# User Manual

# Network module for code scanner

# HD650-ETH

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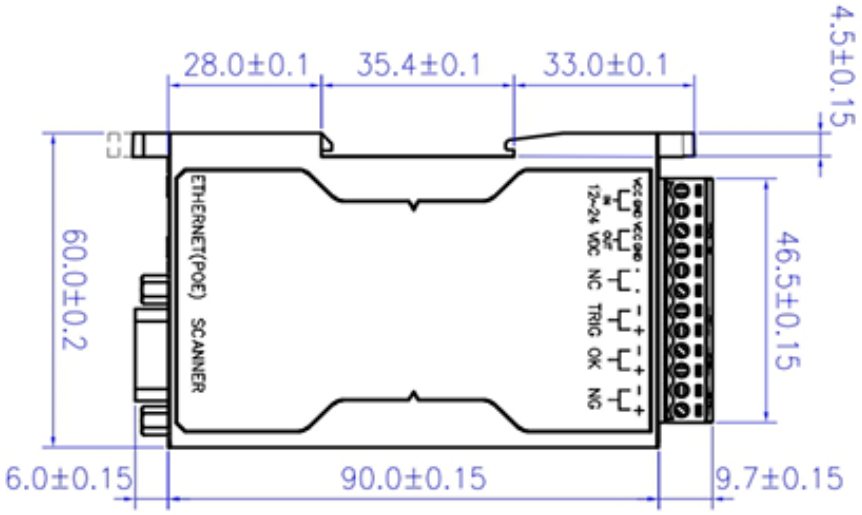
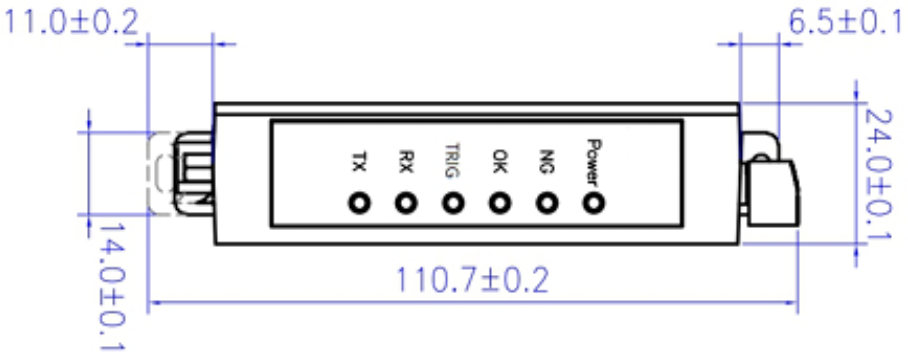
## About the EA100 Network Module

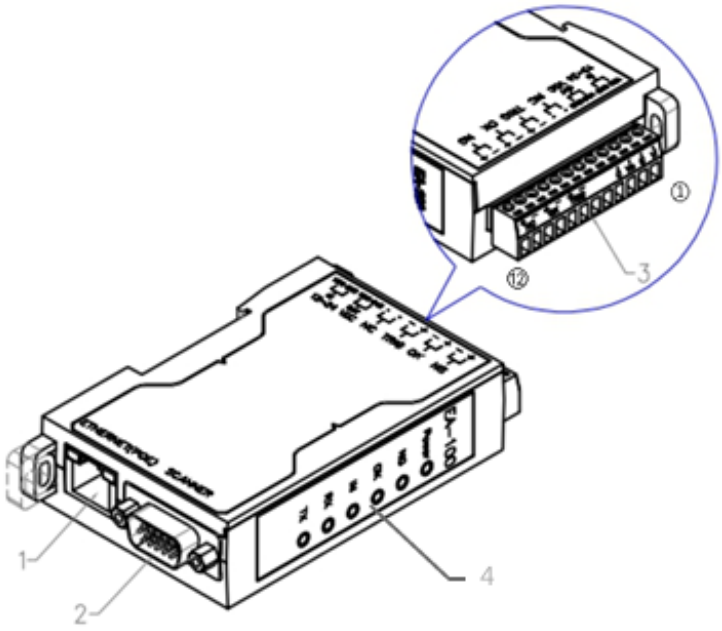
The EA-100 network module is used to realize data transmission between the Ethernet interface and the serial port and protocol converter. The serial port is RS232 data, and in the Ethernet interface, it is the network data packet. Users can configure the parameters through the website or configuration software, set once and save forever.

## Hardware Specifications



## Description of the device




1. Network Port:
- Green LED - proper connection to the Ethernet line
- Yellow LED flashing - normal signal, communication
- Yellow LED is on all the time - mains short circuit
- Yellow LED not lit - no communication
2. DB15 Terminal Port - Scanner Interface Access
3. External interfaces – allow you to connect various external devices. (see table below)

| Pin | Definition | Description |
|---|---|---|
| 1 | VCC (+) Input | 12~24VDC Input |
| 2 | GND(-) | Connection to earth |
| 3 | VCC(+) Output | Fixed 12V DC output |
| 4 | GND(-) | Connection to earth |
| 5 | NC | Do not connect the plug |

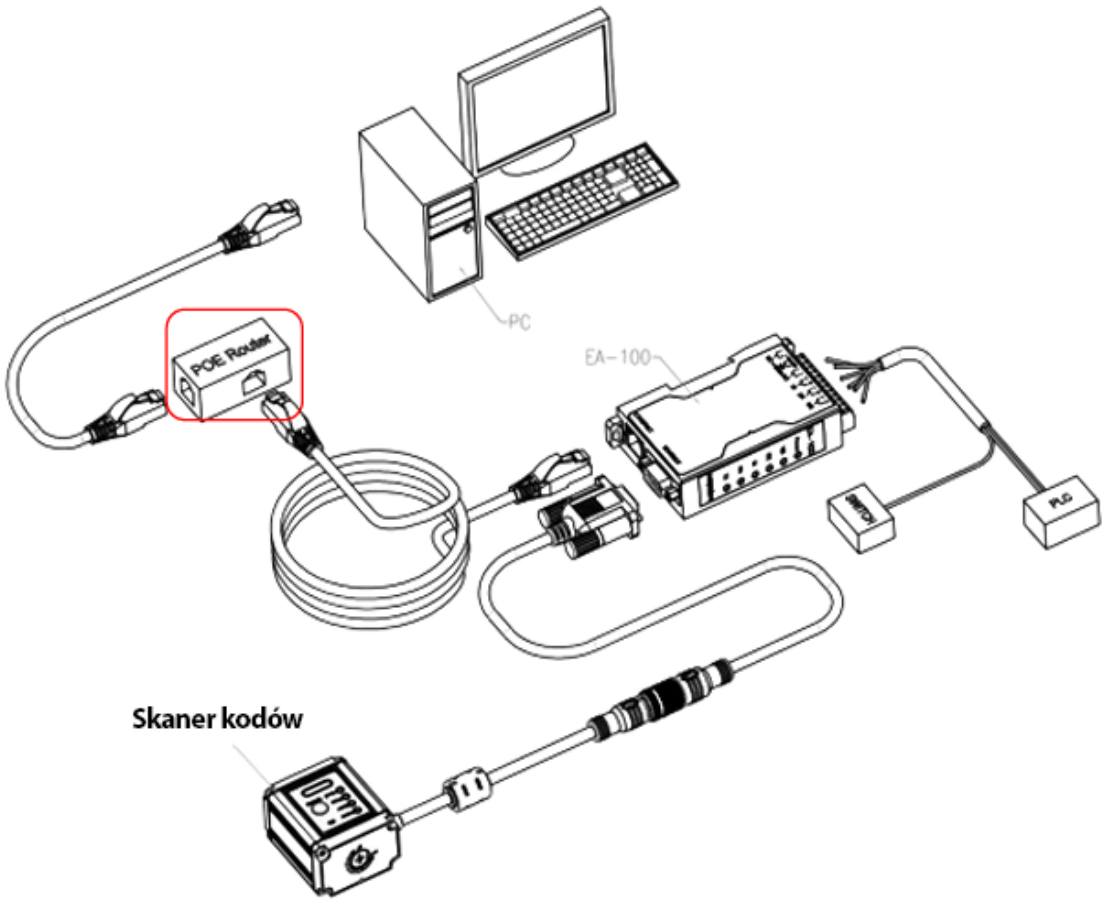
| | | |
|---|---|---|
| 6 | NC | Do not connect the plug |
| 7 | Optoelectronic switch input(-) | INPUT trigger signal |
| 8 | Optoelectronic switch input(+) | INPUT trigger signal |
| 9 | Decode Successful (-) | Successful OK OUTPUT decoding |
| 10 | Decode Successful (+) | Successful OK OUTPUT decoding |
| 11 | Unsuccessful decoding (-) | Unsuccessful NG OUTPUT decoding |
| 12 | Unsuccessful Decoding (+) | Unsuccessful NG OUTPUT decoding |

4. Indicator light:

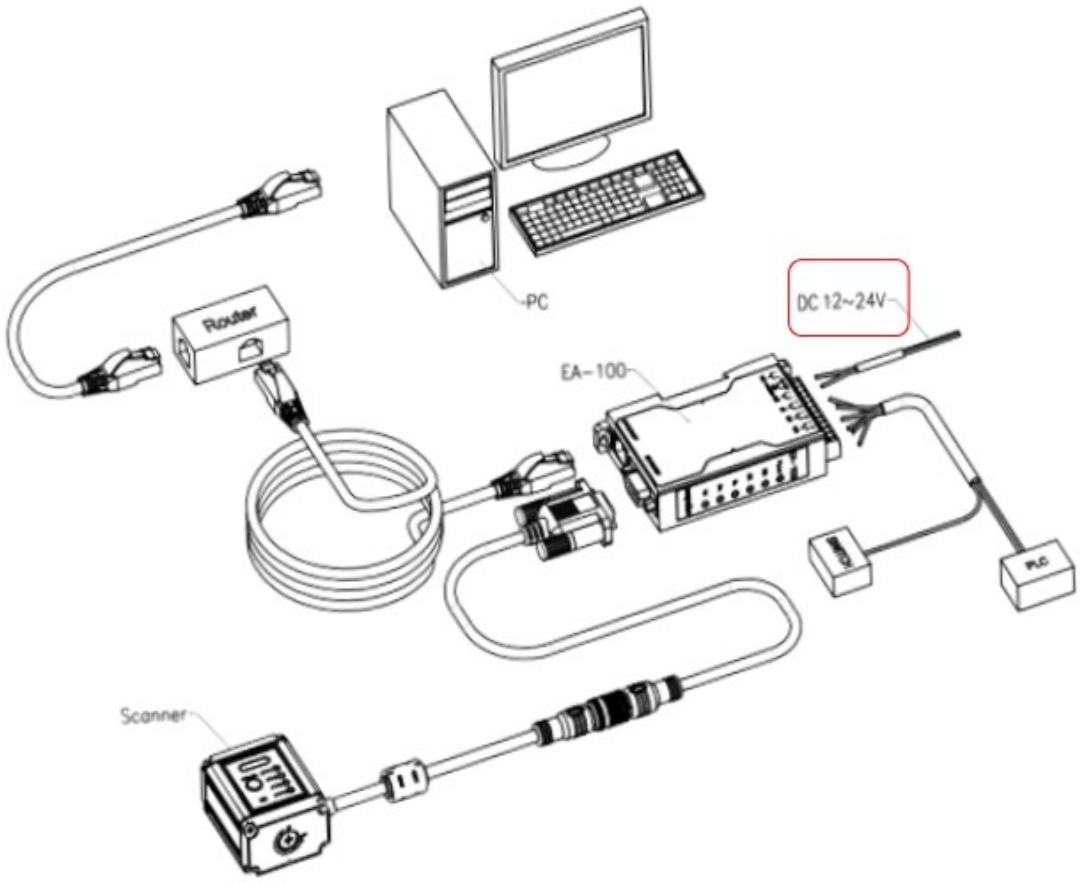
- Power indicator light (orange)
- Decode Failure Signal Indicator (Red)
- Decode signal indicator light (red)
- Decode Success Signal Light (Green)
- Trigger Tone Indicator (Blue)
- Scanner serial port input indicator light (green)
- Scanner serial port output indicator light (green)
- Scanner serial port input light (green)
- Scanner serial output light (green)

# Connecting External Devices

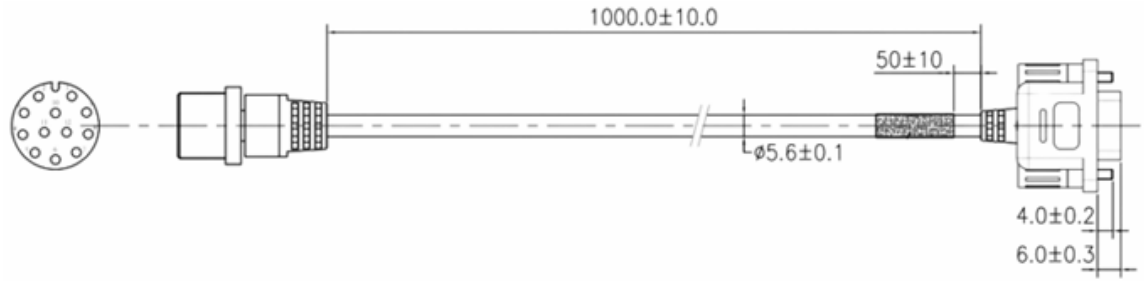
POE:



DC IN:

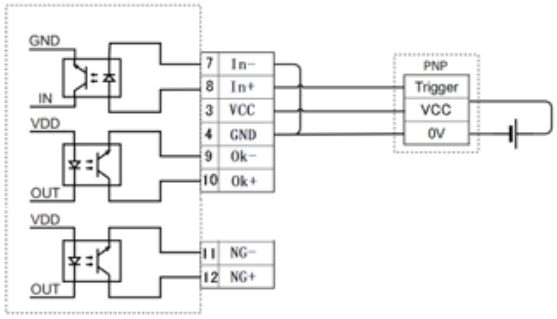



## Communication output cable

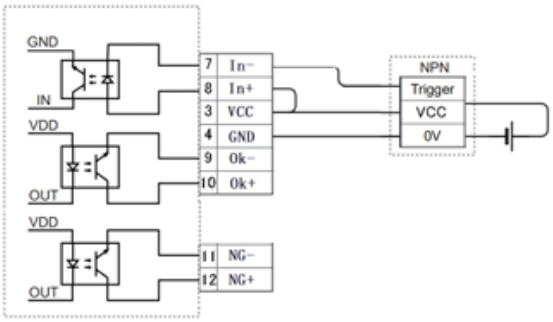


# External interface. Input Wiring Instruction (TRIG)

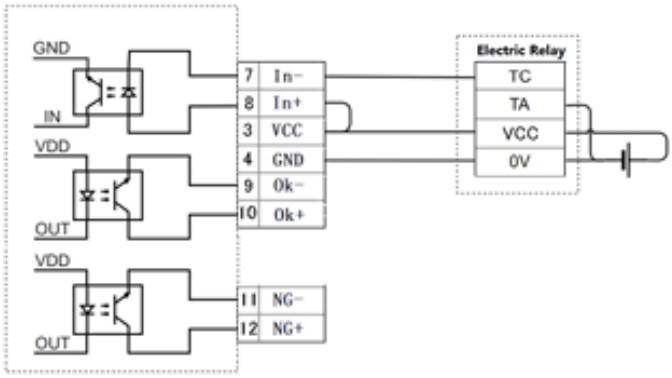
NPN INPUT




PNP INPUT

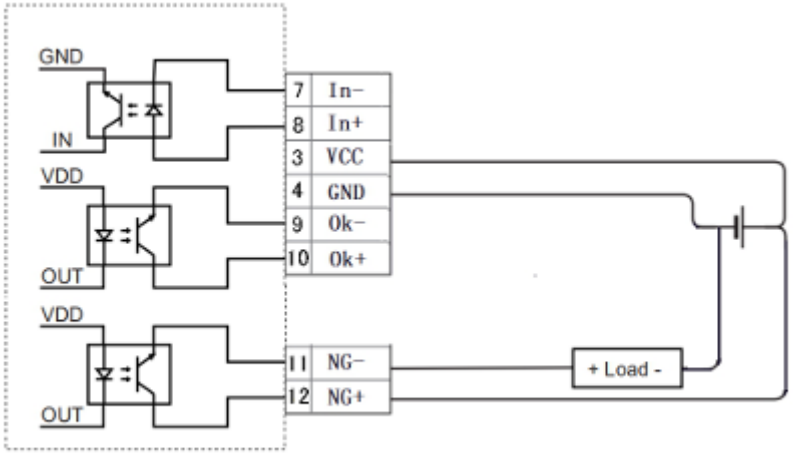



## Electrical Relay Input

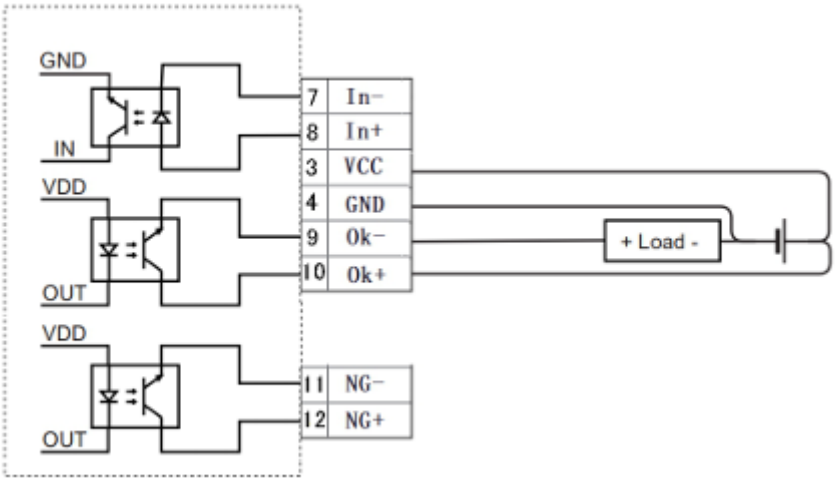


# OUTPUT Wiring Instruction

## Output signal of decode success (OK indication)



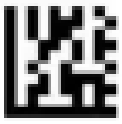

## Output decoding error signal (NG indication)



## First boot of the device

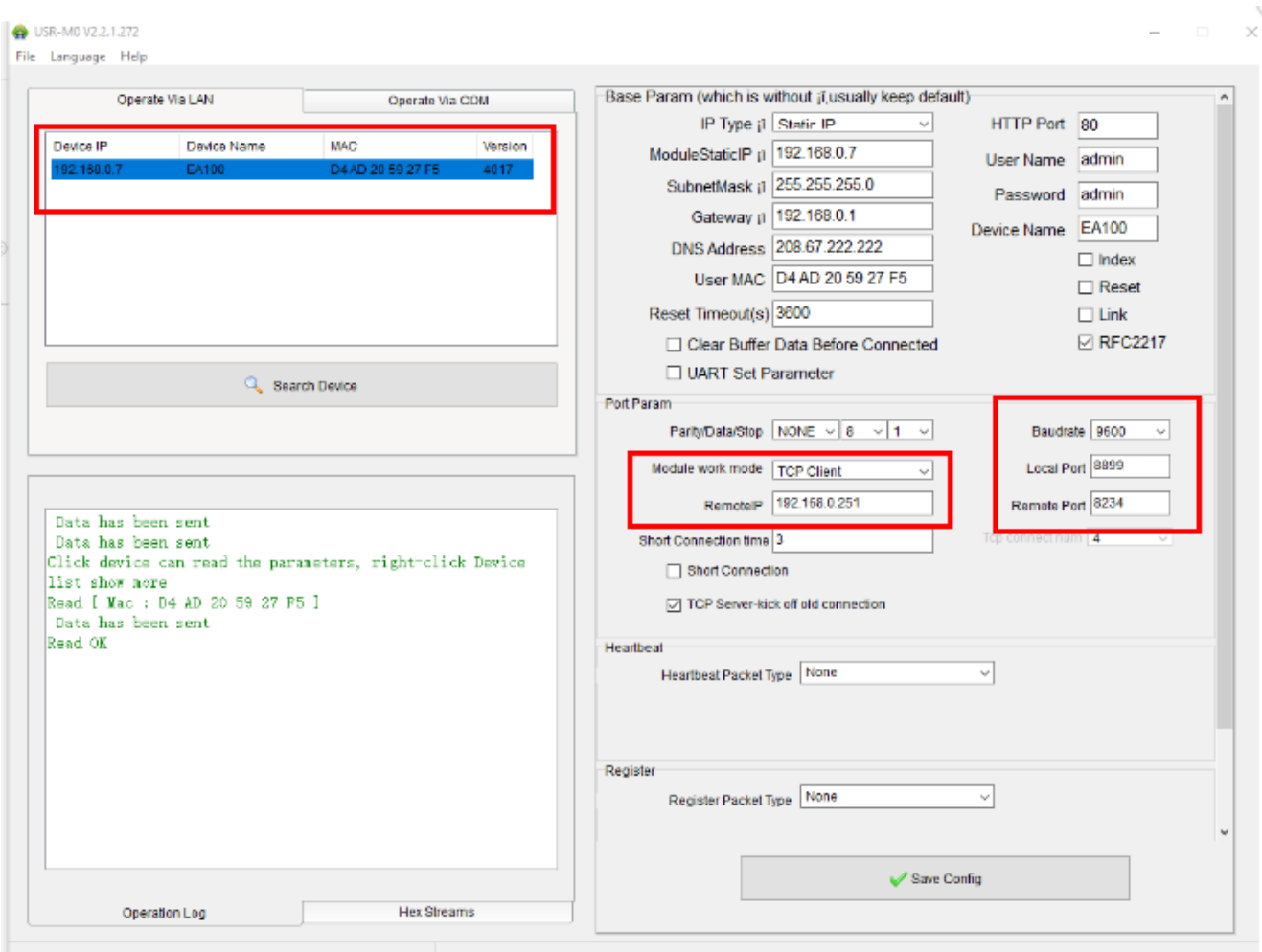
A scanner requires a special program to work properly, in which it must be configured. Before you start working with the device, follow the steps below. On the store **hdwr.pl** from the product page, you need to download two programs located in the Downloads section: **NetWork Network Debugging Assistant** and **the USR-MO** application.

Then scan the following barcodes one by one to set the scanner to RS232 serial port mode and set the baud rate to 9600.

| | |
|---|---|
|  Entering Setup Mode |  RS232 serial port |
|  9600 |  Saving settings |

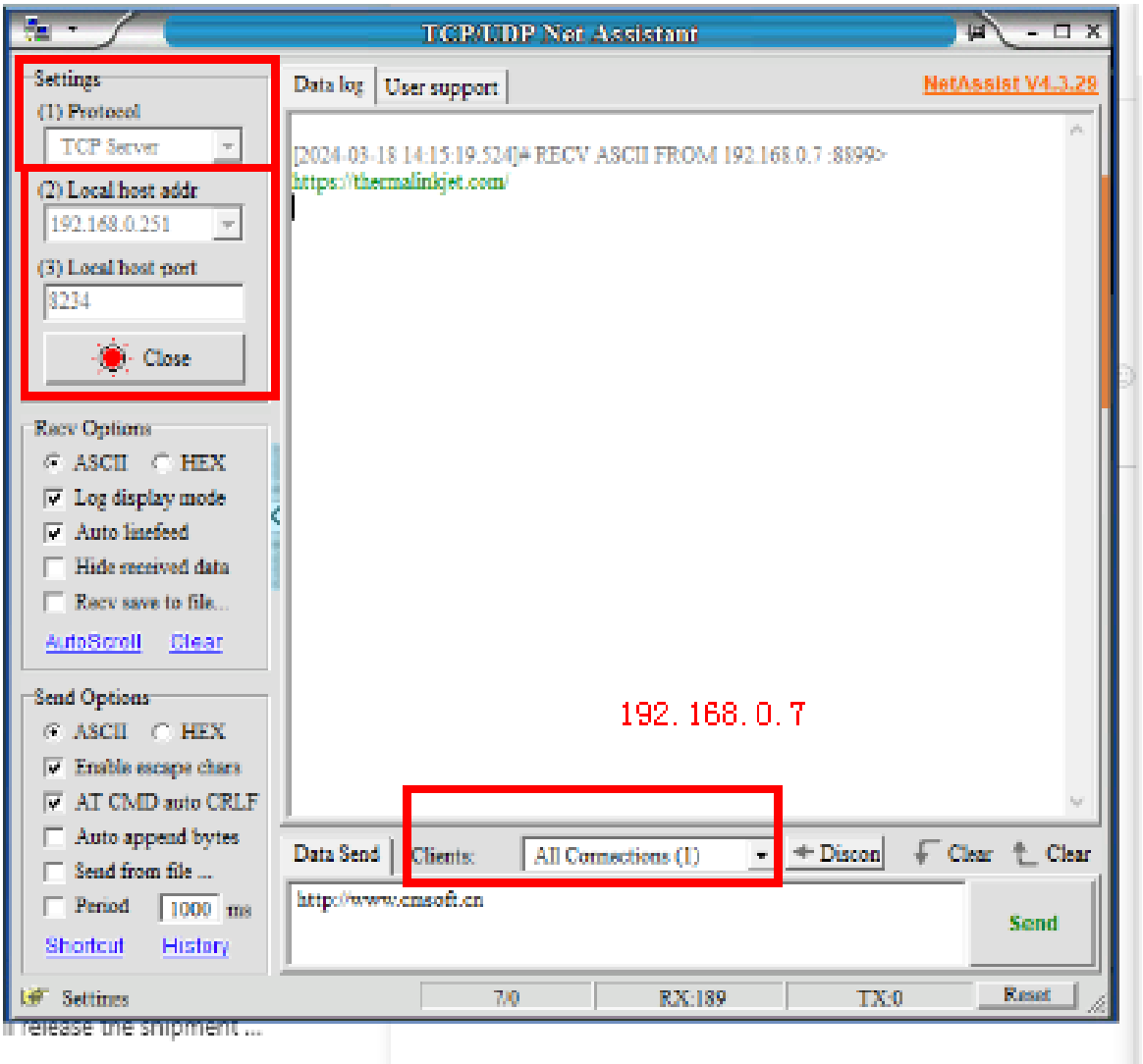
## Setting the Network Module as a TCP Client in the USR-MO Software

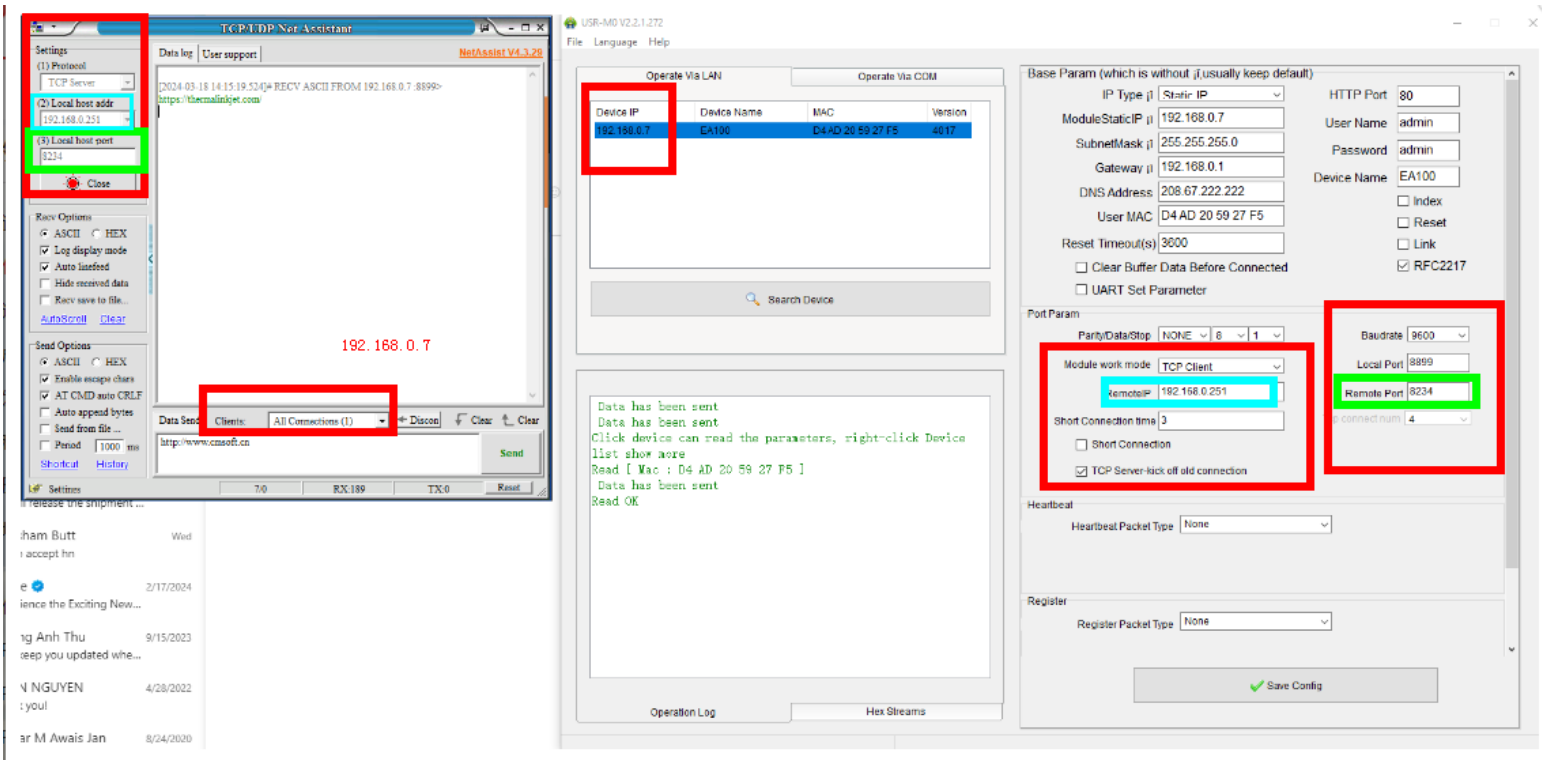
1. In the USR-MO software, the IP address is **192.168.0.7**. The EA100 network module must be set as a TCP client and then the host address must be set: e.g. 192.168.0.251




2. Next, you need to set the local port and the remote port (the remote port in the software should be the same as the local host address in the network debugging assistant.
3. To set the Web Assistant as a TCP server and IP address:

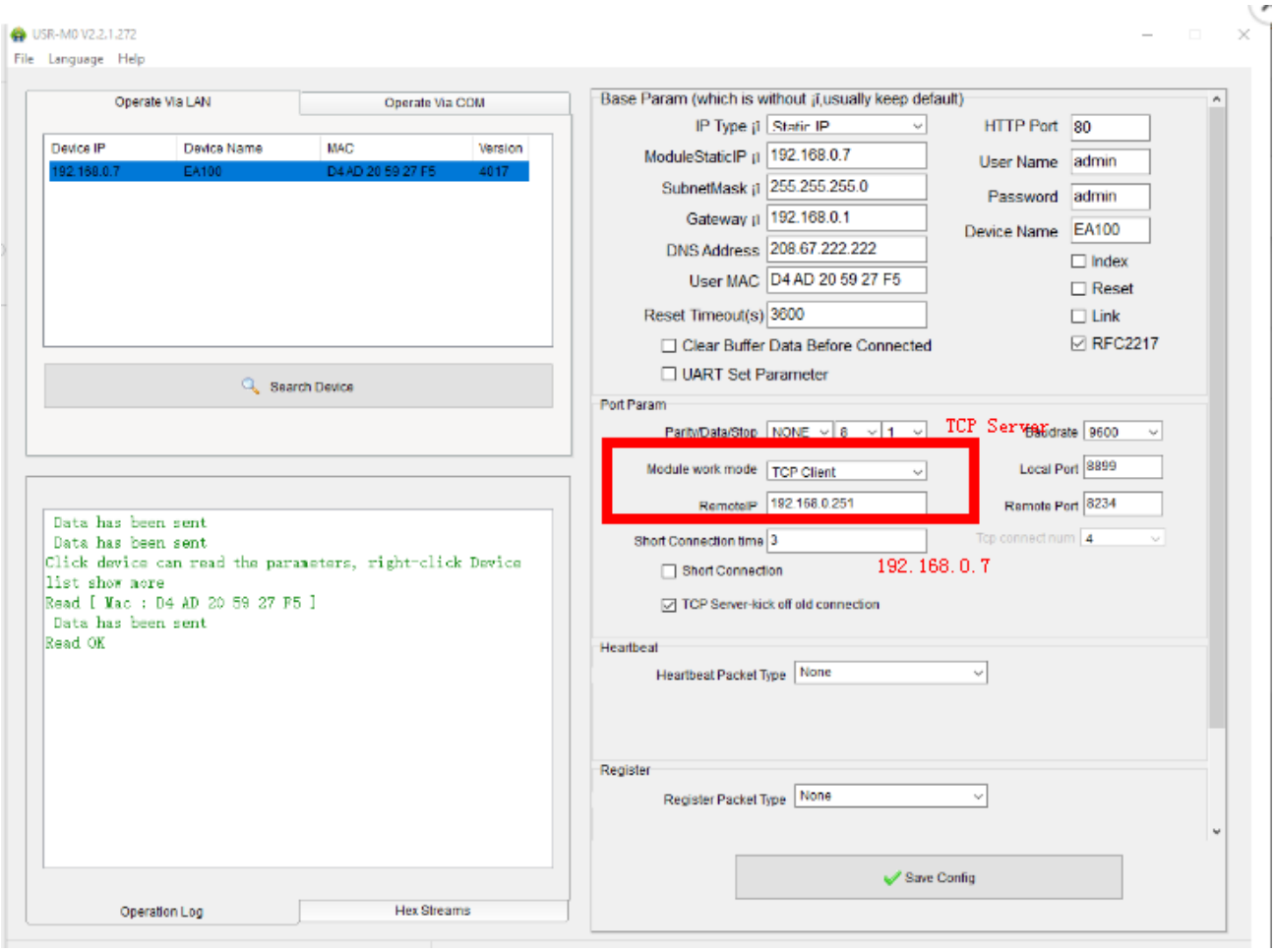
- After installing the NetWork assistant, you can change the language to English in the left corner.
- Next, select a TCP server and enter the IP address of the local host, such as 192.168.0.251
- The local host address in NetWork Assistant should be the same as the remote port in the USR-MO software
- Then select TCP Client: 192.168.0.7
- Select "Open" and after scanning the barcode, you will get the data






## Getting data on a TCP client

In the USR-M0 software, the IP address is 192.168.0.7. Then set the EA100 module as TCP and IP server 192.168.0.7, and the local port is 8899 as the following picture.




Set the network debugging assistant: TCP client and IP address: 192.168.0.7, and the local port should be the same: 8899 with the local port in the USR software.