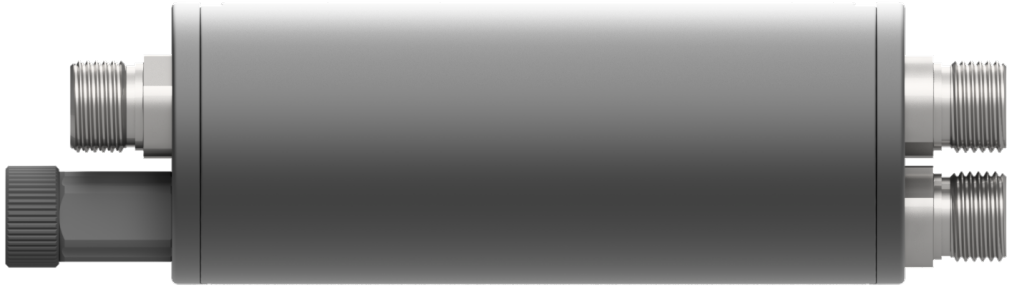
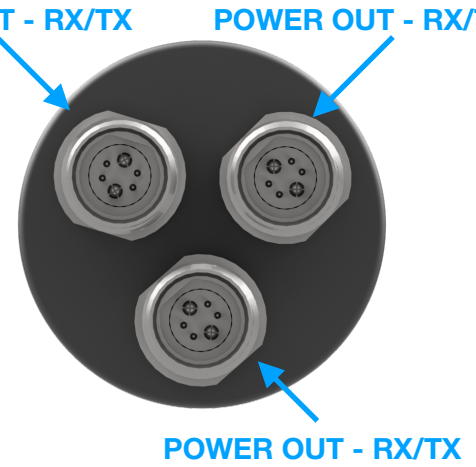
UNDERWATER JUNCTION BOX – 3X UART TO IP USER MANUAL

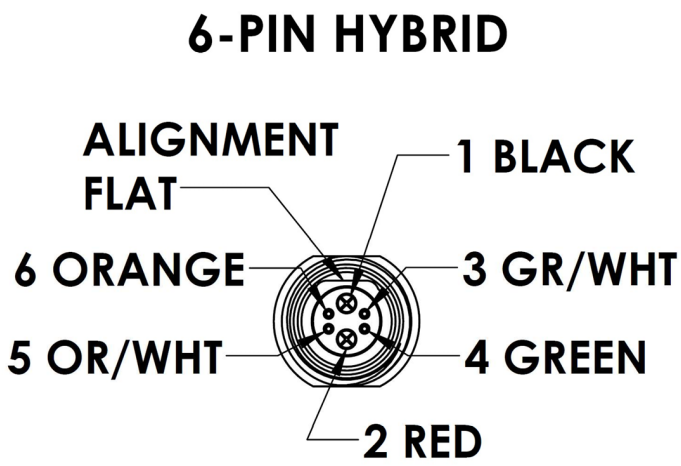
This Underwater Serial Server is a subsea Ethernet-to-serial gateway that gives access to three UART devices through a single 6-pin hybrid connector carrying both data and DC power. Each serial port is exposed as an independent TCP/IP port on the Ethernet link, so the three devices can be reached directly from the surface station over the network, with no additional cabling. The 9–36 V DC supply applied to the input port is passed through unchanged to the three serial ports, so each connected device is powered from the same source as the unit itself.



Green Activity Led
Blink when power and Ethernet connection is established







Parameter	Value
Depth rating	1000 m
Dimensions / weight	Ø50×177.5 mm - 460g in air / 180 g in seawater
Power pass-through	20A total max. shared across outputs.
Switch power	<1W (typical 120mA @ 5V)
Connectors	4×6-pin hybrid - COB-116H0-R1
Operating temperature	-40 °C to +85 °C

Ethernet Pinout IN:

PIN	FUNCTION	COLOR
1	GND IN	BLACK
2	9-36V VCC	RED
3	TX +	GREEN WHITE
4	TX -	WHITE
5	RX +	ORANGE WHITE
6	RX -	ORANGE

UART Pinout OUT:

PIN	FUNCTION	COLOR
1	GND OUT / UART GND	BLACK
2	9-36V VCC OUT	RED
3	RX	GREEN WHITE
4	TX	WHITE
5	NC	ORANGE WHITE
6	NC	ORANGE

Module Installation & Configuration:

Requirements:

- VCOM V5.0.4 Software
- BJ-Link-UART Config Tool V1.1

1. RUN BJ-Link-UART Config Tool

Default configured IP address is:

192.168.2.10

Default IP address after reset is:

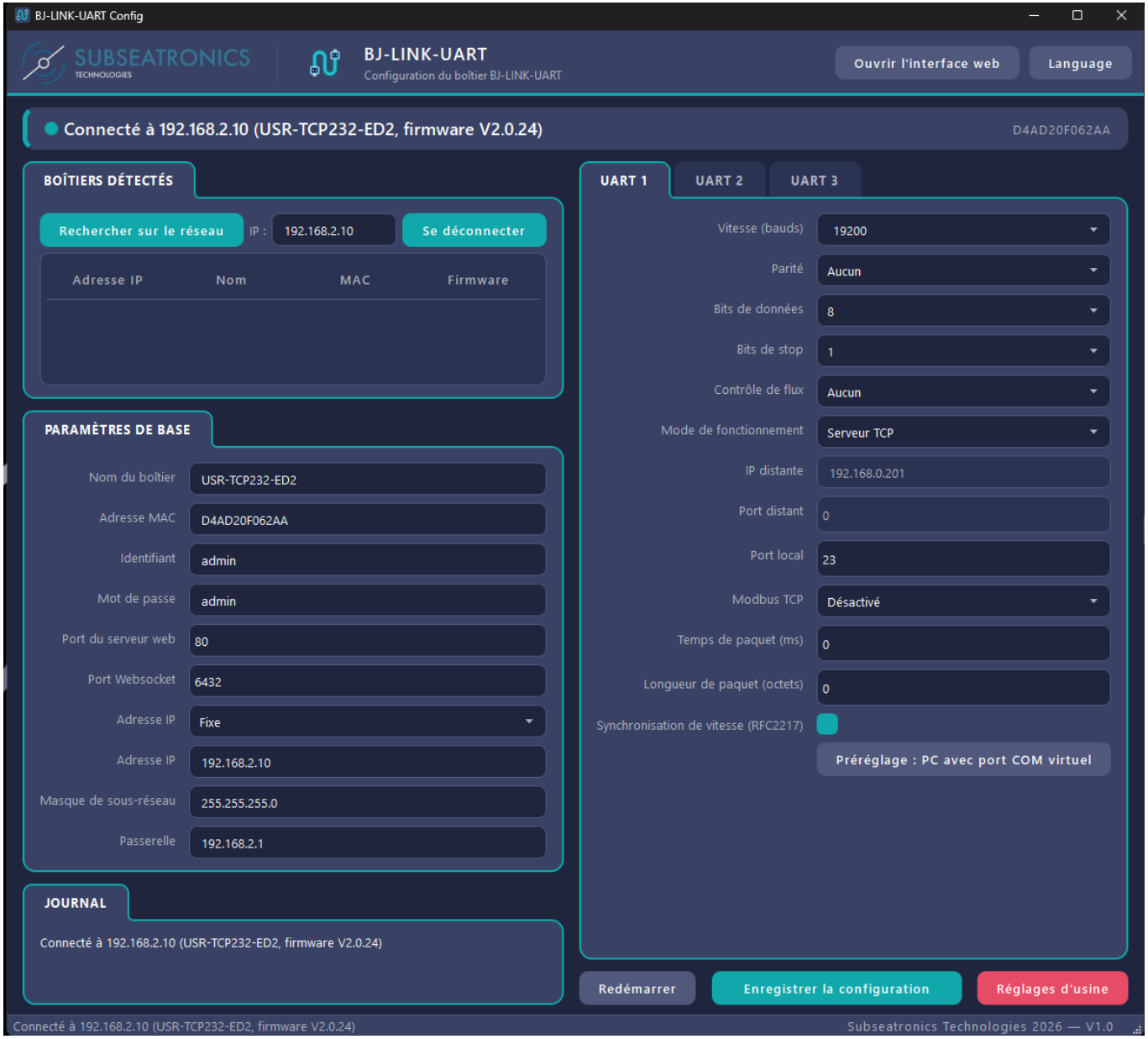
192.168.0.7

What can you do with this software?

- Find the module on the network
- Change the IP address
- Change the name of the BJ
- Change username/password
- DHCP or fixed address
- Direct configuration of UART

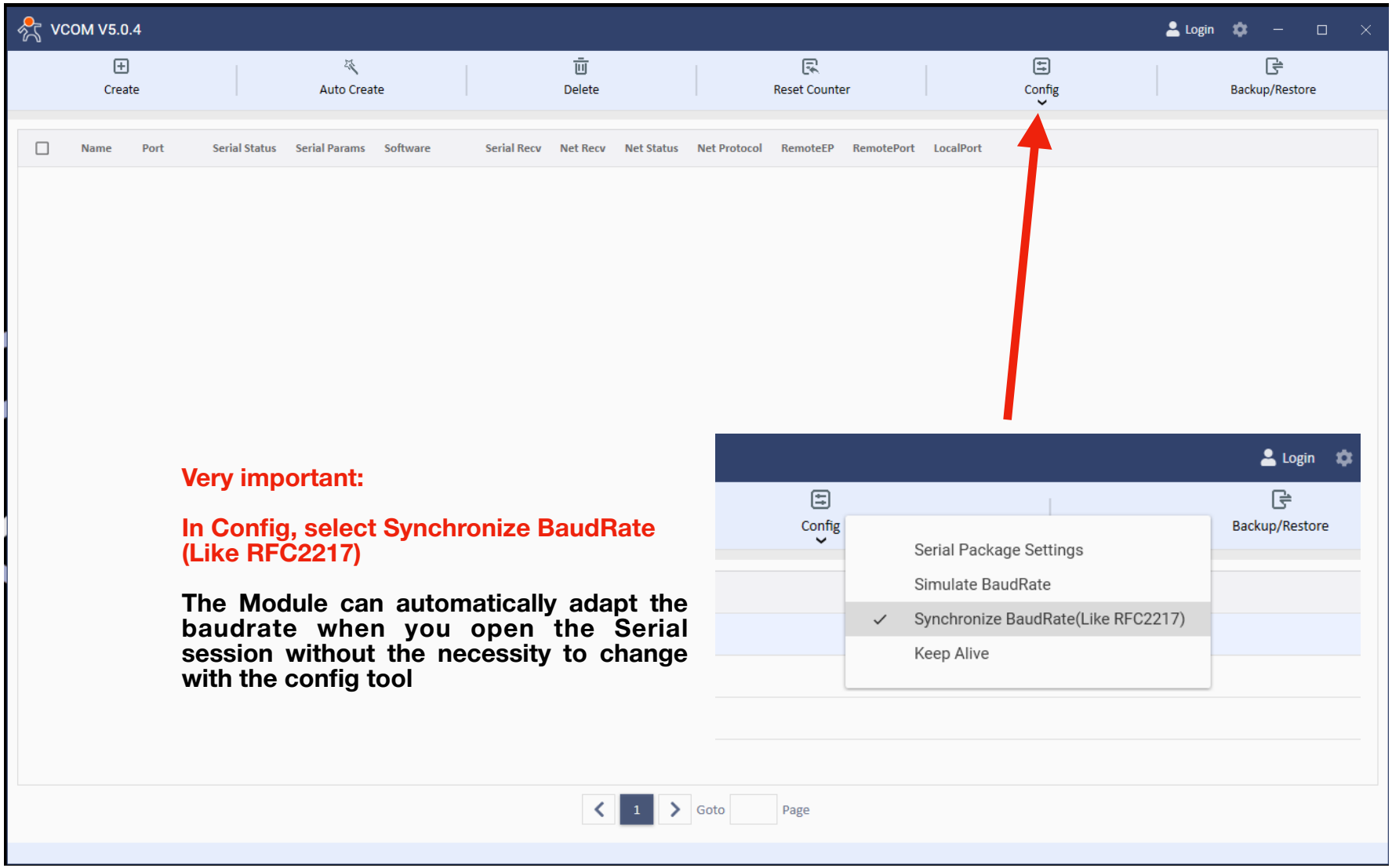
Tips:

- Configure you IP address on the same network
- Verify if the led is blinking

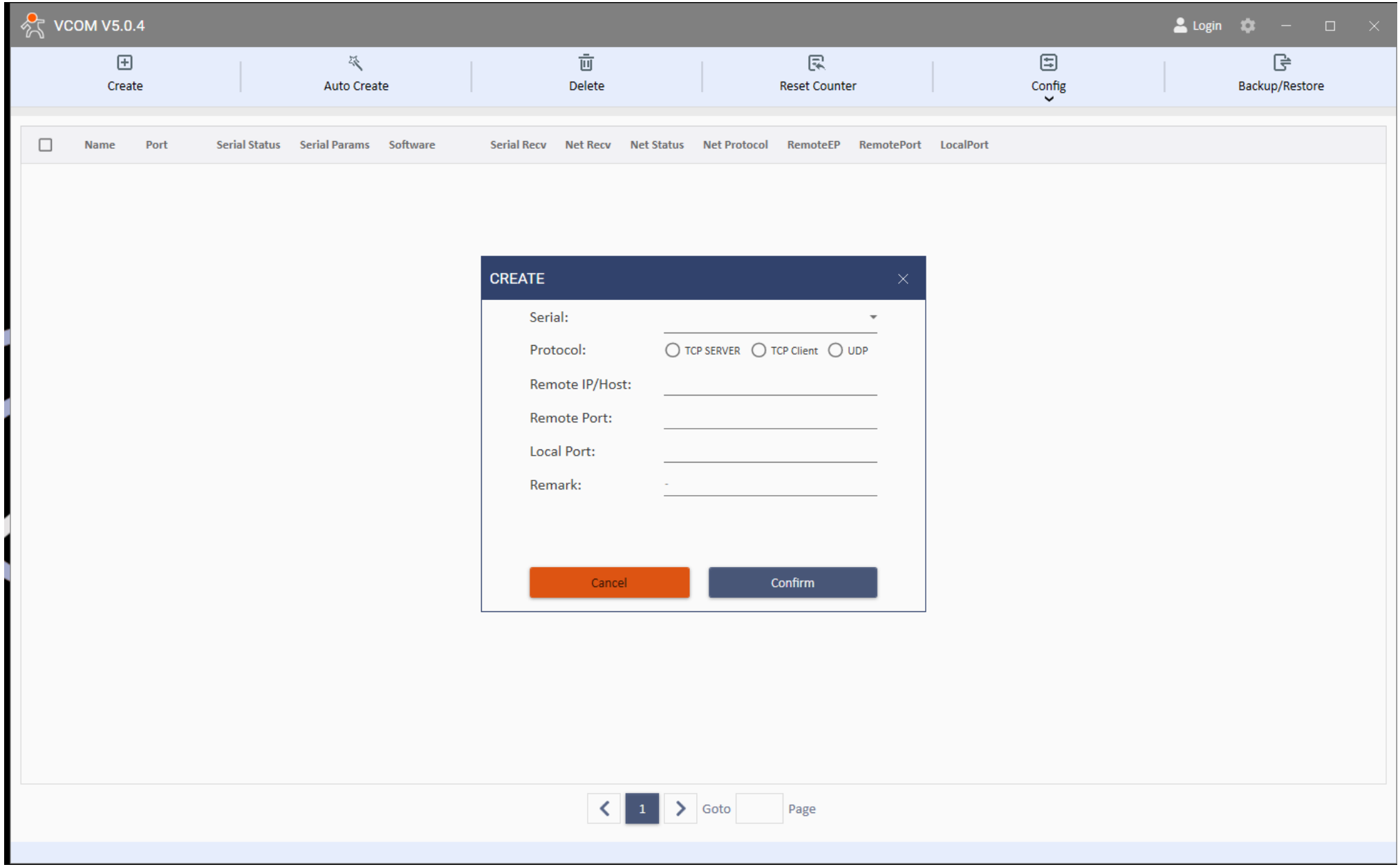


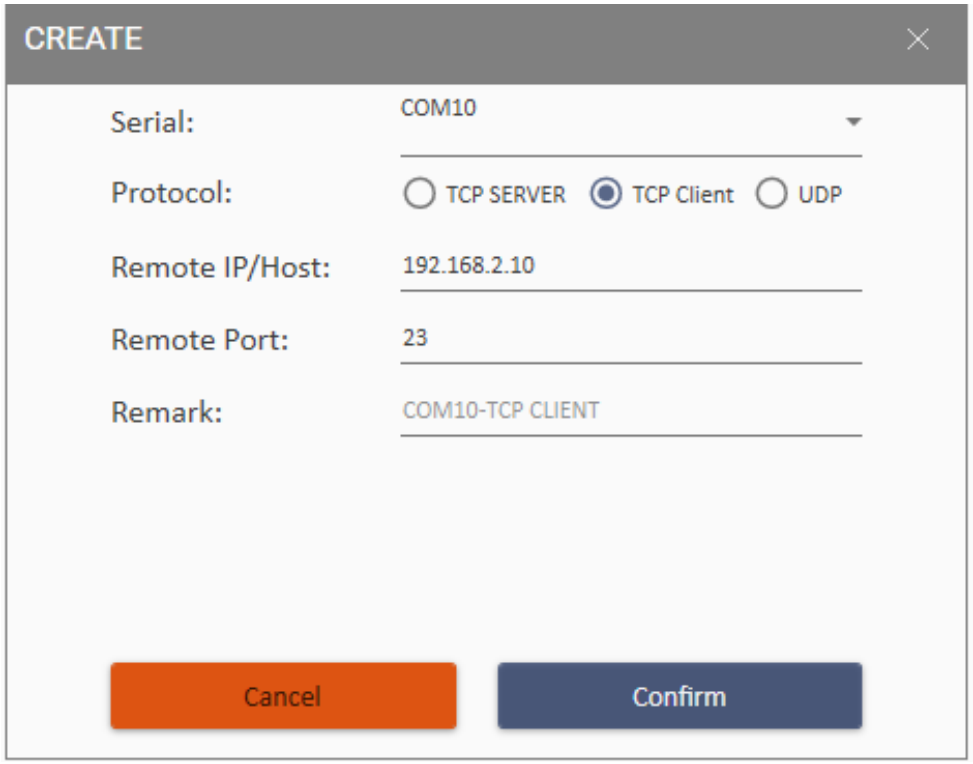
2. VCOM Software: UART to Virtual Com Port

Install the software, and once it's done, you can open it. You will see this empty page. Here, you can connect your module to your PC.



Click on « Create » and this windows open:





Serial: Choose the Serial port number you want to create on your computer

Protocol: The module is Server by default, you must configure to TCP Client

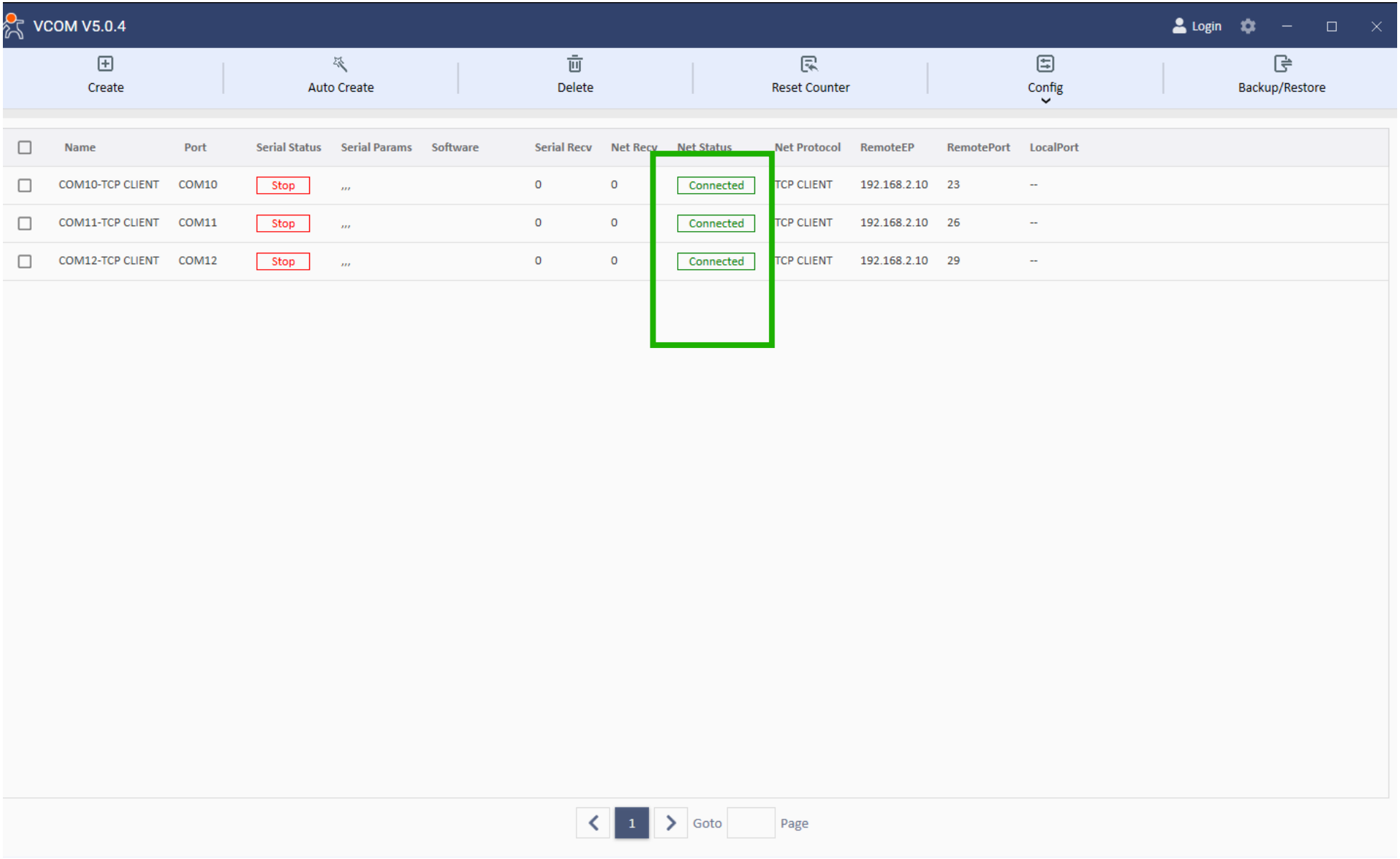
Remote IP/Host: The IP address of the Module

Remote Port: The port of the UART 1/2/3 - You can find this information in the BJ-Link-UART Config software

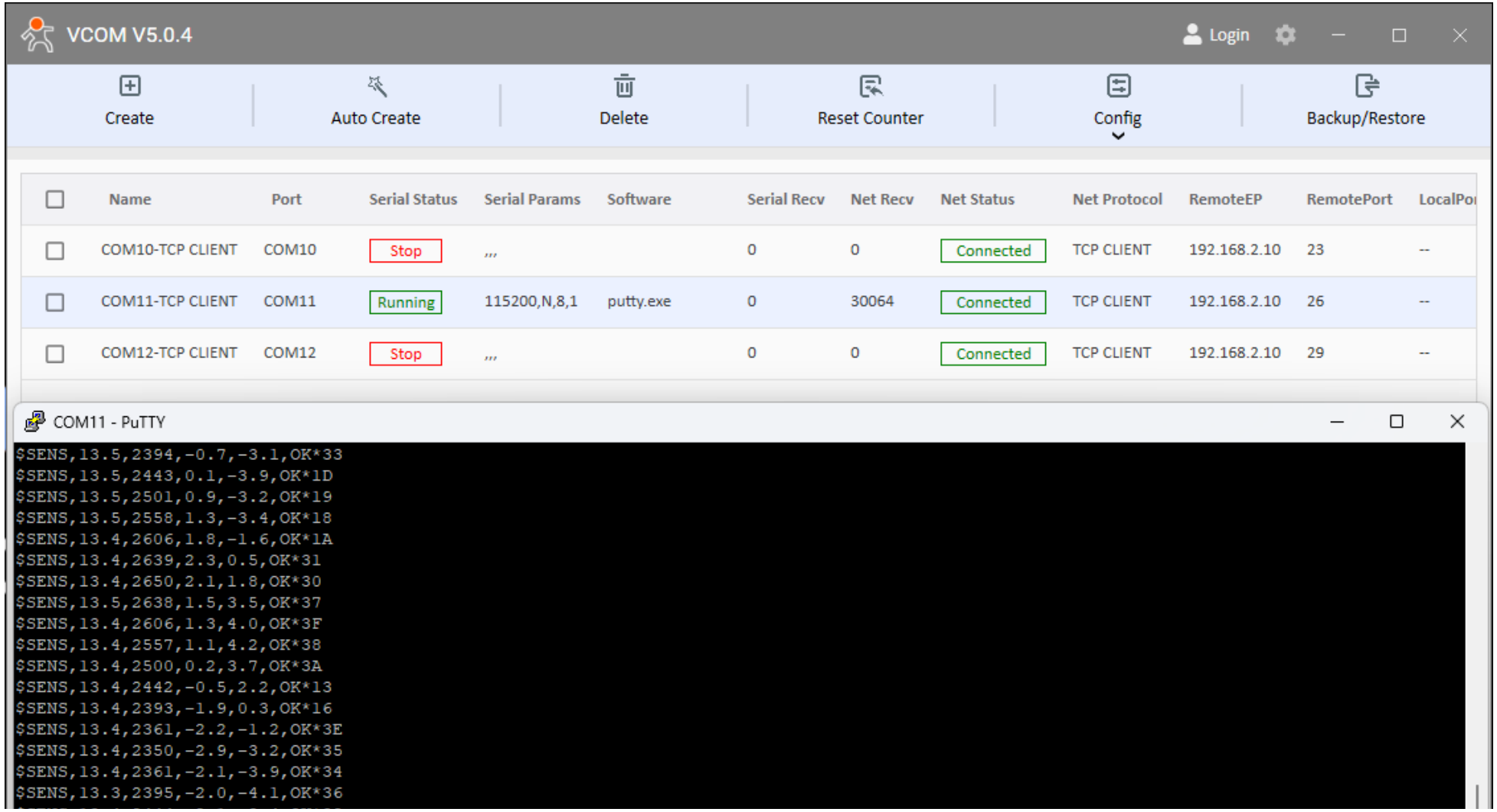
Remark: Add the name of the sensor for exemple or nothing.

Note: You need to do this operation 3 times because you have 3 UART Port on the BJ. Each UART have different IP Port. By default is 23 / 26 /29

Normally, if all is correct, you can see it connected here. It means the module is connected, not the UART Serial Sensors.



Connect your sensors and open, for example, a Putty session with the associated COM port and the BaudRate.
You receive the datas if RX/TX is good. Now you can open the software dedicated to your sensors and enjoy !



If you have some issues, contact your distributor.