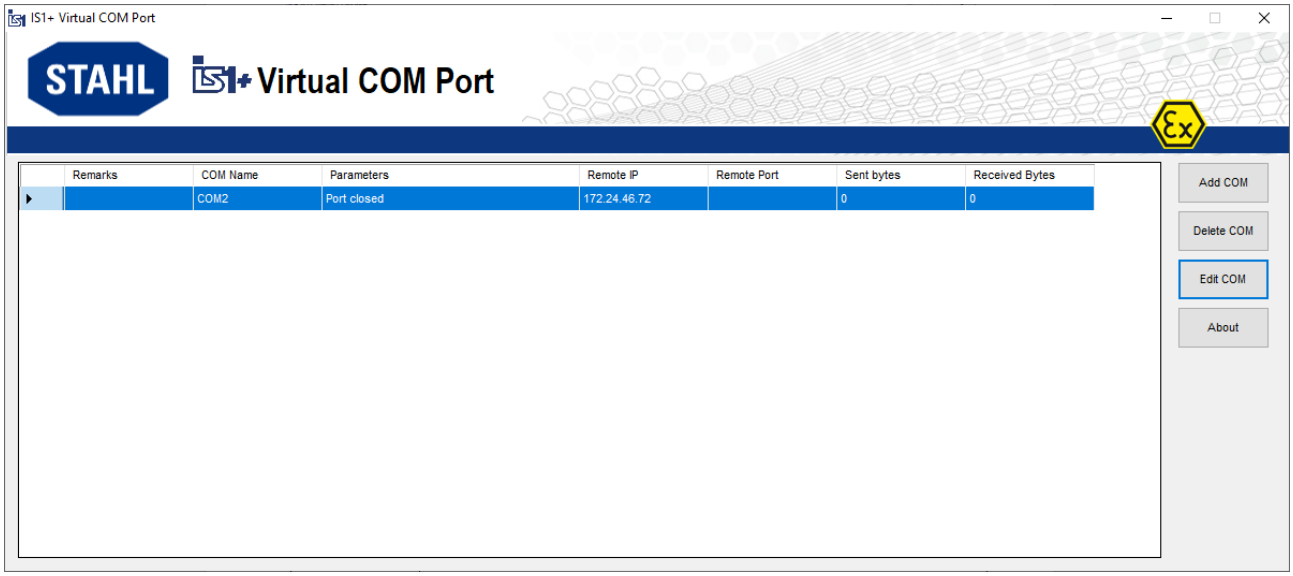
5 Delete a Virtual COM Port

To delete a Virtual COM Port, please select the COM Port you want to delete and press ‘Delete COM’.



6 Edit a Virtual COM Port

To edit a Virtual COM Port, please select the COM Port you want to edit and press ‘Edit COM’. As an alternative, please double-click on a Virtual COM Port for editing.



The same settings window as for creating a new Virtual COM Port will be opened. Please change all the settings you want.

7 List of abbreviations

AS	**A**utomation **S**ystem
AIM	**A**nalogue **I**nput **M**odule
AIMH	**A**nalogue **I**nput **M**odule + **H**ART
AUMH	**A**nalog **U**niversal **M**odule AI/AO with **H**ART
SAIMH	**S**afety **A**nalogue **I**nput **M**odule + **H**ART (PROFIsafe)
AOM	**A**nalogue **O**utput **Module**
AOMH	Analogue Output Module +HART
CPM	**C**PU + **PM** = CPM Central unit consisting of communication processor with power pack
DIM	**D**igital **I**nput **M**odule
DIOM	**D**igital **I**nput **O**utput **M**odule
DOM	**D**igital **O**utput **M**odule
DOMR	**D**igital **O**utput **M**odule **R**elays
DOMV	**D**igital **O**utput **M**odule **V**alves
HW	Hardware
IOP	**I/O P**rocessor of the central unit
IOM	General description of **I/O M**odule
PM	**P**ower **M**odule (power pack)
SW	Software
SIL	**S**afety **I**ntegrity **L**evel
TIM	**T**emperature **I**nput **M**odule

8 Release notes:

Version	Extensions / Changes
V 1.00	First release

9 Support address

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