

# User Manual

Revision 1.000  
English

## Serial / Ethernet – Converter

(Order Code: HD674-A020)

For Website information:

[www.adfweb.com?Product=HD674-A020](http://www.adfweb.com?Product=HD674-A020)

For Price information:

[www.adfweb.com?Price=HD674-A020](http://www.adfweb.com?Price=HD674-A020)

### Benefits and Main Features:

- ⊕ Very easy to configure
- ⊕ Wide supply input range
- ⊕ Electrical isolation
- ⊕ Industrial temperature range:
- ⊕ -40°C / 105°C (-40°F / 221°F)



For others Gateways / Bridges:

### J1939 to Modbus

See also the following links:

[www.adfweb.com?Product=HD67212](http://www.adfweb.com?Product=HD67212) (Modbus RTU)

### CANopen to Modbus

See also the following links:

[www.adfweb.com?Product=HD67001](http://www.adfweb.com?Product=HD67001) (Modbus RTU Master)

[www.adfweb.com?Product=HD67002](http://www.adfweb.com?Product=HD67002) (Modbus RTU Slave)

[www.adfweb.com?Product=HD67004](http://www.adfweb.com?Product=HD67004) (Modbus TCP Master)

[www.adfweb.com?Product=HD67005](http://www.adfweb.com?Product=HD67005) (Modbus TCP Slave)

For others Gateways / Bridges:

For **CAN bus 2.0A** and/or **CAN bus 2.0B to Modbus**

See also the following links:

[www.adfweb.com?Product=HD67011](http://www.adfweb.com?Product=HD67011) (Modbus RTU Slave)

[www.adfweb.com?Product=HD67012](http://www.adfweb.com?Product=HD67012) (Modbus RTU Master)

[www.adfweb.com?Product=HD67014](http://www.adfweb.com?Product=HD67014) (Modbus TCP Slave)

[www.adfweb.com?Product=HD67015](http://www.adfweb.com?Product=HD67015) (Modbus TCP Master)

Do you have an your customer protocol?

See the following links:

[www.adfweb.com?Product=HD67003](http://www.adfweb.com?Product=HD67003)

Do you need to choose a device? do you want help?

Ask it to the following link:

[www.adfweb.com?Cmd=helpme](http://www.adfweb.com?Cmd=helpme)



User Manual

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**UPDATED DOCUMENTATION:**

Dear customer, we thank you for your attention and we remind you that you need to check that the following document is:

- ✚ Updated
- ✚ Related to the product you own

To obtain the most recently updated document, note the “document code” that appears at the top right-hand corner of each page of this document.

With this “Document Code” go to web page [www.adfweb.com/download/](http://www.adfweb.com/download/) and search for the corresponding code on the page. Click on the proper “Document Code” and download the updates.

**REVISION LIST:**

Revision	Date	Author	Chapter	Description
1.000	15/06/2017	Ff	All	First released version

**WARNING:**

ADFweb.com reserves the right to change information in this manual about our product without warning.  
ADFweb.com is not responsible for any error this manual may contain.

**TRADEMARKS:**

All trademarks mentioned in this document belong to their respective owners.

**SECURITY ALERT:****GENERAL INFORMATION**

To ensure safe operation, the device must be operated according to the instructions in the manual. When using the device, legal and safety regulation are required for each individual application. The same applies also when using accessories.

**INTENDED USE**

Machines and systems must be designed so the faulty conditions do not lead to a dangerous situation for the operator (i.e. independent limit switches, mechanical interlocks, etc.).

**QUALIFIED PERSONNEL**

The device can be used only by qualified personnel, strictly in accordance with the specifications. Qualified personnel are persons who are familiar with the installation, assembly, commissioning and operation of this equipment and who have appropriate qualifications for their job.

**RESIDUAL RISKS**

The device is state-of-the-art and is safe. The instruments can represent a potential hazard if they are inappropriately installed and operated by untrained personnel. These instructions refer to residual risks with the following symbol:

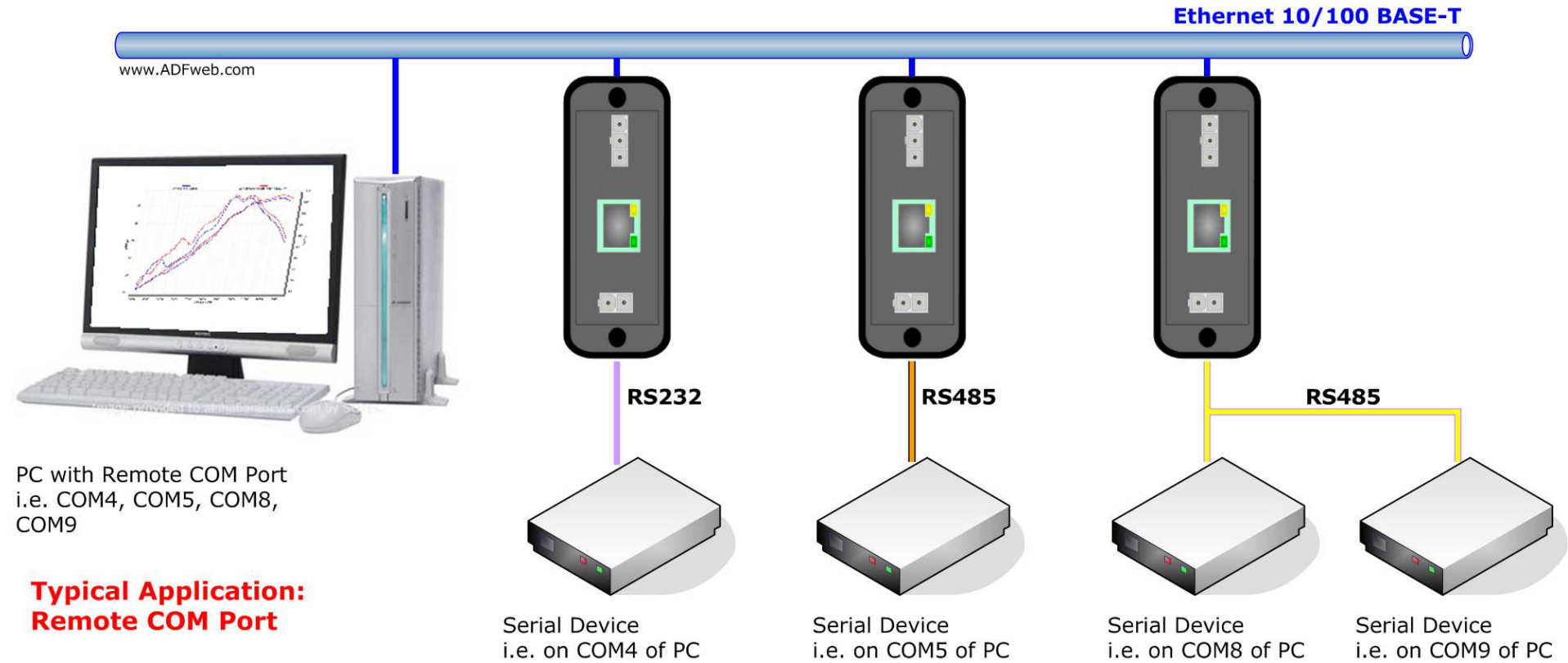


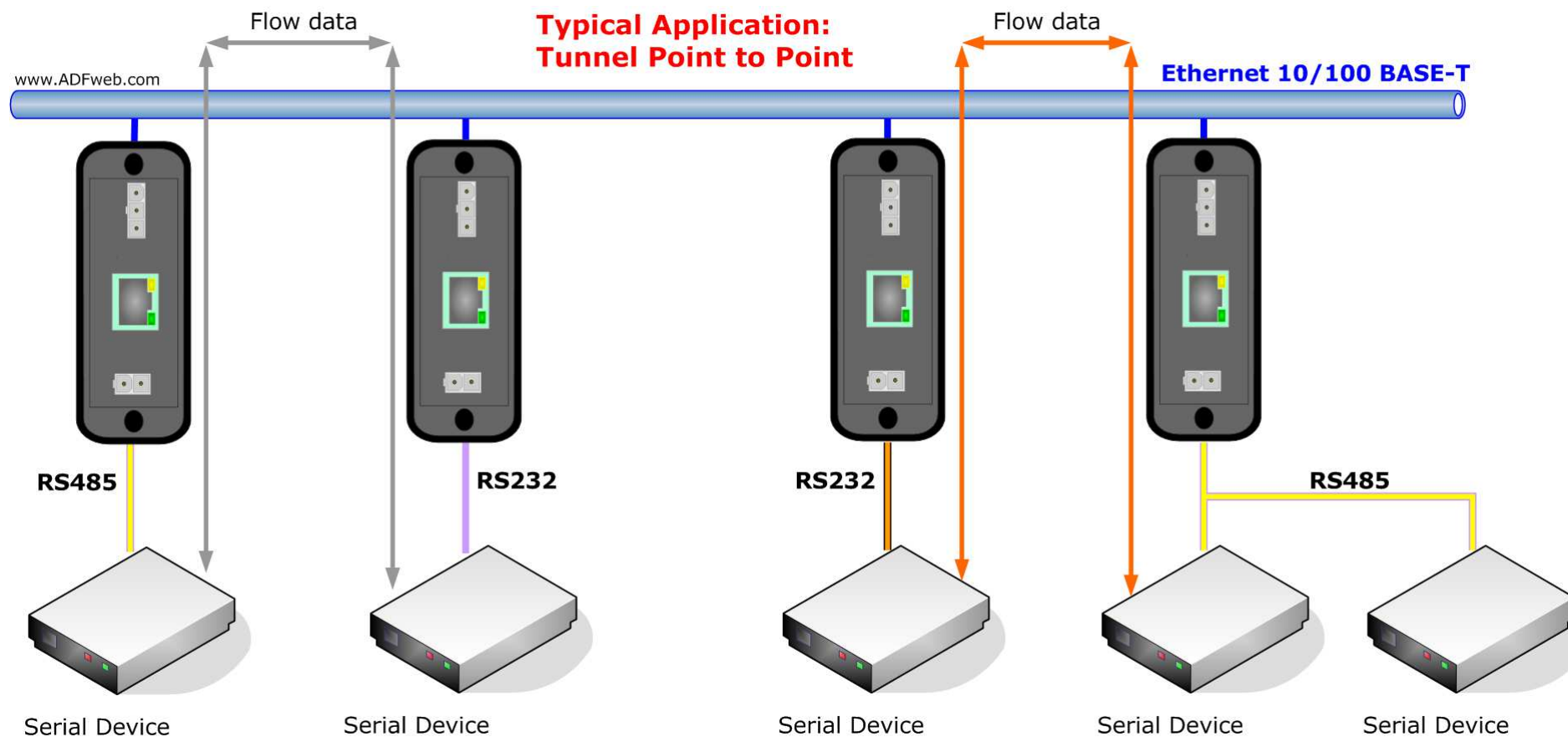
This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

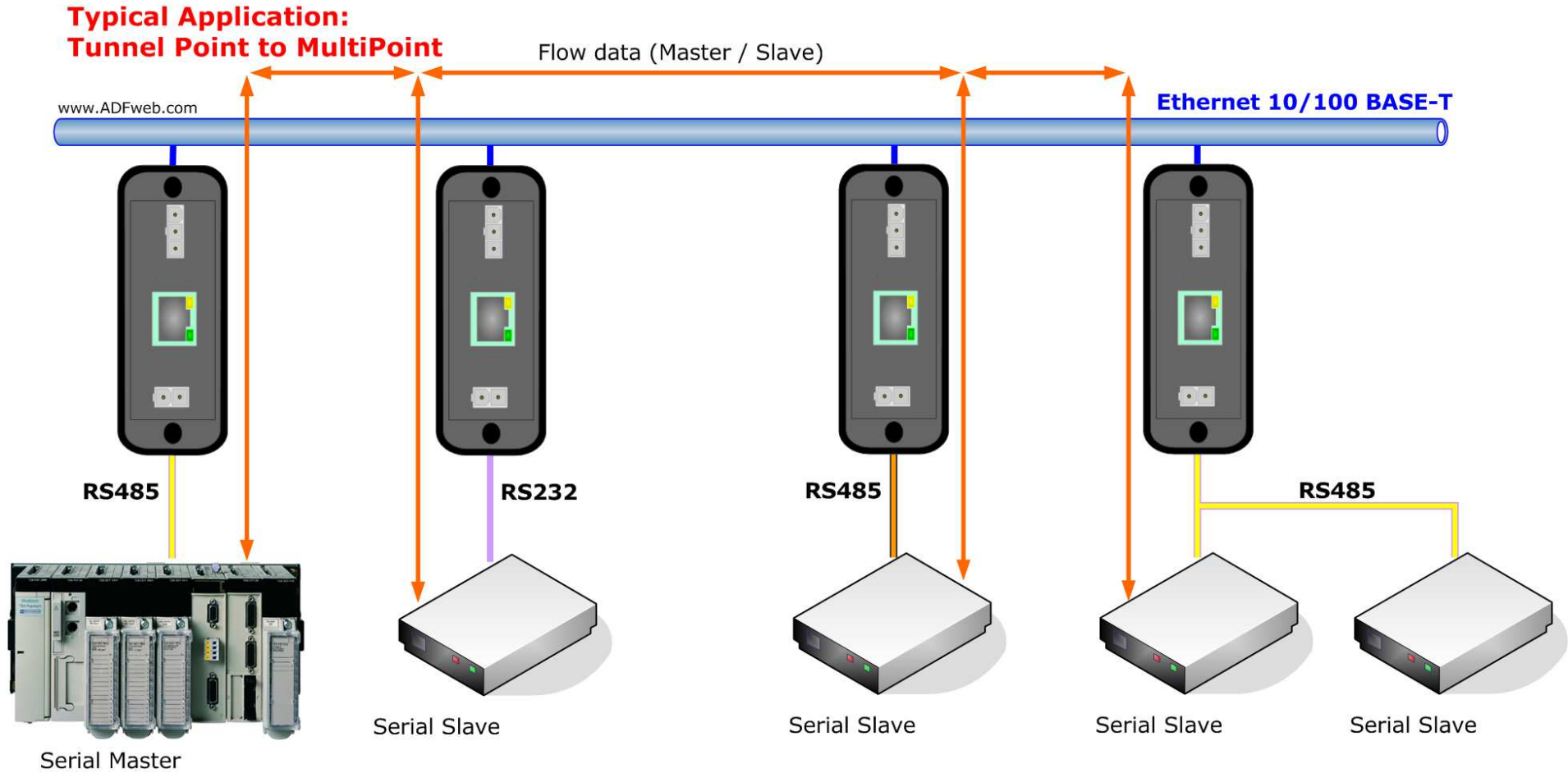
**CE CONFORMITY**

The declaration is made by our company. You can send an email to [support@adfweb.com](mailto:support@adfweb.com) or give us a call if you need it.

**EXAMPLE OF CONNECTION:**







**CONNECTION SCHEME:**



Figure 1a: Connection scheme for HD674-A020-2-E4x-xx



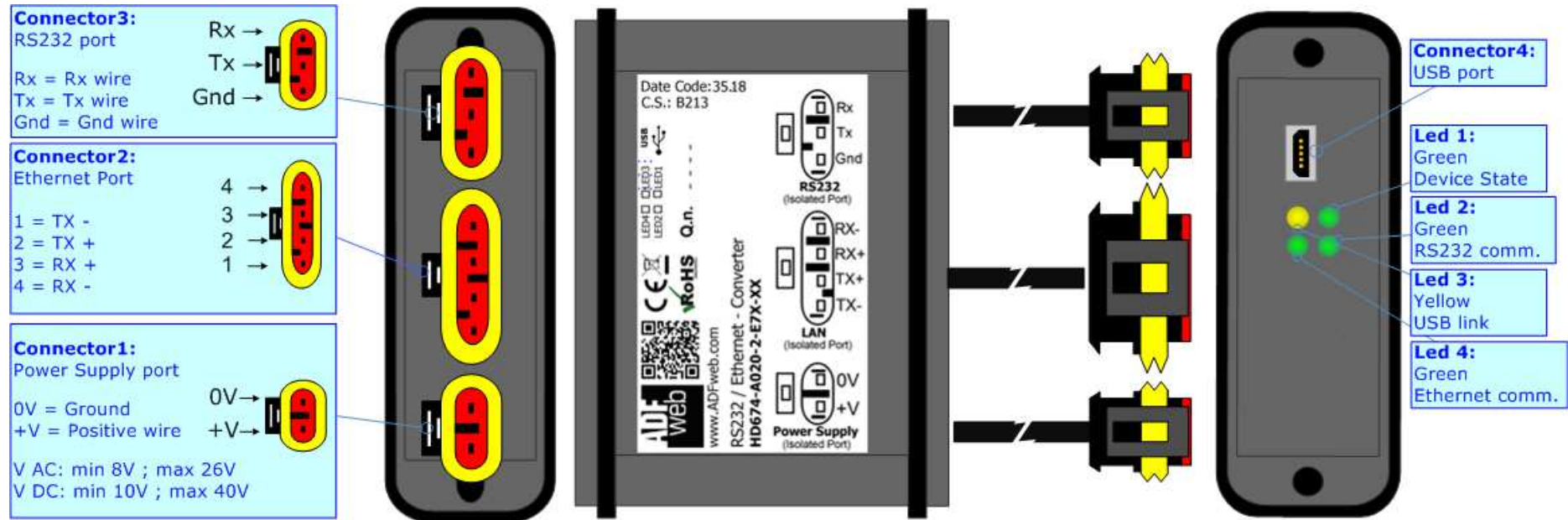


Figure 1b: Connection scheme for HD674-A020-2-E7x-xx



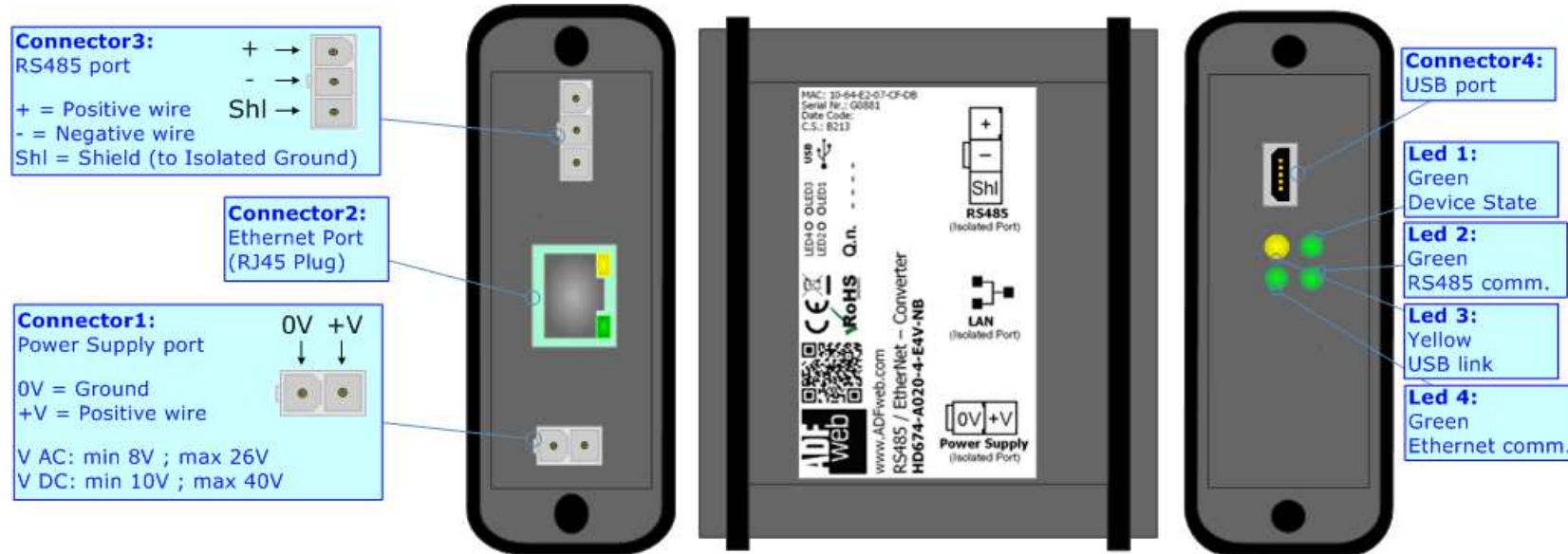


Figure 1c: Connection scheme for HD674-A020-4-E4x-xx

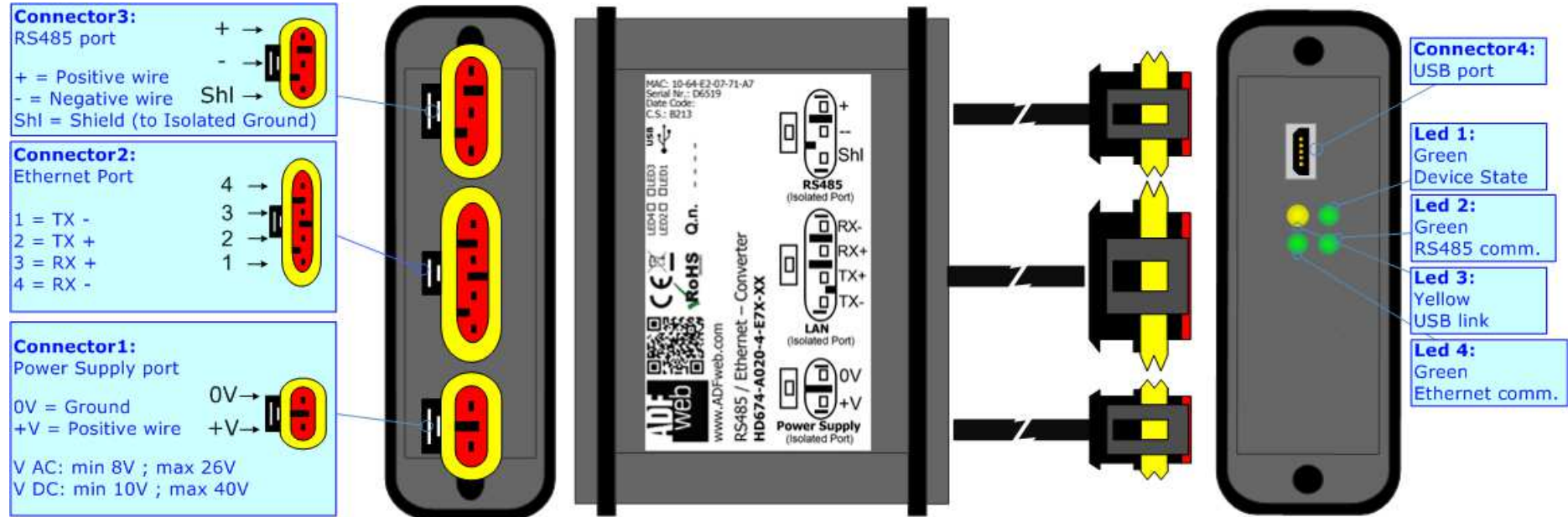


Figure 1d: Connection scheme for HD674-A020-4-E7x-xx

**CHARACTERISTICS:**

The "**HD674-A020**" series are rugged devices used to interface Serial devices with Ethernet network.

With its particular enclosure, equipped with four fixing lugs, makes available the mounting of the device in any plane surface (horizontal, vertical, oblique).

It is possible to have the device varnished or totally resined and also in both cases with "Mini-Fit®" connectors or "AMP SuperSeal 1.5" connectors. If is resined, the enclosure, like the "AMP SuperSeal 1.5" connectors, is waterproof.

All the four series have these characteristics:

- Triple 4kV isolation between Power Supply / Ethernet / Serial;
- Varnished / Resined (optionally);
- Wide power supply input range: 8...26V AC | 10...40V DC;
- Mini-Fit® / AMP SuperSeal 1.5 connectors;
- Metal enclosure with fixing lugs;
- Possibility to use Metal hose clamps for fixing it without using lugs;
- Microprocessor for data control;
- Wide temperature range: -40°C / 105°C (-40°F / 221°F).

**CONFIGURATION:**

You need Compositor SW674-A020 software on your PC in order to perform the following:

- Define the parameter of Ethernet line;
- Define the parameter of Serial line;
- Update the device.

**POWER SUPPLY:**

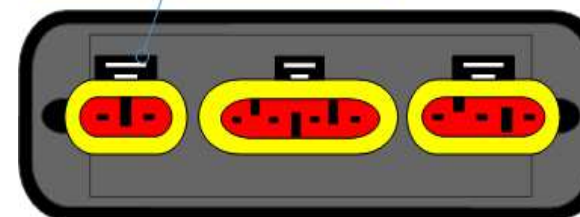
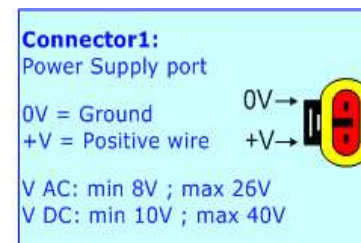
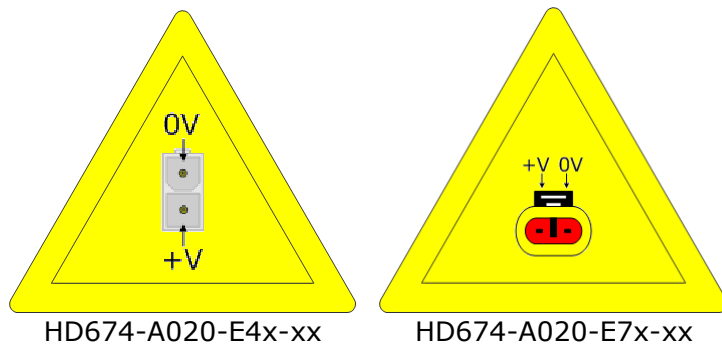
The devices can be powered between a wide range of tensions. For more details see the two tables below.

	VAC		VDC	
	Vmin	Vmax	Vmin	Vmax
<b>HD674-A020-Exx-xx</b>	<b>8V</b>	<b>26V</b>	<b>10V</b>	<b>40V</b>

Consumption at 24V DC:

Device	W/VA
HD674-A020-Exx-xx	4

**Caution: Not reverse the polarity power**

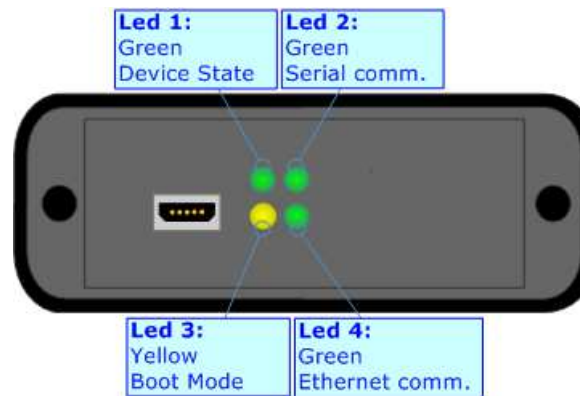


Note: It is possible to use also negative tensions. In this case the polarity must be inverted.

**LEDS:**

The device has got four LEDs that are used to give information of the functioning status. The various meanings of the LEDs are described in the table below.

LED	Normal Mode	Boot Mode
1: Device state (green)	Blinks slowly (~1Hz)	<b>Blinks quickly:</b> Boot state <b>Blinks very slowly (~0.5Hz):</b> update in progress
2: Serial Communication (green)	Blinks when Serial messages are received	<b>Blinks quickly:</b> Boot state <b>Blinks very slowly (~0.5Hz):</b> update in progress
3: USB Link (yellow)	<b>ON:</b> USB cable inserted <b>OFF:</b> USB cable not inserted	<b>ON:</b> USB cable inserted <b>OFF:</b> USB cable not inserted
4: Ethernet communication (green)	Blinks when Ethernet messages are received	<b>Blinks quickly:</b> Boot state <b>Blinks very slowly (~0.5Hz):</b> update in progress



**RS232:**

The connection of the RS232 in the HD674-A020-2-E4x-xx device must be made with a 3way MiniFit Female connector. The pinout of Male MiniFit connector of the board is at right side of the page.

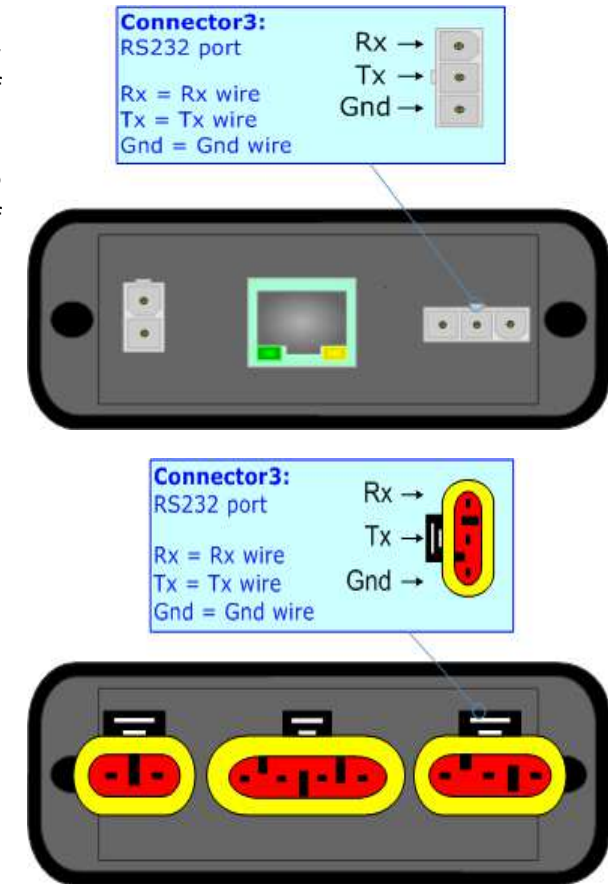
The connection of the RS232 in the HD67-A020-2-E7x-xx device must be made with a AMP SuperSeal 1.5 Male connector. The pinout of Female connector of the board is at right side of the page.

The maximum length of the cable should be 15m.

Link for Mini-Fit® connectors:

[http://www.molex.com/molex/products/group?key=minifit\\_products&channel=products](http://www.molex.com/molex/products/group?key=minifit_products&channel=products)

Link for SuperSeal 1.5 connectors: <http://www.te.com/catalog/cinf/en/c/10876/956>



**RS485:**

The connection of the RS485 in the HD674-A020-4-E4x-xx device must be made with a 3way MiniFit Female connector. The pinout of Male MiniFit connector of the board is at right side of the page.

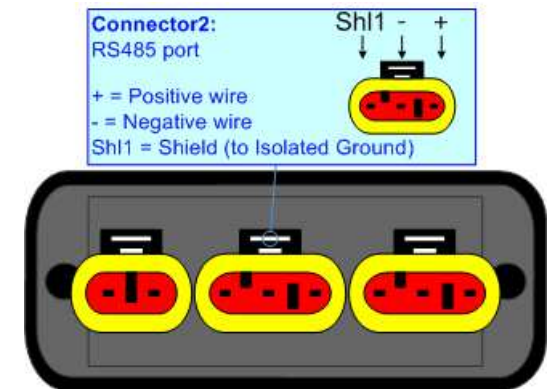
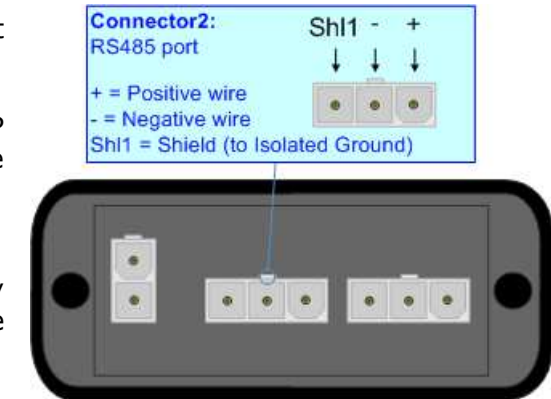
The connection of the RS485 in the HD67-A020-4-E7x-xx device must be made with a AMP SuperSeal 1.5 Male connector. The pinout of Female connector of the board is at right side of the page.

The termination of RS485 line, with a 120Ω resistor, in the HD674-A020-4-Exx-xx is made internally of the device; when the order is performed. If the device have the RS485 terminated the code is the follow: HD674-A020-4-Exx-Yx; otherwise is this other: HD674-A020-4-Exx-Nx.

The maximum length of the cable should be 1200m (4000 feet).

Here some codes of cables:

- Belden: p/n 8132 - 2x 28AWG stranded twisted pairs conductor + foil shield + braid shield;
- Belden p/n 82842 - 2x 24AWG stranded twisted pairs conductor + foil shield + braid shield;
- Tasker: p/n C521 - 1x 24AWG twisted pair conductor + foil shield + braid shield;
- Tasker: p/n C522 - 2x 24AWG twisted pairs conductor + foil shield + braid shield.



Link for Mini-Fit® connectors: [http://www.molex.com/molex/products/group?key=minifit\\_products&channel=products](http://www.molex.com/molex/products/group?key=minifit_products&channel=products)

Link for SuperSeal 1.5 connectors: <http://www.te.com/catalog/cinf/en/c/10876/956>

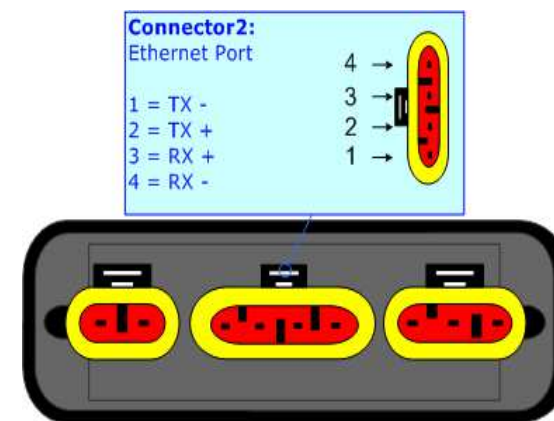


**ETHERNET:**

The connection of Ethernet in the HD674-A020 device must be made with at least a Category 5E cable. The maximum length of the cable should not exceed 100m. The cable has to conform to the T568 norms relative to connections in cat.5 up to 100 Mbps. To connect the device to an Hub/Switch is recommended the use of a straight cable, to connect the device to a PC/PLC/other is recommended the use of a cross cable.

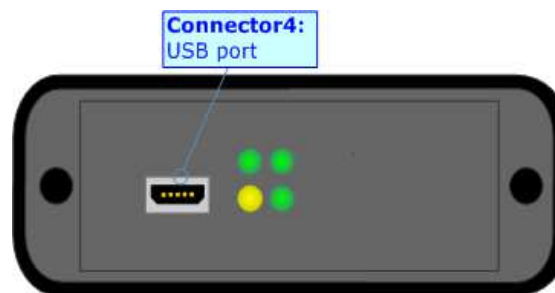
The connection of Ethernet in the HD674-A020-x-E4x-xx device must be made with RJ45 connector.

The connection of the Ethernet in the HD674-A020-x-E7x-xx device must be made with a AMP SuperSeal 1.5 Male connector. The pinout of Female connector of the board is at right side of the page.



**USB:**

The USB port is used to start the converter in Boot Mode. It is necessary to use a Micro USB type B cable.



**USE OF COMPOSITOR SW674-A020:**

To configure the Converter, use the available software that runs with Windows called SW674-A020. It is downloadable on the site [www.adfweb.com](http://www.adfweb.com) and its operation is described in this document. (*This manual is referenced to the last version of the software present on our web site*). The software works with MSWindows (XP, Vista, Seven, 8, 10; 32/64bit).

When launching the SW674-A020, the window below appears (Fig. 2).

**Note:**

It is necessary to have installed .Net Framework 4.

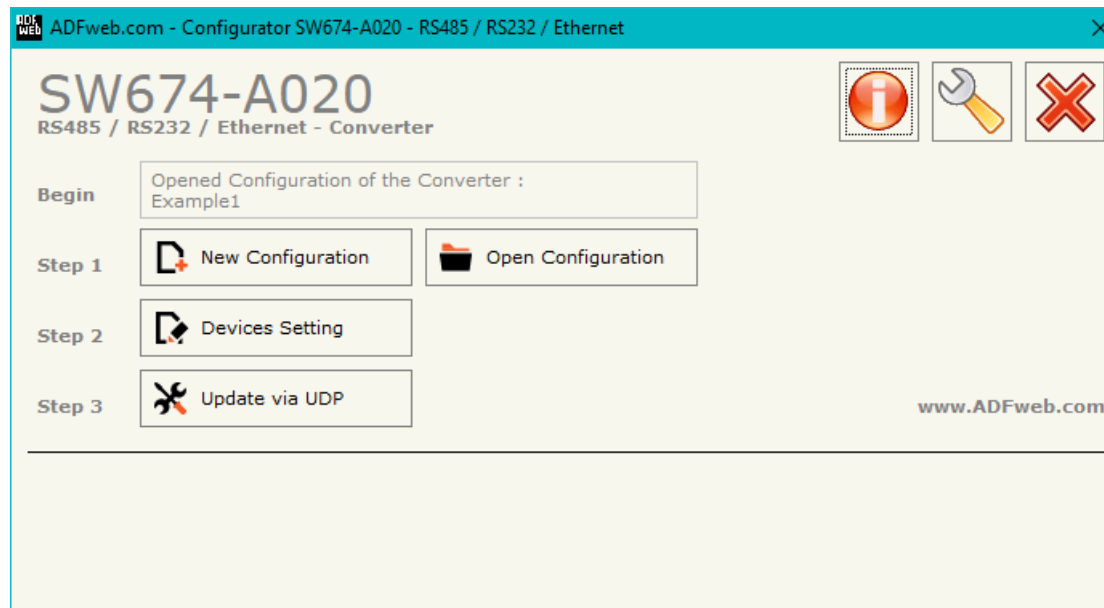
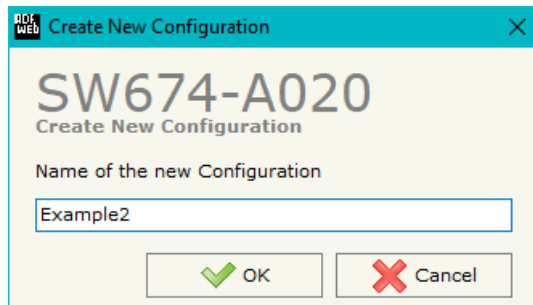


Figure 2: Main window for SW674-A020

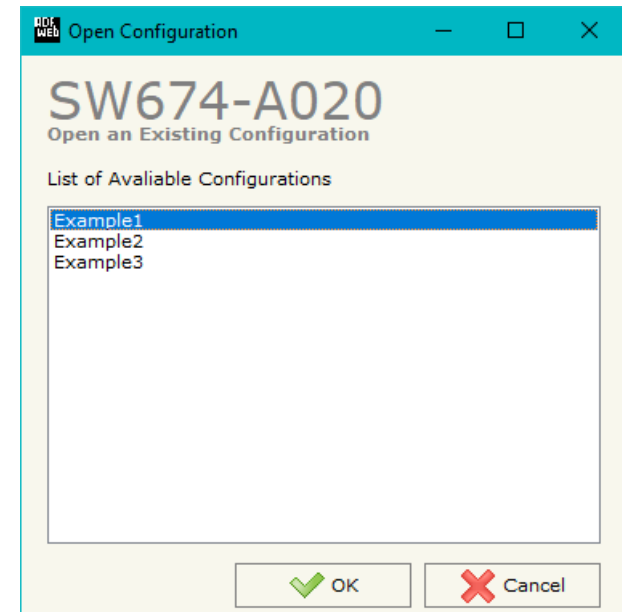
**NEW CONFIGURATION / OPEN CONFIGURATION:**

The “**New Configuration**” button creates the folder which contains the entire device’s configuration.




A device’s configuration can also be imported or exported:

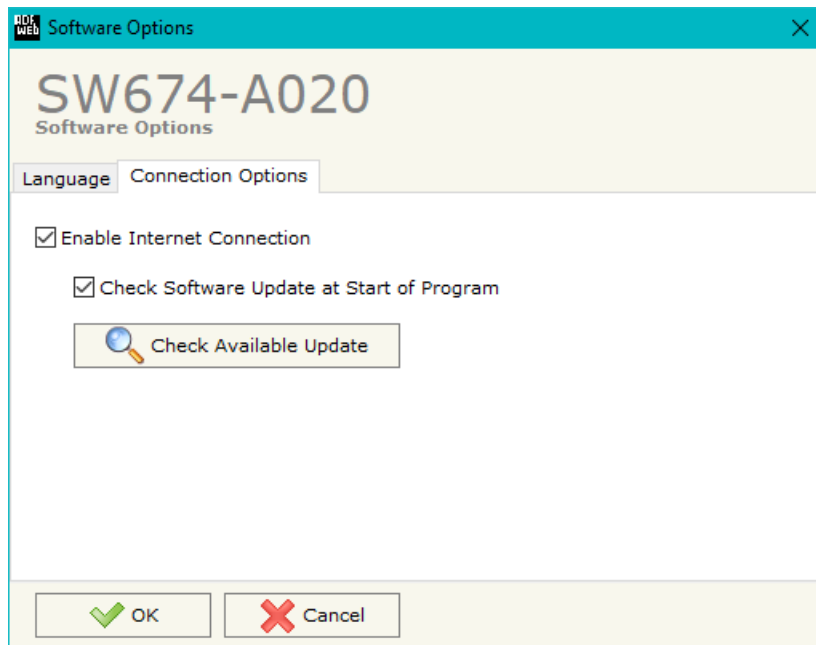
- To clone the configurations of a programmable “Serial / Ethernet - Converter” in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to duplicate the project folder with another name and open the new folder with the button “**Open Configuration**”.



**SOFTWARE OPTIONS:**

By pressing the “**Settings**” () button there is the possibility to change the language of the software and check the updatings for the compositor.

In the section “Language” it is possible to change the language of the software.



In the section “Connection Options”, it is possible to check if there are some updatings of the software compositor in ADFweb.com website. Checking the option “**Check Software Update at Start of Program**”, the SW674-A020 checks automatically if there are updatings when it is launched.

**SET COMMUNICATION:**

By Pressing the "**Devices Setting**" button from the main window for SW674-A020 (Fig. 2), the window "Devices Setting" appears (Fig. 3 or 4 or 5 or 6).

In the section "**Select Modality**" field it is possible to select the function mode of the Converter from these options:

- **Remote COM Port;**
- **Tunnel Point to Point;**
- **Tunnel Point to MultiPoint.**

These operating modalities are described in the following pages.

In the section "**Select Device**" field it is possible to select the device used for the project. These devices are available:

- HD674-A020-2
- HD674-A020-4

### OPERATING MODALITY: REMOTE COM PORT

It consists of a configuration in which the device is generally controlled by a PC that is connected using the TCP or UDP protocol. It writes bytes that automatically are sent on the serial line and each byte read from the serial port is transmitted through the line to the connected PC.

The means of the fields for "ETHERNET" are:

- In the field "**IP Address**" the IP address of the converter is defined;
- In the field "**SubNet Mask**" the Subnet Mask of the converter is defined;
- If the field "**Use Gateway**" is checked, in the field below it is possible to insert the IP Address of the gateway used for going out to the net;
- If the "**Enable Change baudrate on the fly**" is checked, it is possible to change the baudrate, parity and data bits of the serial from an Ethernet command (see "CHANGE BAUDRATE ON THE FLY" section). In the field on the right, the port where addressing the command for the Baudrate change is defined.

The means of the fields for "RS232/RS485" are:

- The field "**Enable Serial**" is used for selecting if the serial is used (field checked) or not (field unchecked).
- In the field "**Port**" the port used to communicate with converter using TCP/UDP protocol is defined. The port of second serial must be different from the first one;
- In the field "**Seconds**" a time in seconds is defined. If no data pass through the socket for the seconds defined, the socket disconnects.
- In the field "**Baudrate**" the data rate of the serial line in use is defined;
- In the field "**Parity**" the parity of the serial line in use is defined;
- In the field "**Data Bits**" the number of data bits used for the serial line communication is defined;
- In the field "**Stop Bit**" the number of Stop bits used for the serial line communication is defined;

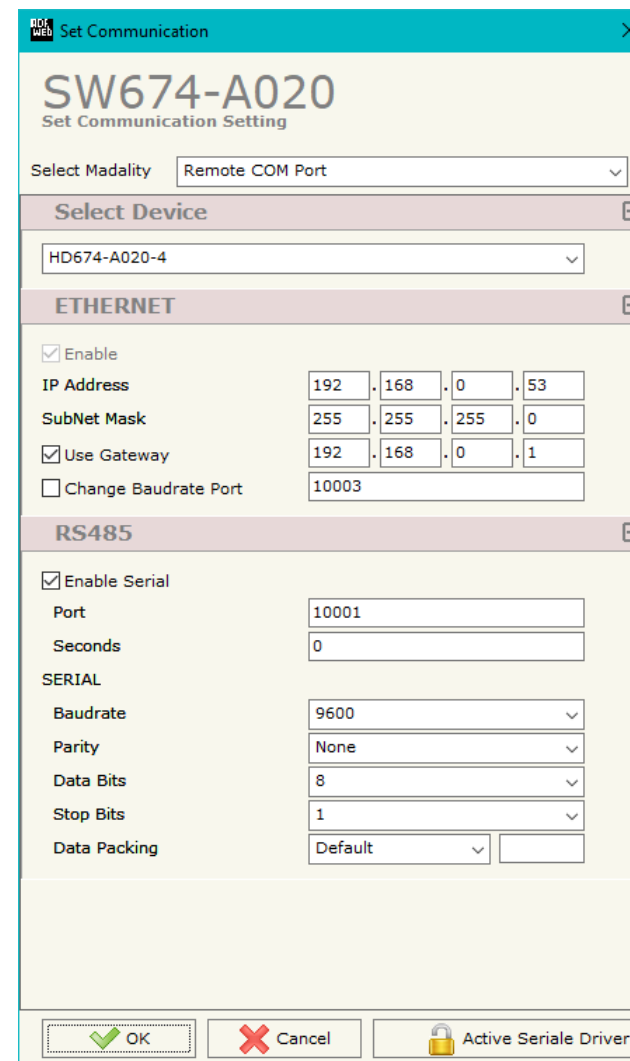


Figure 3: "Devices Setting" window (Remote COM Port)

- In the field "**Data Packing**" the serial to Ethernet conversion's method is defined:
  - Default: standard way defined in the firmware;
  - Length: defined number of bytes in the field on the right;
  - Timeout: after a defined time with no communication in the field on the right;
  - Delimiter: after a specific char defined in the field on the right.

The "**Active Serial Driver**" button is used to activate the "Serial to Ethernet Connector". For more details go to page XX.



**OPERATING MODALITY: TUNNEL POINT TO POINT**

A mode that allows the extension of a serial line using a Ethernet network. The two devices in this mode must be configured in a coherent way in order to allow the Ethernet communication between them.

The window is divided in two section, one for Device1 and the other for Device2. It is possible to assign a label to each device in order to have a name to use for understand the project to upload.

The means of the fields for "ETHERNET" are:

- ➔ In the field "IP Address" the IP address of the converter is defined;
- ➔ In the field "SubNet Mask" the Subnet Mask of the converter is defined;
- ➔ If the field "Use Gateway" is checked, in the field below it is possible to insert the IP Address of the gateway used for going out to the net.

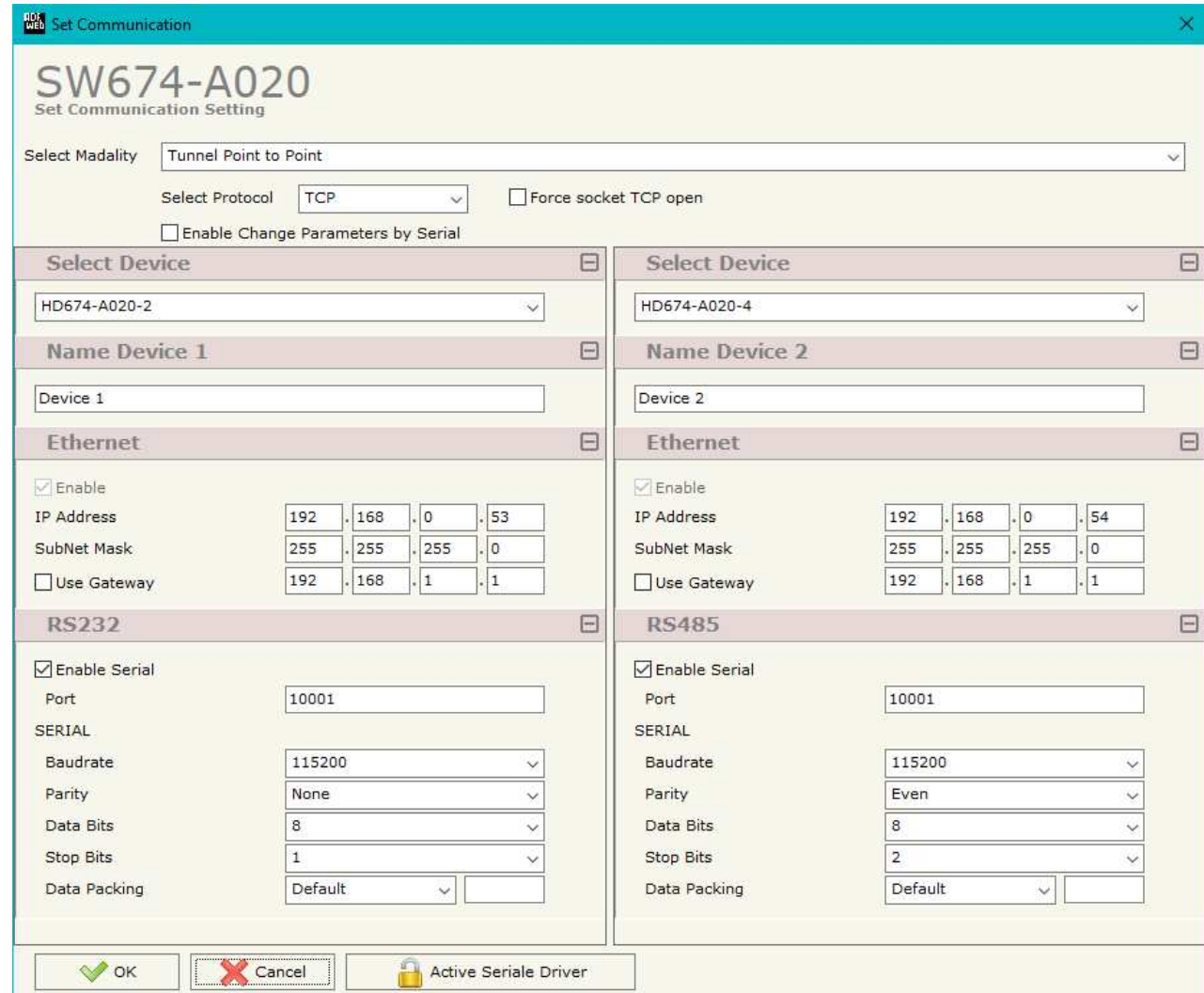



Figure 4: "Devices Setting" window (Tunnel Point to Point)

The means of the fields for "RS232/RS485" are:

- The field "**Enable Serial**" is used for selecting if the serial is used (field checked) or not (field unchecked).
- In the field "**Port**" the port used to communicate with converter using TCP/UDP protocol is defined. The port of second serial must be different from the first one;
- In the field "**Baudrate**" the data rate of the serial line in use is defined;
- In the field "**Parity**" the parity of the serial line in use is defined;
- In the field "**Data Bits**" the number of data bits used for the serial line communication is defined;
- In the field "**Stop Bit**" the number of Stop bits used for the serial line communication is defined;
- In the field "**Data Packing**" the serial to Ethernet conversion's method is defined:
  - Default: standard way defined in the firmware;
  - Length: defined number of bytes in the field on the right;
  - Timeout: after a defined time with no communication in the field on the right;
  - Delimiter: after a specific char defined in the field on the right.
- If the field "**TCP**" is checked, the Protocol used is the TCP, if the field "**UDP**" is checked, the Protocol used is the UDP. Only if the protocol is "TCP", it is possible to select the field "**Force socket TCP open**". When it is selected, the converter opens the TCP connection with the end-point automatically at start-up and, if the end-point closes the connection, the converter tries to reopen it cyclically;
- If the "**Enable Change Parameters by Serial**" is checked, it is possible to change the IP Address and the Port by serial command (see "CHANGE PARAMETERS BY SERIAL" section).

### OPERATING MODALITY: TUNNEL POINT TO MULTIPPOINT WITH BROADCAST

This mode allows to extend a serial line based on Master-Slave concept, where there are more Slave lines dislocated in different places.

 **Note:** This modality uses UDP packets.

The window is divided in two section, one for Master device and the other for Slave devices. It is possible to assign a label to each device in order to have a name to use for understand the project to upload.

The means of the fields for "ETHERNET" are:

- In the field "**IP Address**" the IP address of the converter is defined;
- In the field "**SubNet Mask**" the Subnet Mask of the converter is defined;

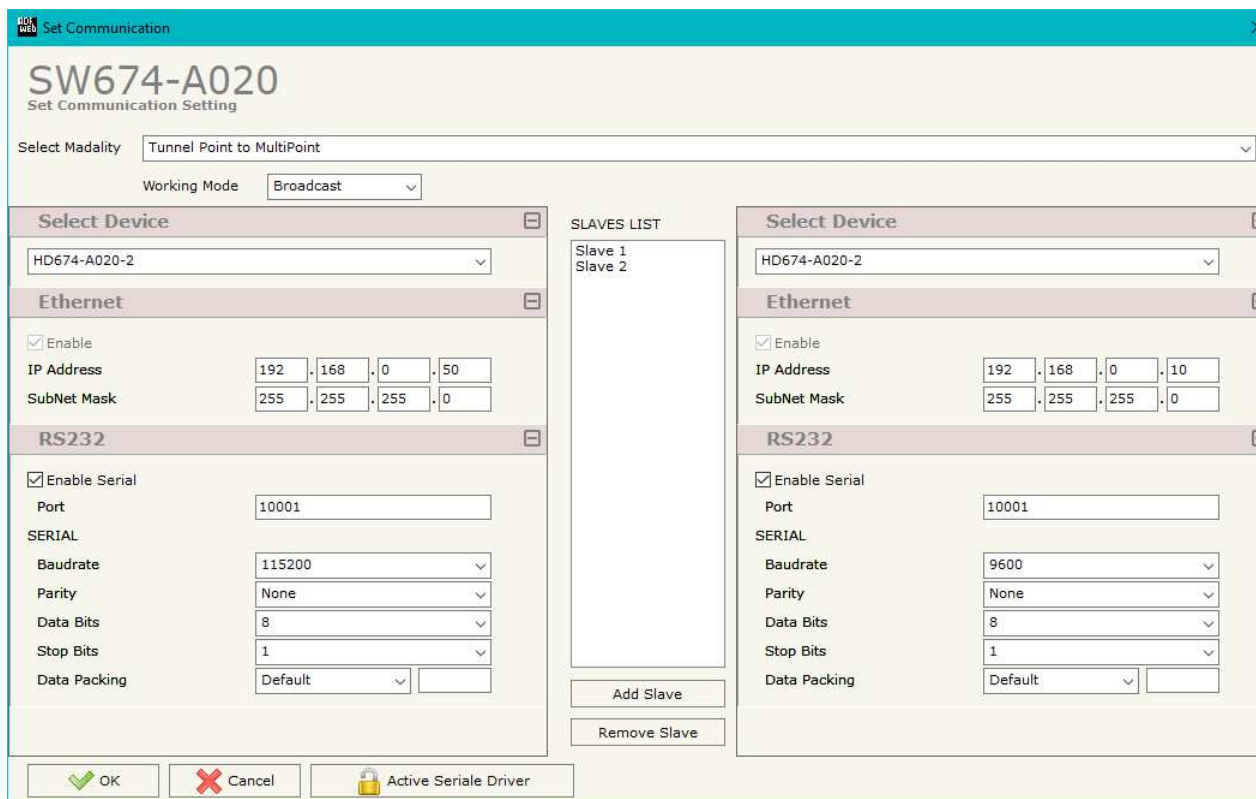


Figure 5: "Devices Setting" window (Tunnel Point to MultiPoint, Work with Broadcast)

The means of the fields for "RS232/RS485" are:

- The field "**Enable Serial**" is used for selecting if the serial is used (field checked) or not (field unchecked). For the codes with only one serial, this field isn't editable (it is always checked); for the codes with two serials, at least one of the two must be checked.
- In the field "**Port**" the port used to communicate with converter using UDP protocol is defined. The port of second serial must be different from the first one;
- In the field "**Baudrate**" the data rate of the serial line in use is defined;
- In the field "**Parity**" the parity of the serial line in use is defined;
- In the field "**Data Bits**" the number of data bits used for the serial line communication is defined;
- In the field "**Stop Bit**" the number of Stop bits used for the serial line communication is defined;
- In the field "**Data Packing**" the serial to Ethernet conversion's method is defined:
  - Default: standard way defined in the firmware;
  - Length: defined number of bytes in the field on the right;
  - Timeout: after a defined time with no communication in the field on the right;
  - Delimiter: after a specific char defined in the field on the right.

For adding a new slave in the section "SLAVES LIST", it is necessary to press the "**Add Slave**" button. After that it is possible to select the new slave from the list and modify the values.

For deleting a slave present in the "SLAVES LIST", it is necessary to select the desired slave and press the "**Remove Slave**" button.



Note:

In the case of the MASTER, the packets are sent in broadcast.

**OPERATING MODALITY: TUNNEL POINT TO MULTIPPOINT WITH KEEP ALIVE**

This mode allows to extend a serial line based on Master-Slave concept, where there are more Slave lines dislocated in different places.

**Note:** This modality uses UDP packets.

The window is divided in two section, one for Master device and the other for Slave devices. It is possible to assign a label to each device in order to have a name to use for understand the project to upload.

The means of the fields for "ETHERNET" are:

- In the field "IP Address" the IP address of the converter is defined;
- In the field "SubNet Mask" the Subnet Mask of the converter is defined;
- If the field "Use Gateway" is checked, in the field below it is possible to insert the IP Address of the gateway used for going out to the net in the field under;
- In the field "TimeOut Keep Alive (Seconds)" the time that the Master waits for receiving a Keep Alive from a Slave is defined. If at least one Keep Alive message isn't arrived from a slave in this time, the Master doesn't send the serial data to that Slave.
- In the field "Keep Alive Every (Seconds)" the time interval between the Keep Alive messages sent by the Slaves is defined;

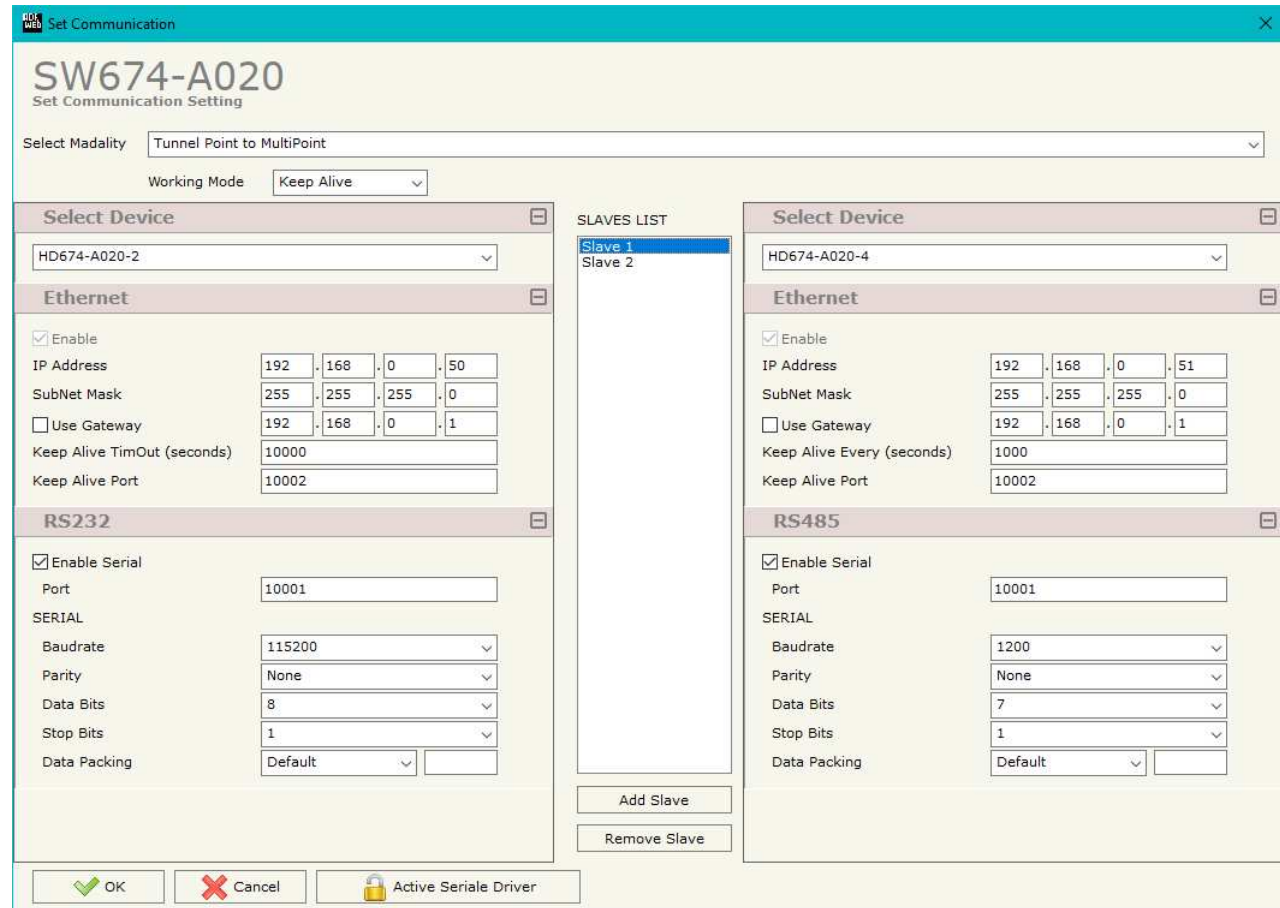


Figure 6: "Devices Setting" window (Tunnel Point to MultiPoint, Work with Keep Alive)

- In the field "**Keep Alive Port**" the port used by the Master for receiving the Keep Alive messages from the Slaves, or used by the Slaves for sending the the Keep Alive message to the Master, is defined.

The means of the fields for "RS232/RS485" are:

- The field "**Enable Serial**" is used for selecting if the serial is used (field checked) or not (field unchecked). For the codes with only one serial, this field isn't editable (it is always checked); for the codes with two serials, at least one of the two must be checked.
- In the field "**Port**" the port used to communicate with converter using UDP protocol is defined. The port of second serial must be different from the first one;
- In the field "**Baudrate**" the data rate of the serial line in use is defined;
- In the field "**Parity**" the parity of the serial line in use is defined;
- In the field "**Data Bits**" the number of data bits used for the serial line communication is defined;
- In the field "**Stop Bit**" the number of Stop bits used for the serial line communication is defined;
- In the field "**Data Packing**" the serial to Ethernet conversion's method is defined:
  - Default: standard way defined in the firmware;
  - Length: defined number of bytes in the field on the right;
  - Timeout: after a defined time with no communication in the field on the right;
  - Delimiter: after a specific char defined in the field on the right.

For adding a new slave in the section "SLAVES LIST", it is necessary to press the "**Add Slave**" button. After that it is possible to select the new slave from the list and modify the values.

For deleting a slave present in the "SLAVES LIST", it is necessary to select the desired slave and press the "**Remove Slave**" button.



Note:

In the case of the MASTER, the UDP packets are sent to each slave that is present and active in the network.

### UPDATE DEVICE:

By pressing the **“Update Device”** button, it is possible to load the created Configuration into the device; and also the Firmware, if necessary.

If you don't know the actual IP address of the device you have to use this procedure:

- Connect the USB cable;
- Connect the Ethernet cable;
- Turn ON the converter;
- Insert the IP **“192.168.2.205”**;
- Press the **“Ping”** button, **“Device Found! must appear”**;
- Press the **“Next”** button;
- Select which operations you want to do;
- Press the **“Execute update firmware”** button to start the upload;
- When all the operations are **“OK”**, the updating is done;
- Remove the USB cable.

If you know the actual IP address of the device, you have to use this procedure:

- Turn ON the Device with the Ethernet cable inserted;
- Insert the actual IP of the Converter;
- Press the **“Ping”** button, must appear **“Device Found!”**;
- Press the **“Next”** button;
- Select which operations you want to do;
- Press the **“Execute update firmware”** button to start the upload;
- When all the operations are **“OK”** the device automatically goes at Normal Mode.

At this point the configuration/firmware on the device is correctly updated.

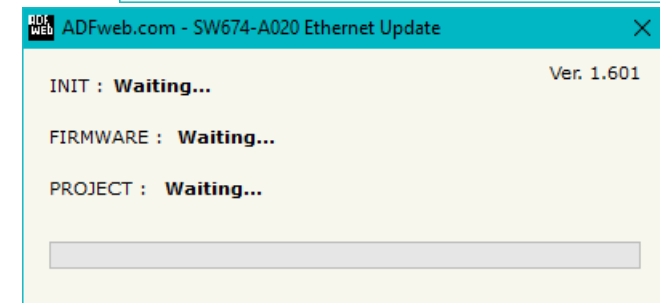
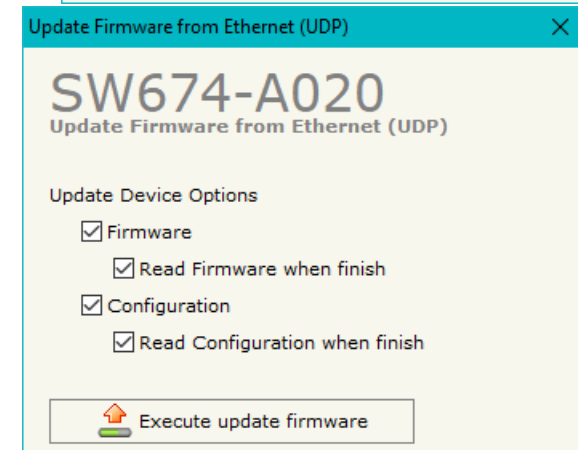
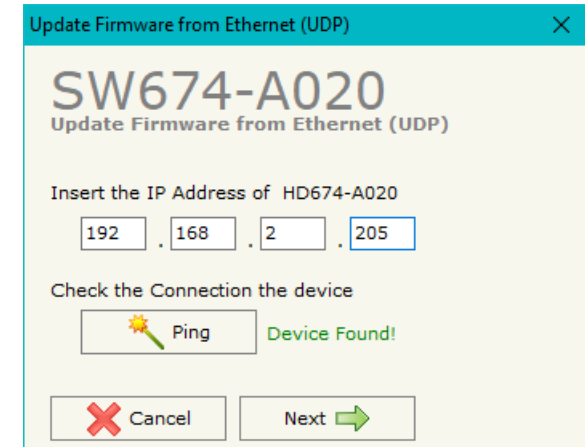


Figure 6: “Update Device” windows





**Note:**

When you install a new version of the software, if it is the first time it is better you do the update of the Firmware in the HD674-A020 device.



**Note:**

When you receive the device, for the first time, you also have to update the Firmware in the HD674-A020 device.



**Warning:**

If Fig. 7 appears when you try to do the Update try these points before seeking assistance:

- Try to repeat the operations for the updating;
- Try with another PC;
- Try to restart the PC;
- Check the LAN settings;
- If you are using the program inside a Virtual Machine, try to use in the main Operating System;
- If you are using Windows Seven, Vista, 8 or 10 make sure that you have the administrator privileges;
- In case you have to program more than one device, using the "UDP Update", you have to cancel the ARP table every time you connect a new device on Ethernet. For do this you have to launch the "Command Prompt" and write the command "arp - d". Pay attention that with Windows Vista, Seven, 8, 10 you have to launch the "Command Prompt" with Administrator Rights;
- Pay attention at Firewall lock.

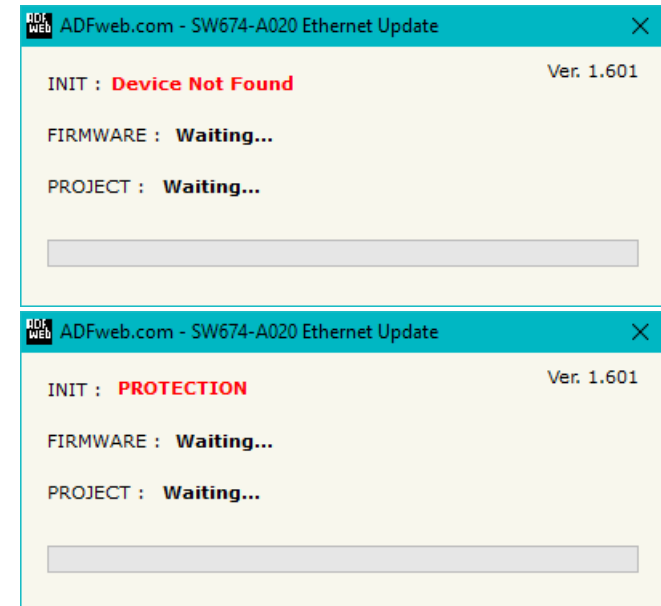


Figure 7: "Protection" window

In the case of HD674-A020 you have to use the software "SW674-A020": [www.adfweb.com/download/filefold/SW674-A020.zip](http://www.adfweb.com/download/filefold/SW674-A020.zip).

**CHANGE BAUDRATE AND PARITY ON THE FLY:**

Enabling the option "**Enable change baudrate on the fly**" in the modality "Remote COM Port" is possible to change the baudrate, parity and data bits of the serial port by sending a UDP frame into the selected "**Port**". The new baudrate, parity and data bits are saved in RAM so when you turn off the device you lose these parameters and the device starts with the default value.

**Note:**

You can use this modality only in the "Remote COM port" modality.

The packet to send for change these parameters are:

BAUD=<baud value>;PARITY=<parity value>;DATABIT=<parity value>;<serial type>;

The admitted value for Baudrate are:

1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200

The Admitted value for Parity are:

0 (= None)  
1 (= Odd)  
2 (= Even)

The Admitted value for Data Bits are:

7 (= 7 Data Bits)  
8 (= 8 Data Bits)

The admitted value for "serial type" are:

232 (= RS232)  
485 (= RS485)

Example.

To set the Baudrate of RS485 port at 115200, Odd parity and 7 data bits, you have to send in ASCII:

"**BAUD=115200;PARITY=0;DATABIT=7;485;**"

In hexadecimal:

[42][41][55][44][3D][31][31][35][32][30][30][3B][50][41][52][49][54][59][3D][30][3B][44][41][54][41][42][49][54][3D][37][3B][34][38][35][3B]

**CHANGE PARAMETERS BY SERIAL:**

Enabling the option "**Enable change parameters by serial**" in the modality "Tunneling Point to Point", it is possible to change the IP Address and the port of Ethernet side by serial command. The new parameters are saved in RAM, so, when you turn off the device, you will lose these parameters and the device starts with the last parameters programmed.

**Note:**

You can use this modality only in the "Tunneling Point to Point" modality.

The packets to send for changing these parameters are:

IP Address: 'ADF<IP>IP1.IP2.IP3.IP4</IP>' where IPX are the numbers of the new IP Address.

Port: 'ADF<PORT1>PORT</PORT1>' where PORT is the new port.

Example.

To set the new IP Address 192.168.2.195 and the port 123, the commands are:

```
"ADF<IP>192.168.2.195</IP>"
```

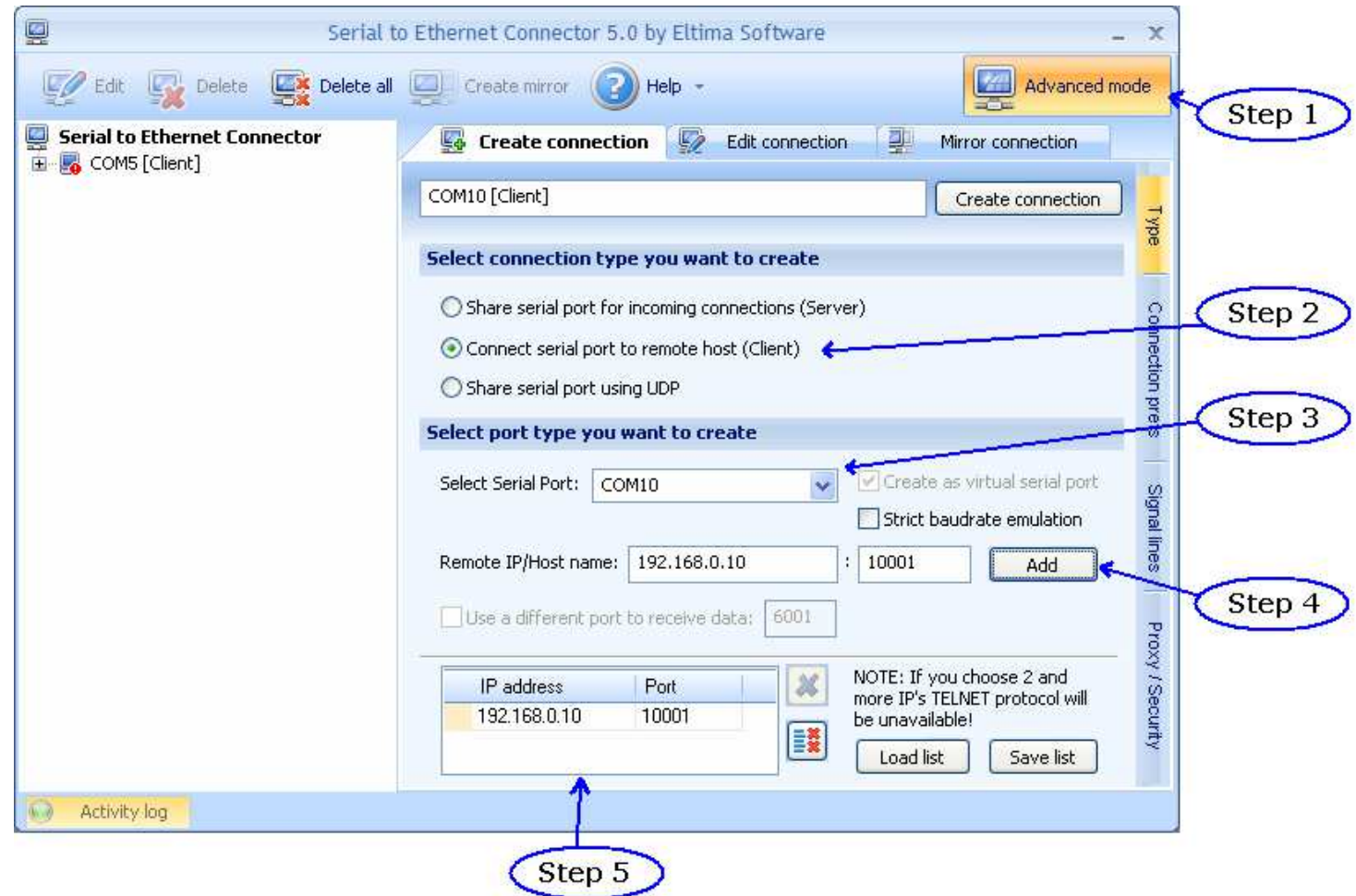
```
"ADF<PORT1>123</IP>"
```

**ACTIVE SERIAL DRIVER:**

Before pressing the **Active Serial Driver** button from the "General Parameter" window it is necessary to download the "Serial to Ethernet Connector" software from the following link: [www.adfweb.com/download/filefold/serial\\_ethernet\\_connector.zip](http://www.adfweb.com/download/filefold/serial_ethernet_connector.zip). After the installation of the software you have to enter in the SW674-A020, go into the "General Parameter" section and press the "ACTIVE SERIAL DRIVER" button. At this point it is possible to configure the virtual COM port following these steps:

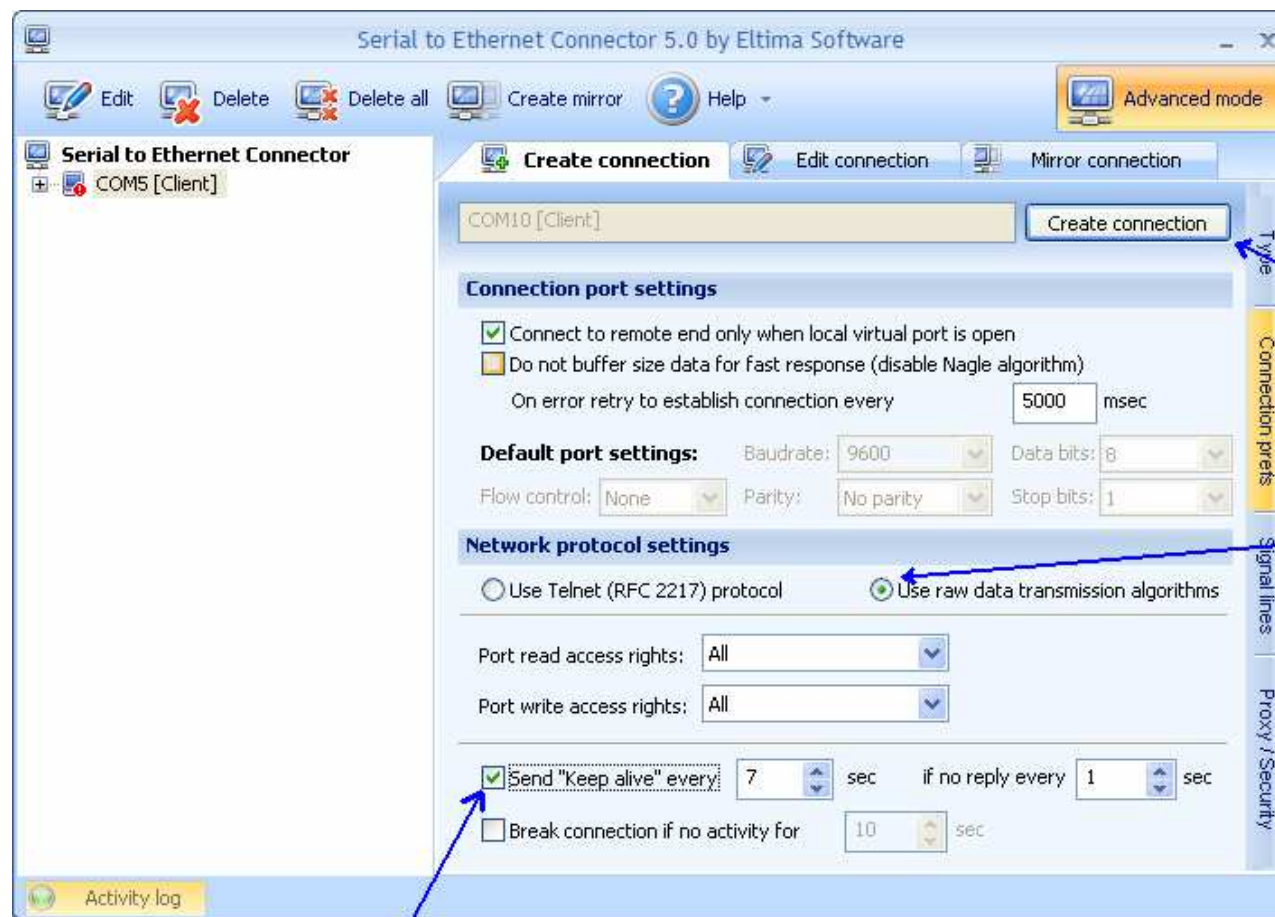
Go in the "Type" Section.

- Step 1** - Active the Advanced Mode;
- Step 2** - Active the Client Mode;
- Step 3** - Select the COM port to use with the device. It is better if you use a COM port that does not exist in your system;
- Step 4** - Insert the IP Address and the Port of the Device and then press the "ADD" button;
- Step 5** - Check that the IP and the Port are correct.



Go in the "Connection prefs" Section.

- Step 1** – Select the RAW protocol;
- Step 2** – Select the "Send Keep alive" option;
- Step 3** – Confirm the parameters and create the Virtual COM port.

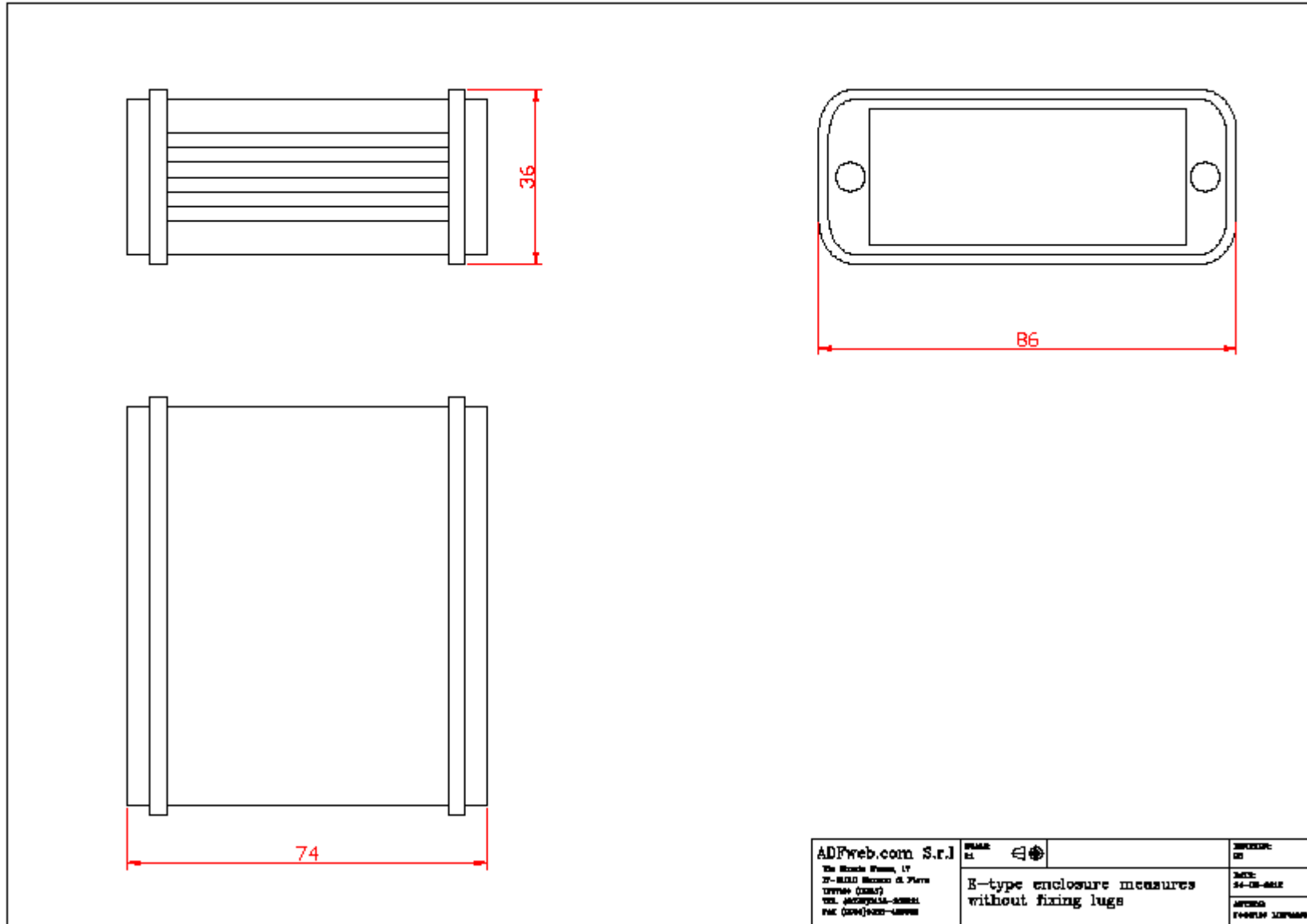


Step 2

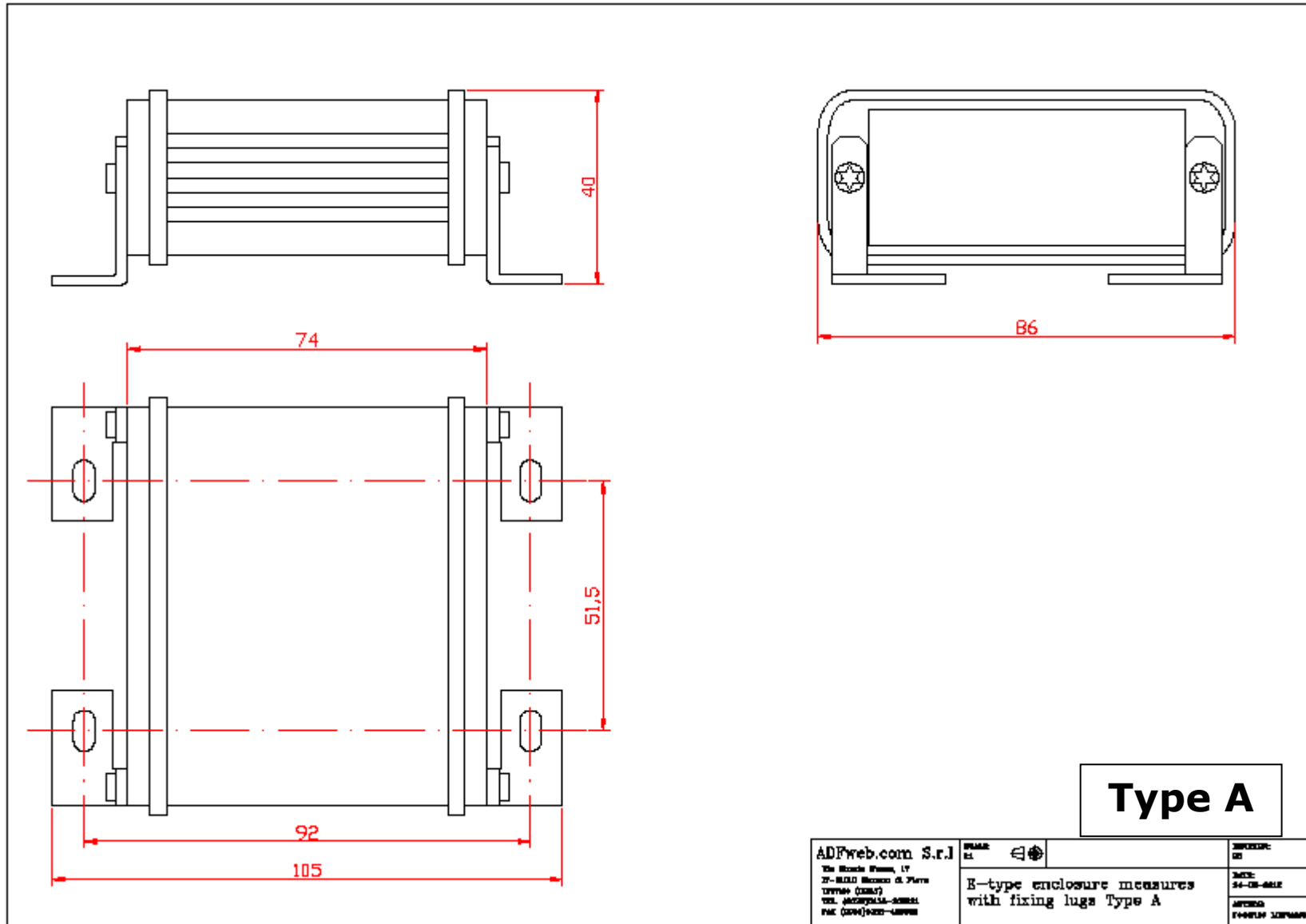
Step 3

Step 1

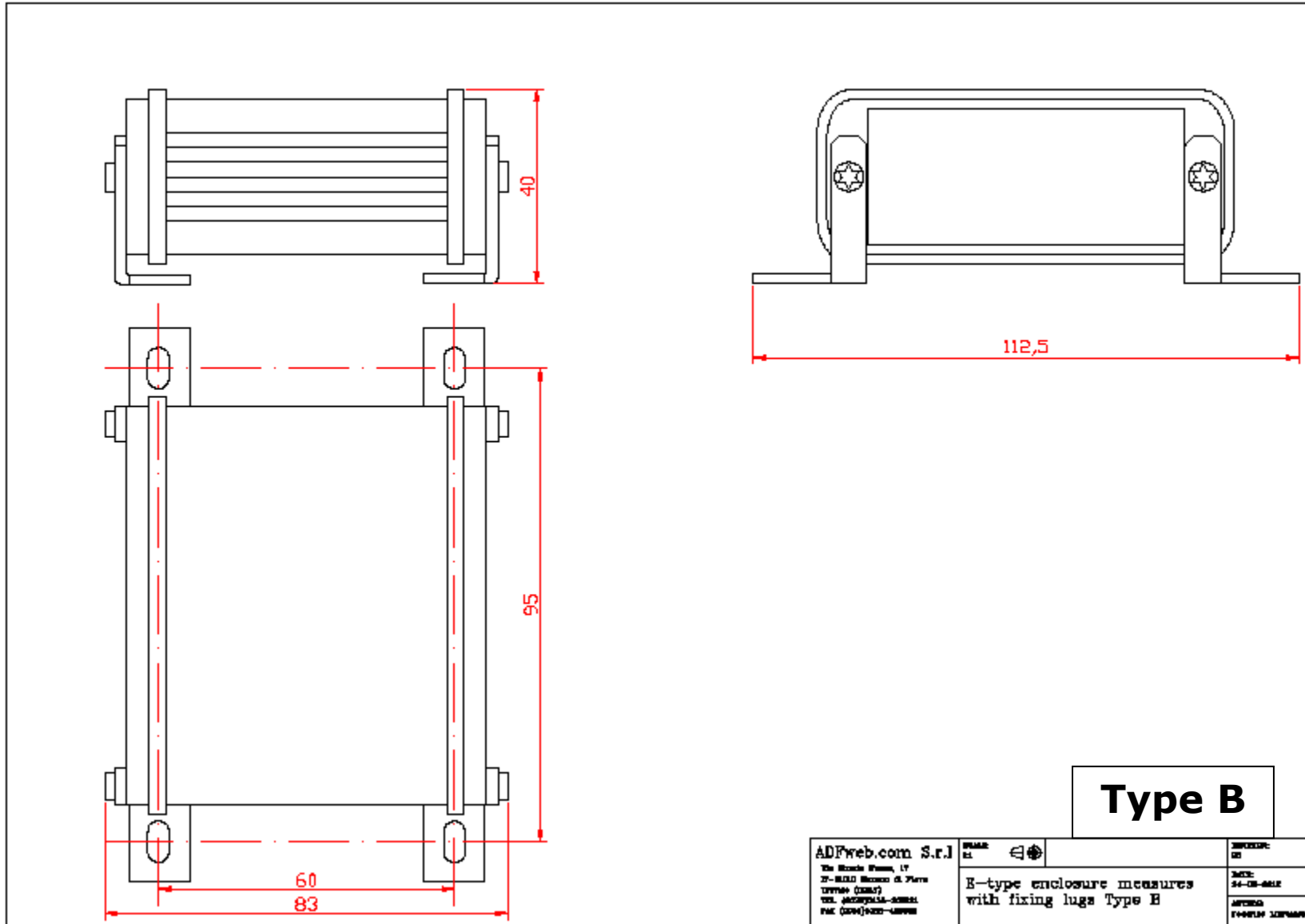
**MECHANICAL DIMENSIONS:**

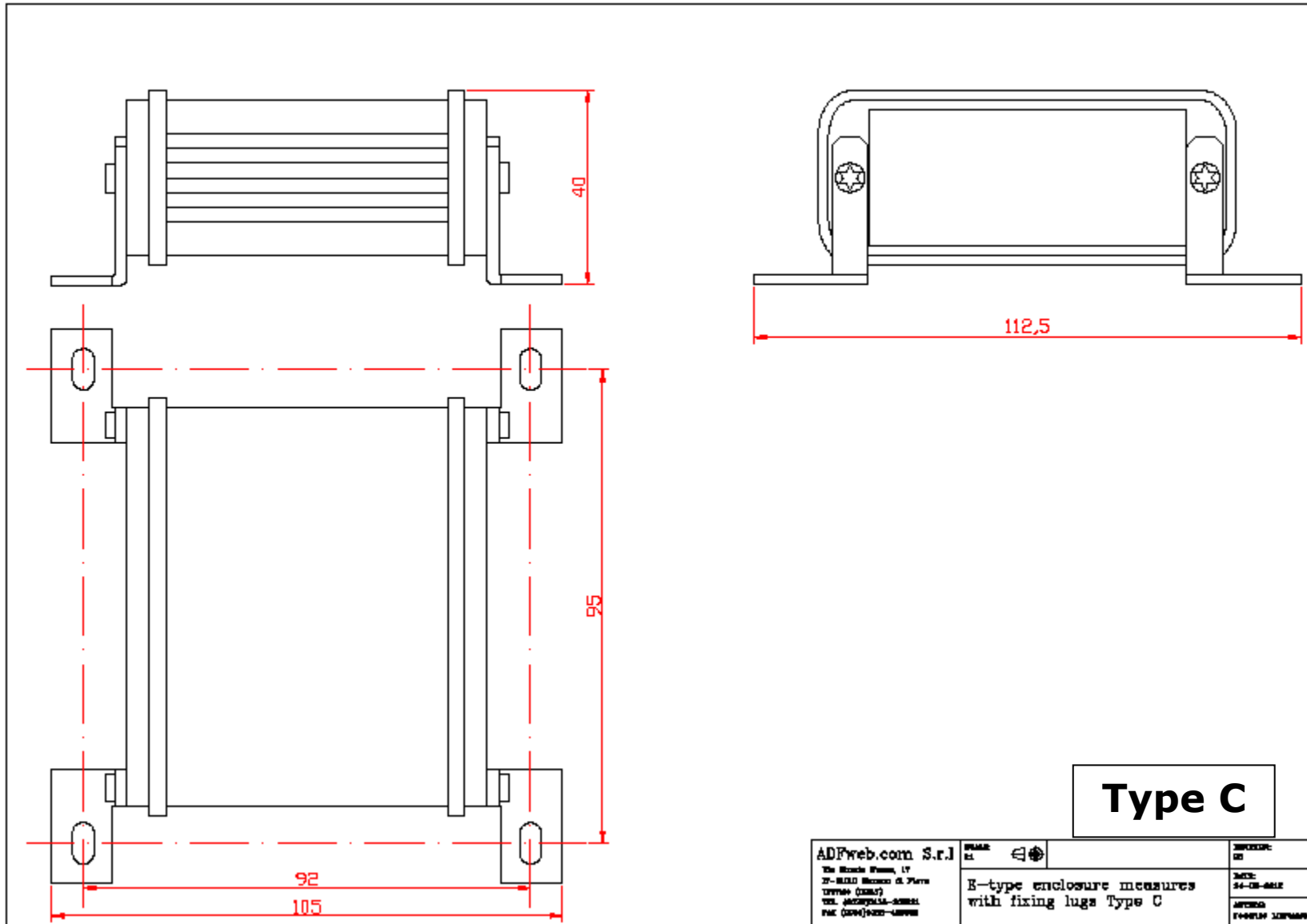


<b>ADFweb.com S.r.l</b> Via Monte Pratom, 17 37-03010 Marenco di Piave (TREVISO) (ITALY) TEL. +39(0)423/3116-30881 FAX +39(0)423/3116-30888	SYMBOLS CE	DESCRIPTION: E2
	E-type enclosure measures without fixing lugs	
	CODE: 34-08-081E APPROVED: F+08/01/10/04/08/09	





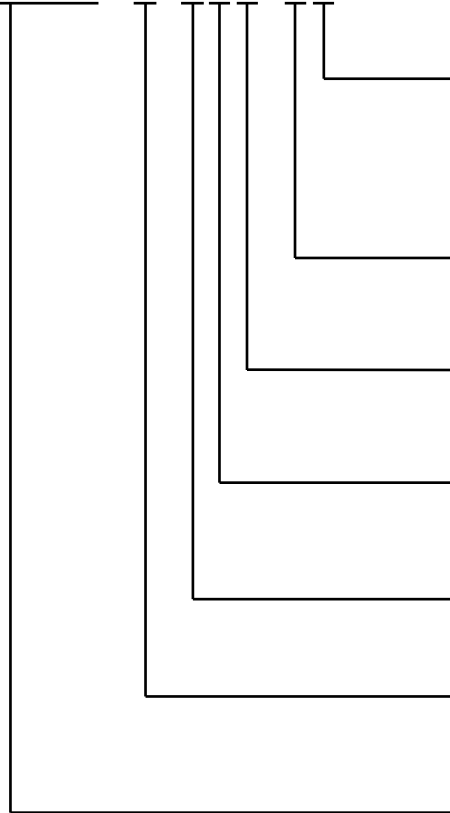




**ORDERING INFORMATIONS:**

The ordering part number is formed by a valid combination of the following:

**HD674-A020 - x - E y z - s f**



**Fixing lugs**

- A: Type A
- B: Type B
- C: Type C
- D: without fixing lugs

**RS485 Termination (not present for RS232 version)**

- Y: Terminated with 120Ω
- N: Not terminated

**Varnished/Resinated**

- V: Varnished
- R: Resined

**Connectors Type**

- 4: MiniFit
- 7: SuperSeal 1.5

**Enclosure Type**

- E: Metal enclosure

**Serial Type**

- 2: RS232
- 4: RS485

**Device Family**

HD674-A020 = Serial / Ethernet - Converter

**ACCESSORIES:**

- Order Code: **AC34001** - Rail DIN - Power Supply 220/240V AC 50/60Hz – 12 V AC
- Order Code: **AC34002** - Rail DIN - Power Supply 110V AC 50/60Hz – 12 V AC
- Order Code: **AC67402** - Cable Super Seal 1.5 MALE 2-pole - 1.0 Meter
- Order Code: **AC67402-3** - Cable Super Seal 1.5 MALE 2-pole - 3.0 Meters
- Order Code: **AC67403** - Cable Super Seal 1.5 MALE 3-pole - 1.0 Meter
- Order Code: **AC67403-3** - Cable Super Seal 1.5 MALE 3-pole - 3.0 Meters
- Order Code: **AC67404** - Cable Super Seal 1.5 MALE 4-pole - 1.0 Meter
- Order Code: **AC67404-3** - Cable Super Seal 1.5 MALE 4-pole - 3.0 Meters
- Order Code: **AC67410** - Accessory Automotive Devices - Support for rail DIN

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**OTHER REGULATIONS AND STANDARDS:****WEEE INFORMATION**

Disposal of old electrical and electronic equipment (as in the European Union and other European countries with separate collection systems).

— This symbol on the product or on its packaging indicates that this product may not be treated as household rubbish. Instead, it should be taken to an applicable collection point for the recycling of electrical and electronic equipment. If the product is disposed correctly, you will help prevent potential negative environmental factors and impact of human health, which could otherwise be caused by inappropriate disposal. The recycling of materials will help to conserve natural resources. For more information about recycling this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

**RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE**

The device respects the 2002/95/EC Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (commonly referred to as Restriction of Hazardous Substances Directive or RoHS).

**CE MARKING**

The product conforms with the essential requirements of the applicable EC directives.

**WARRANTIES AND TECHNICAL SUPPORT:**

For fast and easy technical support for your ADFweb.com SRL products, consult our internet support at [www.adfweb.com](http://www.adfweb.com). Otherwise contact us at the address [support@adfweb.com](mailto:support@adfweb.com)

**RETURN POLICY:**

If while using your product you have any problem and you wish to exchange or repair it, please do the following:

- Obtain a Product Return Number (PRN) from our internet support at [www.adfweb.com](http://www.adfweb.com). Together with the request, you need to provide detailed information about the problem.
- Send the product to the address provided with the PRN, having prepaid the shipping costs (shipment costs billed to us will not be accepted).

If the product is within the warranty of twelve months, it will be repaired or exchanged and returned within three weeks. If the product is no longer under warranty, you will receive a repair estimate.



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