

# **IF2E001 – ethernet interface**

## **User manual**

## 1 – GENERAL DESCRIPTION

The Ethernet interface is a gateway between the Meters and Multifunction devices and the Ethernet network line.

The device has a RS485 interface capable to drive up to 31 devices and an Ethernet interface 10 / 100 Mbit. The functionality is completely transparent with respect to the data passing through.

The interface must be programmed with the IP address code. To do this the proper program **STECfg\_EN.exe** must be used.

## 2 – SETUP PROCEDURE

Power supply the interface and connect it to the user Ethernet network.

The necessary steps are :

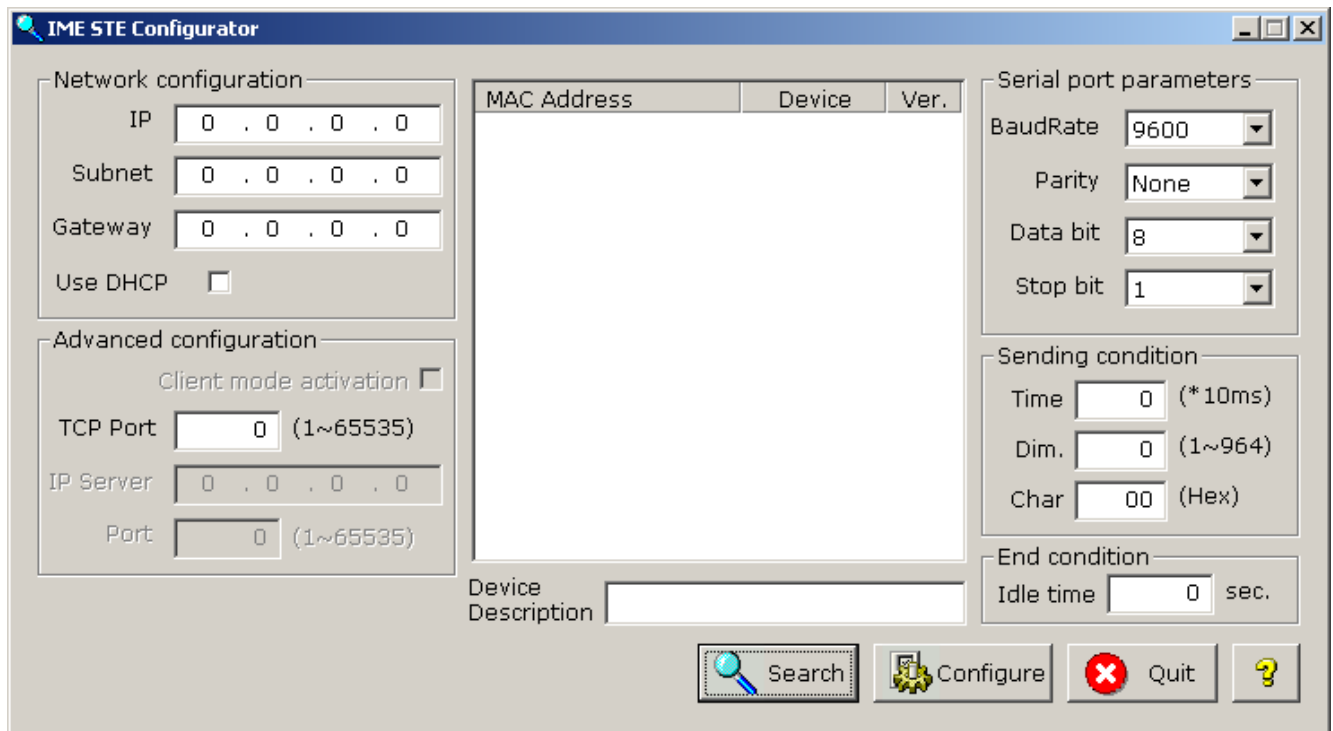
a) Temporary disable every Anti virus, Anti Spam ... that may be resident on the computer.

If Windows XP is used, disable the internal firewall following this procedure :

Control panel => Windows firewall => Disable

b) Run the program **STECfg\_EN** to search the device. No installation is needed.

The main screen should appear :



- c) Click on the “Search” button. After a while, in the main windows, the program should display the data of the interface. If not, repeat the click.
- d) Double click on the name of the device and read on the left part of the window the IP address and other information.  
Set the serial port parameters in the right part of the window.
- e) Change the IP address and program the interface pressing the “Configure” key.
- e) After the configuration the device restarts and it may be possible that an error message could be displayed. Don’t worry about it and continue with the next point.
- f) Search the device again and check that the IP address has been accepted.

If some problem comes from the network and the operation has not success :

- a.1) Connect the interface to the personal computer using the cross cable supplied together with the device. Even if in this situation, the firewall and all Anti-virus ... must be disable.
- b.1) Run the program and click on the “Search” button. After a while, in the main windows, the program should display the data of the interface. If not, repeat the click.
- c.1) Continue from d)

If even in this case no result will come try to change the subnet of the IP address in the personal computer.

- a.2) Connect the interface to the personal computer using the cross cable supplied together with the device. Even if in this situation, the firewall and all Anti-virus must be disable.
- b.2) Change the personal computer IP address.  
The IP address, for a local network is composed as follows :

xxx.yyy.sss.aaa (e.g. 192.168.1.34)

In this case try to set <sss> to 100 (e.g. 192.168.100.34)

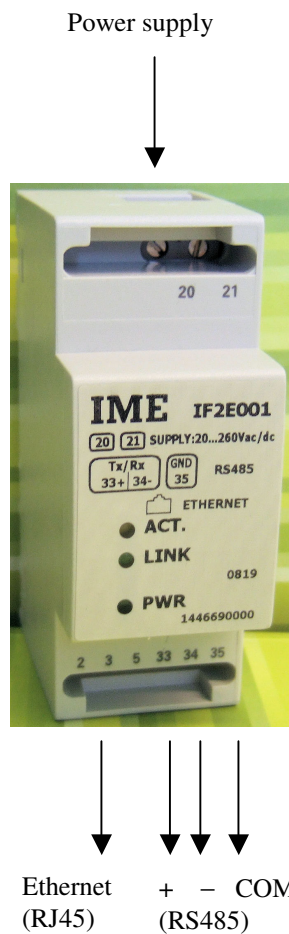
- c.2) Restart the computer keeping the interface connected to the PC
- d.2) Continue from b)

After the operation has been successfully completed, enable the Anti-spams ... programs and the Windows XP firewall again.

## 4 – PIN OUT AND WIRING INSTRUCTION

A device or a network must be connected to the RS485 terminals.

Be careful that the baud rate , the parity, the stop bit and data bit are as required by the remote device.



### Wiring instructions

The wiring instruction are written on the top label and, more in detail :

20 – 21 : power supply (no polarity even in case of Vdc supply)

33 : RS485 +

34 : RS485 –

35 : RS485 gnd (not earth)

RJ45 socket : plug in the ethernet connector

Suggested cable for RS485 line : shielded cable (AWG22 or AWG24) two twisted pair + metallic shield.

A twisted pair should be used for terminals 33 and 34; the other twisted pair should be used, wired together, for terminals 35.

Shield of the cable : to earth only at one side