

User Manual

Revision 1.100
English

Ethernet/IP / CANopen - Converter

(Order Code: HD67596-A1)

for Website information:

www.adfweb.com?Product=HD67596

for Price information:

www.adfweb.com?Price=HD67596-A1

Benefits and Main Features:

- ⊕ Very easy to configure
- ⊕ Electrical isolation
- ⊕ Temperature range: -40°C/85°C (-40°F/185°F)



For others EtherNet/IP products see also the following link:

Converter Ethernet/IP to

www.adfweb.com?Product=HD67077
www.adfweb.com?Product=HD67159
www.adfweb.com?Product=HD67174
www.adfweb.com?Product=HD67588
www.adfweb.com?Product=HD67589
www.adfweb.com?Product=HD67595
www.adfweb.com?Product=HD67597
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www.adfweb.com?Product=HD67660
www.adfweb.com?Product=HD67663
www.adfweb.com?Product=HD67664
www.adfweb.com?Product=HD67682
www.adfweb.com?Product=HD67722
www.adfweb.com?Product=HD67807

(M-Bus)
(SNMP Agent)
(SNMP Manager)
(DMX)
(NMEA 2000)
(CAN)
(DeviceNet Master)
(DeviceNet Slave)
(J1939)
(Serial)
(Modbus Master)
(Modbus Slave)
(PROFIBUS Master)
(PROFIBUS Slave)
(PROFINET)
(Modbus TCP Slave)
(Modbus TCP Master)
(BACnet Slave)
(BACnet Master)
(KNX)

Do you have an your customer protocol?

www.adfweb.com?Product=HD67003

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

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/ 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	21/09/2012	Dp	All	First release version
1.001	27/09/2012	Dp	All	Revision
1.002	07/01/2014	Ff	All	Added “Sending Asynchronous CAN Messages” chapter
1.100	14/06/2016	Ff	All	New software interface

WARNING:

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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:

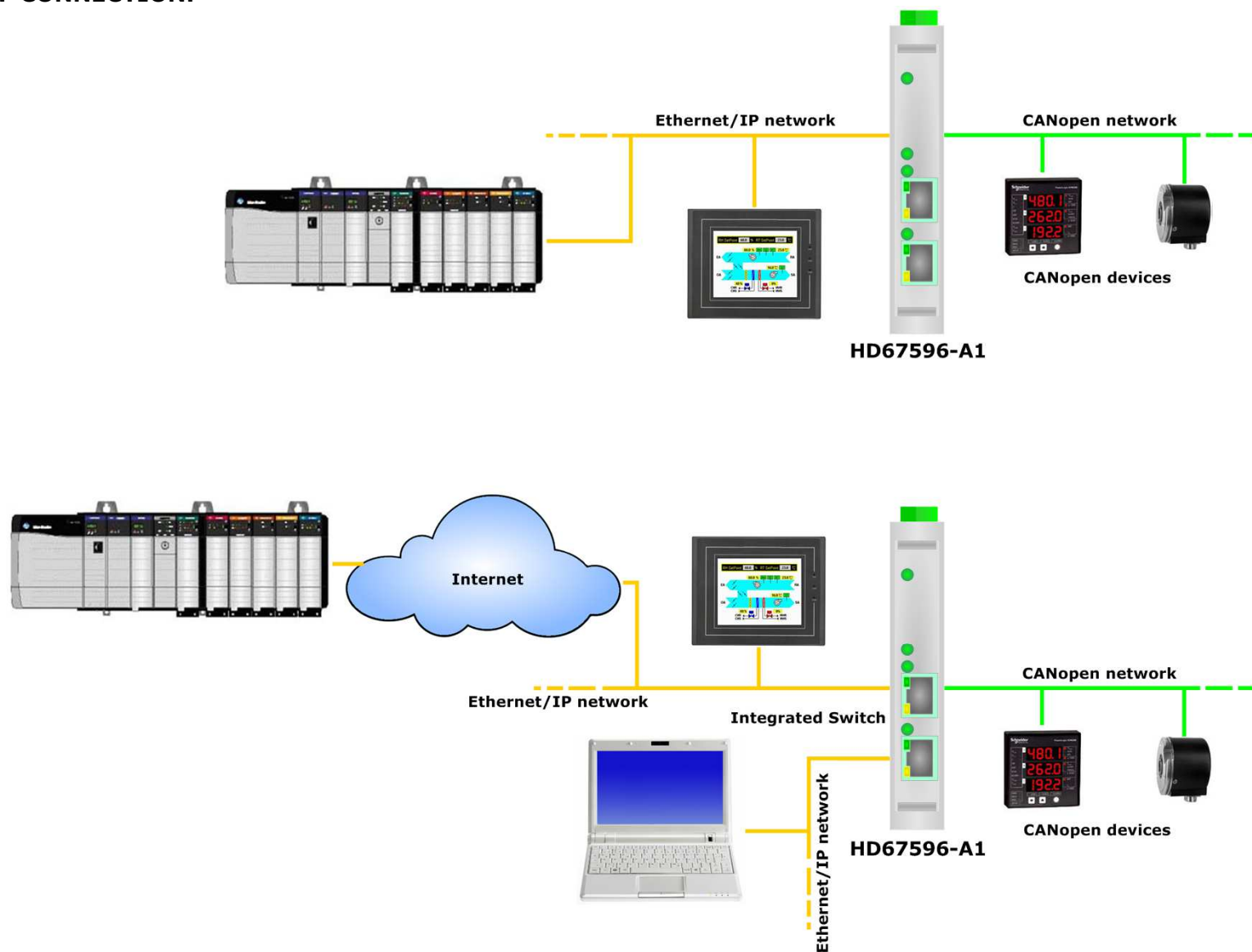


This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

CE CONFORMITY

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

EXAMPLE OF CONNECTION:



CONNECTION SCHEME:

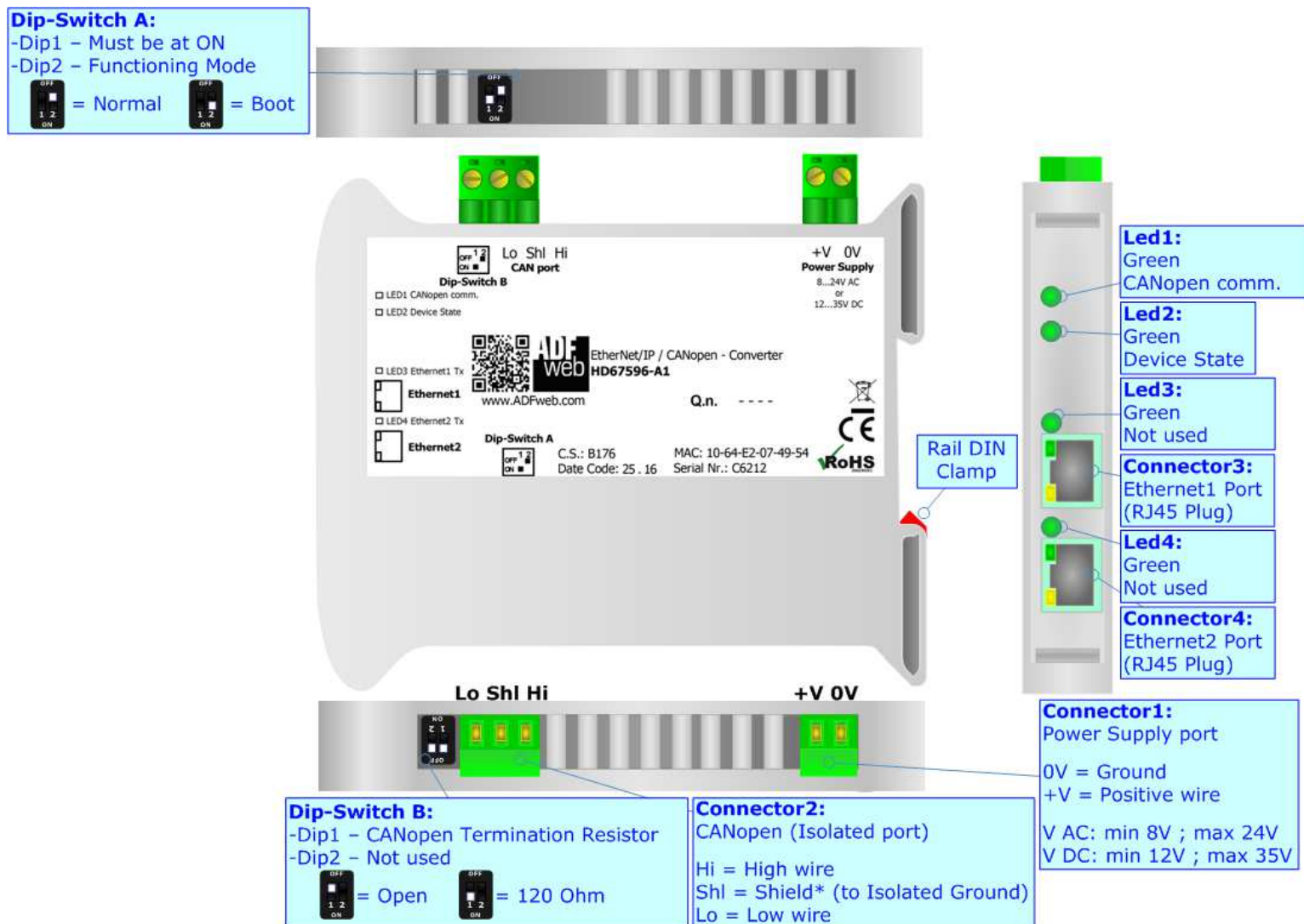


Figure 1: Connection scheme for HD67596-A1

CHARACTERISTICS:

The HD67596-A1 is a Ethernet/IP / CANopen Converter.

It allows the following characteristics:

- Up to 496 bytes in reading and 496 bytes in writing;
- Bi-directional information between CANopen bus and Ethernet/IP bus;
- Mountable on 35mm Rail DIN;
- Power Supply 8...24V AC or 12...35V DC;
- Temperature range -40°C to 85°C.



CONFIGURATION:

You need Compositor SW67596 software on your PC in order to perform the following:

- Define the parameter of Ethernet/IP line;
- Define the parameter of CANopen line;
- Define which Ethernet/IP bytes transferring in CANopen and vice versa;
- Define SDO Server informations;
- Define SDO Client informations;
- Define PDO informations (RPDO/TPDO);
- Update the device.

POWER SUPPLY:

The devices can be powered at 8...24V AC and 12...35V DC. For more details see the two tables below.

VAC 		VDC 	
Vmin	Vmax	Vmin	Vmax
8V	24V	12V	35V

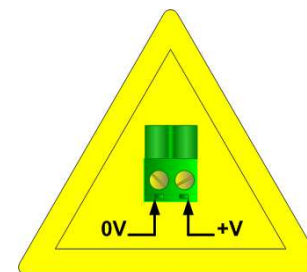
Consumption at 24V DC:

Device	Consumption [W/VA]
HD67596-A1	3.5

Connector1:
Power Supply port
0V = Ground
+V = Positive wire
V AC: min 8V ; max 24V
V DC: min 12V ; max 35V



Caution: Not reverse the polarity power



HD67596-A1

FUNCTION MODES:

The device has got two functions mode depending of the position of the 'Dip2 of Dip-Switch A':

- The first, with 'Dip2 of Dip-Switch A' at "OFF" position, is used for the normal working of the device.
- The second, with 'Dip2 of Dip-Switch A' at "ON" position, is used for upload the Project and/or Firmware.

For the operations to follow for the updating, see 'UPDATE DEVICE' section.

According to the functioning mode, the LEDs will have specifics functions, see 'LEDS' section.

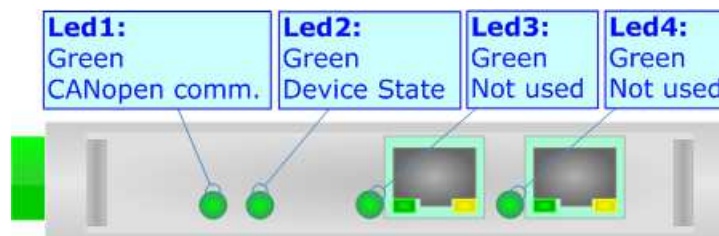
**Warning:**

Dip1 of 'Dip-Switch A' must be at ON position for working even if the Ethernet cable isn't inserted.

LEDS:

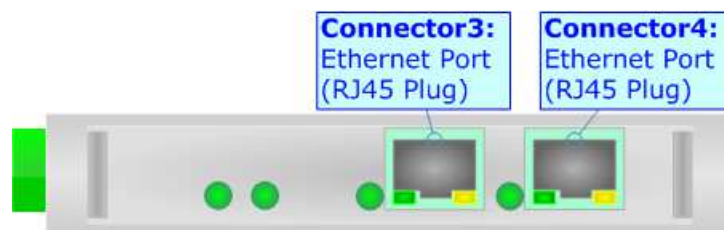
The device has got four LEDs that are used to give information of the functioning status.
The various meanings of the LEDs are described in the table below.

LED	Normal Mode	Boot Mode
1: CANopen comm. (green)	Blinks when a CANopen frame/request is received	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
2: Device State (green)	Blinks slowly (~1Hz)	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
3: Not used (green)	OFF	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
4: Not used (green)	OFF	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress



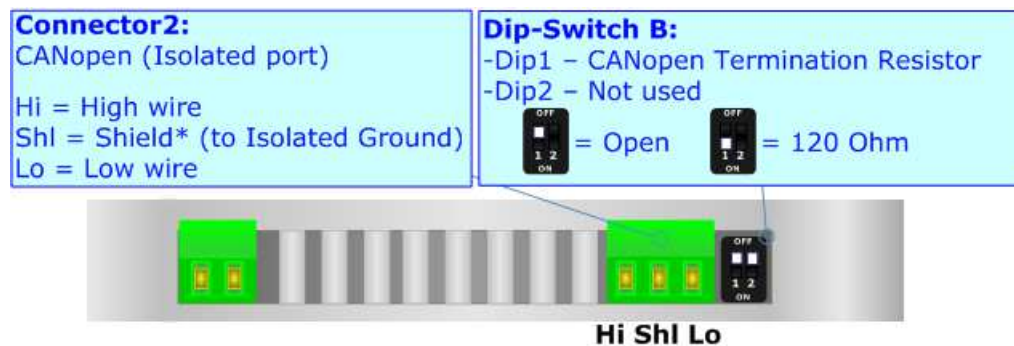
ETHERNET/IP:

The Ethernet/IP connection must be made using Connector3 and/or Connector4 of HD67596-A1 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.



CANOPEN:

For terminate the CANopen line with a 120Ω resistor it is necessary that the Dip1 of 'Dip-Switch B' is at ON position.



Cable characteristics:

DC parameter:		Impedance	70 Ohm/m
AC parameters:		Impedance	120 Ohm/m
		Delay	5 ns/m
Length		Baud Rate [bps]	Length MAX [m]
		10 K	5000
		20 K	2500
		50 K	1000
		100 K	650
		125 K	500
		250 K	250
		500 K	100
		800 K	50
		1000 K	25

USE OF COMPOSITOR SW67596:

To configure the Converter, use the available software that runs with Windows called SW67596. It is downloadable on the site 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 SW67596, the window below appears (Fig. 2).



Note:

It is necessary to have installed .Net Framework 4.

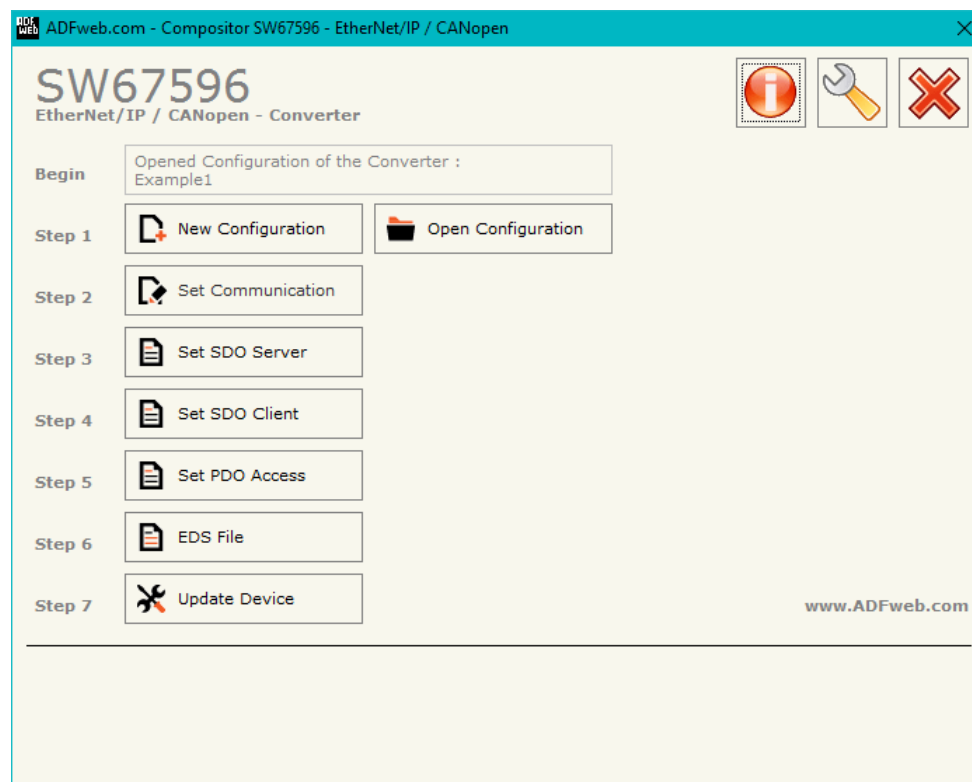
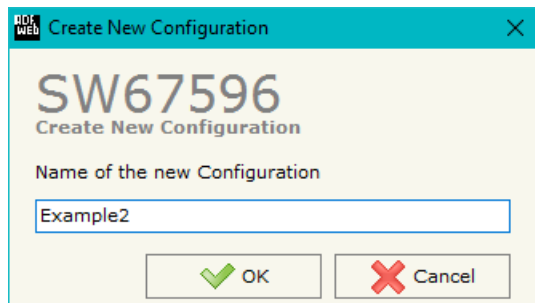


Figure 2: Main window for SW67596

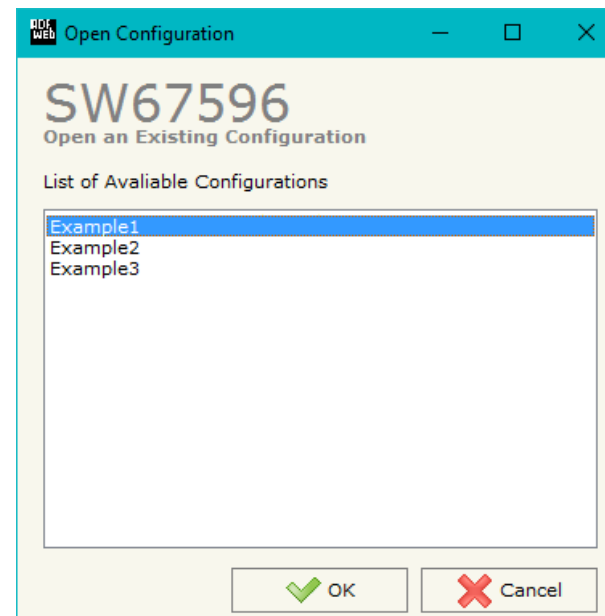
NEW CONFIGURATION / OPEN CONFIGURATION:

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




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

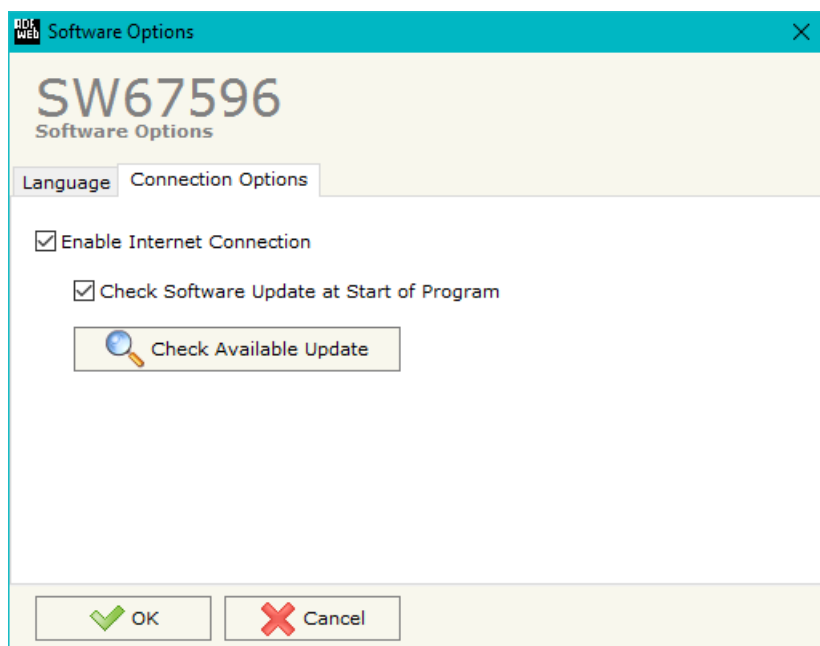
- To clone the configurations of a Programmable “EtherNet/IP / CANopen - Converter” in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to duplicate 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 SW67596 check automatically if there are updatings when it is launched.

SET COMMUNICATION:

This section define the fundamental communication parameters of two buses, EtherNet/IP and CANopen.

By Pressing the **"Set Communication"** button from the main window for SW67596 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The window is divided in two sections, one for the EtherNet/IP and the other for the CANopen.

The means of the fields for "EtherNet/IP" 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;
- In the field **"GATEWAY"** the default gateway of the network is defined. This feature can be enabled or disabled pressing the check box. This feature is used for going out of the net;
- In the field **"Port"** the port for the EtherNet/IP communication is defined (fixed to '44818');
- In the field **"Number Byte IN"** the number of input bytes of EtherNet/IP is defined (up to 496 byte);
- In the field **"Number Byte OUT"** the number of output bytes of EtherNet/IP is defined (up to 496 byte).

The means of the fields for the "CANopen" section are:

- In the field **"Device ID"** the ID for the CANopen side is defined;
- In the field **"Baudrate"** the baudrate for the CANopen is defined;
- In the field **"Set Operational State at Start-up"** the state of the CANopen is defined. I.e. if it is checked the board starts in Operational State, else it starts in Pre-Operational;
- In the field **"Network Start at Start-up"** the state of the network CANopen is defined. I.e. if it is checked the board sends a command to set the Operational State for all the devices present in the network;
- In the field **"Delay"** the delay before sending the network start command for the CANopen is defined;
- If the field **"SDO Client TimeOut (1/10 ms)"** the timeout for the SDO requests is defined. It is the maximum time that the device attends for the answer from the Slave interrogated;

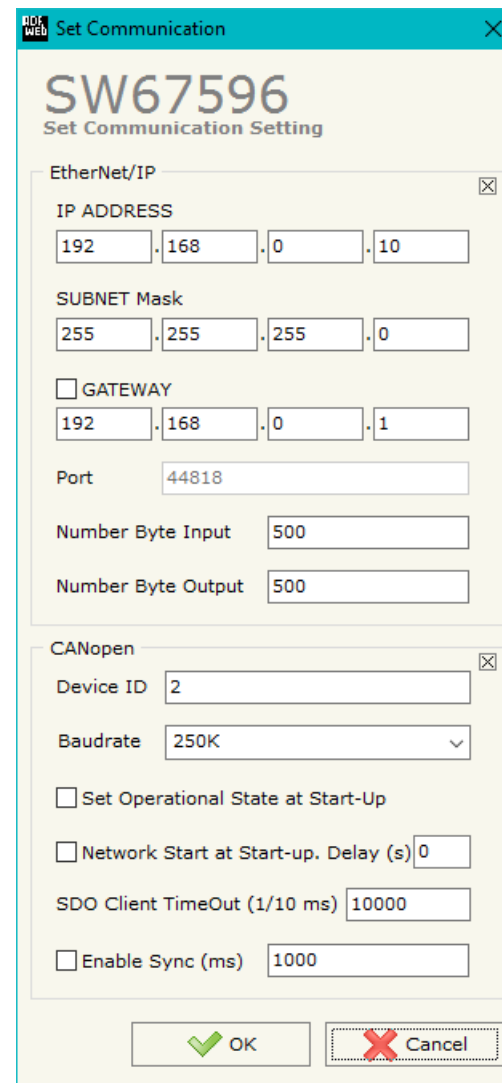


Figure 3: "Set Communication" window

- If the field “**Enable Sync (ms)**” is checked, the converter will produce cyclically the Sync message. The delay between the Sync messages is defined in the field on the right.

SET SDO SERVER:

By pressing the **"Set SDO Server"** button from the main window for SW67596 (Fig. 2) the window "Set SDO Server Access" appears (Fig. 4).

This window is made to create the SDO in read or write in the CANopen side, and to indicate which byte are associated to these SDOs.

It is divided in two parts, the "SDO in Read" and the "SDO in Write".

The first part is used to read, using the SDO, the data arrived from the EtherNet/IP side. The second is used to write, using SDO, the data that will be sent to the EtherNet/IP side.

The data of the columns have the following meanings:

- In the field **"Index"** the address of the SDO Object is defined;
- In the field **"SubIndex"** the second address of the SDO Object is defined;
- If the field **"N Byte"** the dimension of the SDO is defined (it can be 1, 2 or 4);
- In the field **"Address Byte1"** insert the address of the EtherNet/IP arrays where reading/writing the 1st byte of the SDO;
- In the field **"Address Byte2"** insert the address of the EtherNet/IP arrays where reading/writing the 2nd byte of the SDO (only if N Byte is 2 or 4);
- In the field **"Address Byte3"** insert the address of the EtherNet/IP arrays where reading/writing the 3rd byte of the SDO (only if N Byte is 4);
- In the field **"Address Byte4"** insert the address of the EtherNet/IP arrays where reading/writing the 4th byte of the SDO (only if N Byte is 4);
- In the field **"Mnemonic"** the description for the SDO is defined.

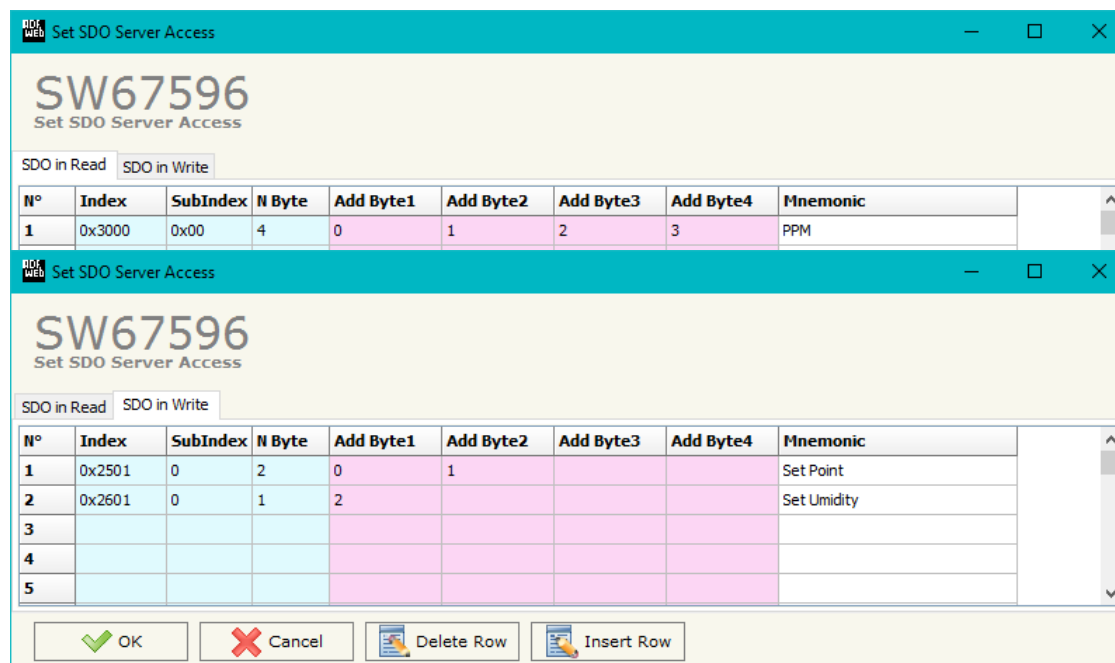


Figure 4: "Set SDO Server Access" window

SET SDO CLIENT:

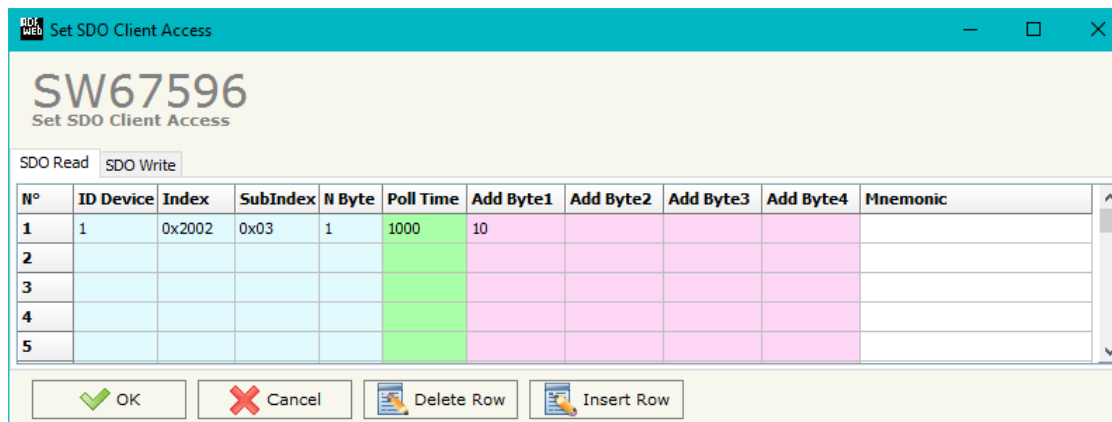
By pressing the **"Set SDO Client"** button from the main window for SW67596 (Fig. 2) the window "Set SDO Client Access" appears (Fig. 5a and 5b).

With the SDO Client the HD67596 can read and/or write the data from/to others devices connected in the CANopen network.

It is divided in two parts, the "SDO Read" and the "SDO Write". The first part is used to read, using the SDO, the data in another device and then put this data in the EtherNet/IP array. The second part is used to write, using the SDO, the data present in the EtherNet/IP array to others CANopen devices.

The meaning of the columns in the "SDO Read" are:

- In the field **"Device ID"** the ID of the device to read is defined;
- In the field **"Index"** the address of the SDO to read is defined;
- In the field **"SubIndex"** the second address of the SDO to read is defined;
- In the field **"N Byte"** the dimension of the SDO to read is defined (it can be 1, 2, or 4);
- In the field **"Poll Time"** the cyclic time of the request is defined;
- In the field **"Address Byte1"** the address of the EtherNet/IP array where coping the 1st byte of the SDO read is defined;
- In the field **"Address Byte2"** the address of the EtherNet/IP array where coping the 2nd byte of the SDO read is defined (only if N Byte is 2 or 4);
- In the field **"Address Byte3"** the address of the EtherNet/IP array where coping the 3rd byte of the SDO read is defined (only if N Byte is 4);
- In the field **"Address Byte4"** the address of the EtherNet/IP array where coping the 4th byte of the SDO read is defined (only if N Byte is 4);
- In the field **"Mnemonic"** the description for the SDO is defined.

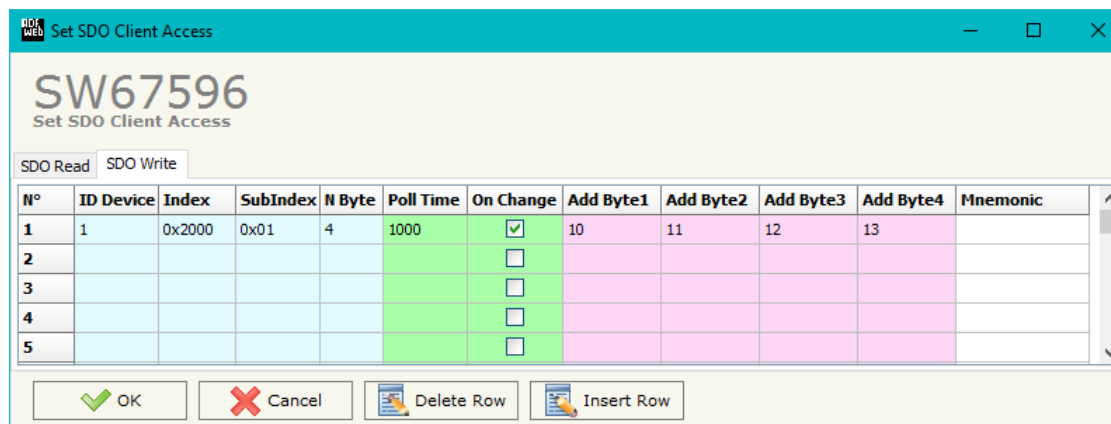


N°	ID Device	Index	SubIndex	N Byte	Poll Time	Add Byte1	Add Byte2	Add Byte3	Add Byte4	Mnemonic
1	1	0x2002	0x03	1	1000	10				
2										
3										
4										
5										

Figure 5a: "Set SDO Client Access – SDO Read" window

The meaning of the columns in the "SDO Write" are:

- In the field "**Device ID**" the ID of the device to write is defined;
- In the field "**Index**" the address for the SDO to write is defined;
- In the field "**SubIndex**" the second address for the SDO to write is defined;
- In the field "**N Byte**" the dimension of the SDO to write is defined (it can be 1, 2, or 4);
- In the field "**Poll Time**" the time to make the request is defined;
- If the field "**On Change**" is checked, the converter sends the writing request when the data from EtherNet/IP changes;
- In the field "**Address Byte1**" the address of the EtherNet/IP array where taking the 1st byte of the SDO write is defined;
- In the field "**Address Byte2**" the address of the EtherNet/IP array where taking the 2nd byte of the SDO write is defined (only if N Byte is 2 or 4);
- In the field "**Address Byte3**" the address of the EtherNet/IP array where taking the 3rd byte of the SDO write is defined (only if N Byte is 4);
- In the field "**Address Byte4**" the address of the EtherNet/IP array where taking the 4th byte of the SDO write is defined (only if N Byte is 4);
- In the field "**Mnemonic**" the description for the SDO is defined.



N°	ID Device	Index	SubIndex	N Byte	Poll Time	On Change	Add Byte1	Add Byte2	Add Byte3	Add Byte4	Mnemonic
1	1	0x2000	0x01	4	1000	<input checked="" type="checkbox"/>	10	11	12	13	
2						<input type="checkbox"/>					
3						<input type="checkbox"/>					
4						<input type="checkbox"/>					
5						<input type="checkbox"/>					

Figure 5b: "Set SDO Client Access – SDO Write" window

SET PDO ACCESS:

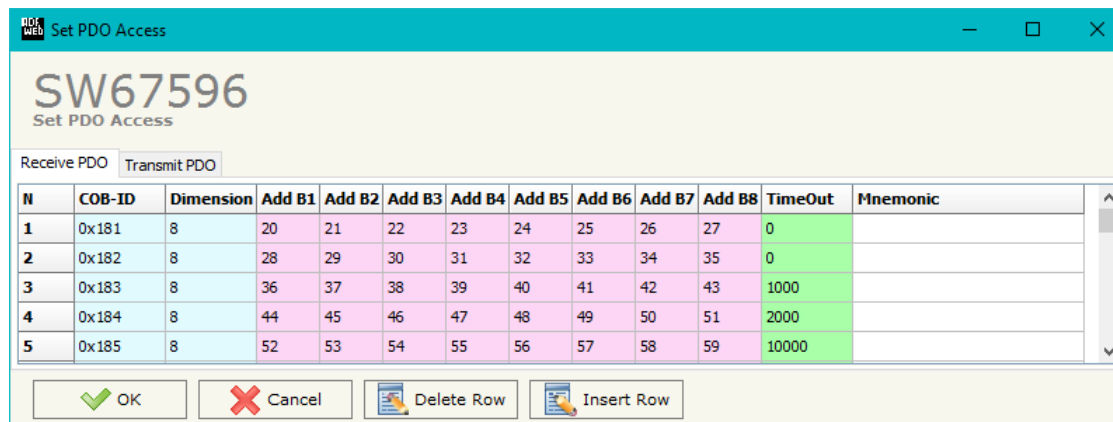
By pressing the "**Set PDO Access**" button from the main window for SW67596 (Fig. 2) the window "Set PDO Access" appears (Fig. 6a and 6b).

This window is used to create the Receive and the Transmit PDOs in the CANopen side and to indicate which bytes of EtherNet/IP side are associated to these PDOs.

It is divided in two parts, the "Receive PDO" and the "Transmit PDO". The first part is used to receive PDO from the CANopen network and copy the data in the EtherNet/IP array. The second part is used to transmit PDO in the CANopen network with the data of EtherNet/IP array.

The meaning of the columns in the "Receive PDO" are:

- In the field "**Cob-ID**" the COB-ID for the PDO is defined;
- In the field "**Dimension**" the dimension of the PDO is defined (it can be between 1 and 8 bytes);
- In the field "**Add B1**" the address of the EtherNet/IP array where coping the 1st byte of the RPDO is defined;
- In the field "**Add B2**" the address of the EtherNet/IP array where coping the 2nd byte of the RPDO is defined;
- In the field "**Add B3**" the address of the EtherNet/IP array where coping the 3rd byte of the RPDO is defined;
- In the field "**Add B4**" the address of the EtherNet/IP array where coping the 4th byte of the RPDO is defined;
- In the field "**Add B5**" the address of the EtherNet/IP array where coping the 5th byte of the RPDO is defined;
- In the field "**Add B6**" the address of the EtherNet/IP array where coping the 6th byte of the RPDO is defined;
- In the field "**Add B7**" the address of the EtherNet/IP array where coping the 7th byte of the RPDO is defined;
- In the field "**Add B8**" the address of the EtherNet/IP array where coping the 8th byte of the RPDO is defined;
- In the field "**TimeOut**" the timeout is defined. It is used to put to 0 the data into EtherNet/IP if the PDO doesn't arrive in the defined time. If the value in this field is '0', the function is not used;
- In the field "**Mnemonic**" the description for the PDO is defined.

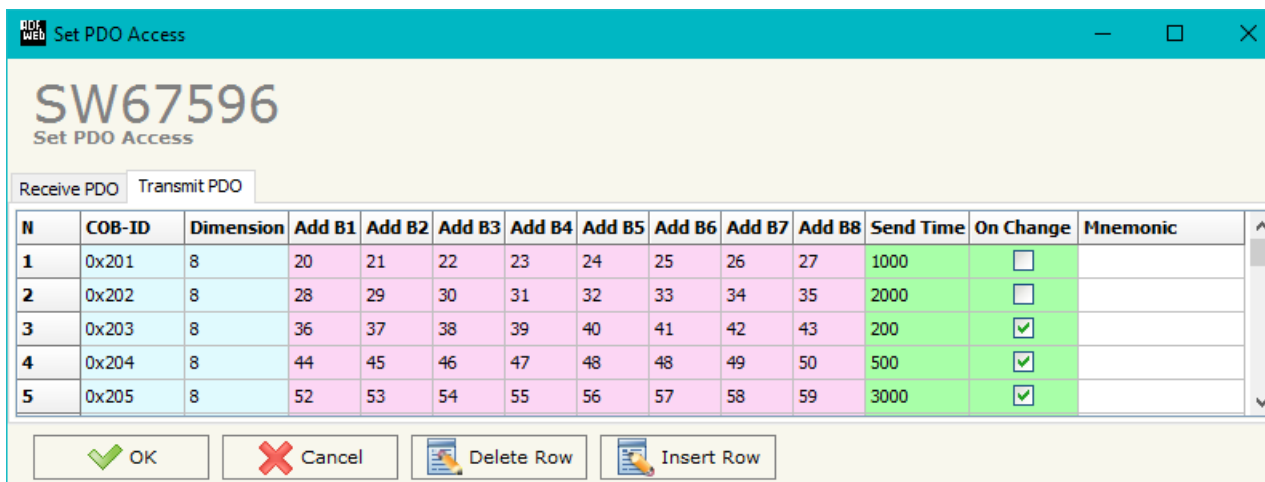


N	COB-ID	Dimension	Add B1	Add B2	Add B3	Add B4	Add B5	Add B6	Add B7	Add B8	TimeOut	Mnemonic
1	0x181	8	20	21	22	23	24	25	26	27	0	
2	0x182	8	28	29	30	31	32	33	34	35	0	
3	0x183	8	36	37	38	39	40	41	42	43	1000	
4	0x184	8	44	45	46	47	48	49	50	51	2000	
5	0x185	8	52	53	54	55	56	57	58	59	10000	

Figure 6a: "Set PDO Access – Receive PDO" window

The meaning of the columns in the "Transmit PDO" are:

- In the field "**Cob-ID**" the COB-ID for the PDO is defined;
- In the Field "**Dimension**" the dimension of the PDO is defined (it can be between 1 and 8 bytes);
- In the field "**Add B1**" the address of the EtherNet/IP array where taking the 1st byte of the RPDO is defined;
- In the field "**Add B2**" the address of the EtherNet/IP array where taking the 2nd byte of the RPDO is defined;
- In the field "**Add B3**" the address of the EtherNet/IP array where taking the 3rd byte of the RPDO is defined;
- In the field "**Add B4**" the address of the EtherNet/IP array where taking the 4th byte of the RPDO is defined;
- In the field "**Add B5**" the address of the EtherNet/IP array where taking the 5th byte of the RPDO is defined;
- In the field "**Add B6**" the address of the EtherNet/IP array where taking the 6th byte of the RPDO is defined;
- In the field "**Add B7**" the address of the EtherNet/IP array where taking the 7th byte of the RPDO is defined;
- In the field "**Add B8**" the address of the EtherNet/IP array where taking the 8th byte of the RPDO is defined;
- In the field "**Send Time**" the interval used to send the PDO is defined. The time is in milliseconds;
- If the field "**On Change**" is checked, the gateway sends the Transmit PDO when the data from EtherNet/IP change the value;
- In the field "**Mnemonic**" the description for the PDO is defined.



N	COB-ID	Dimension	Add B1	Add B2	Add B3	Add B4	Add B5	Add B6	Add B7	Add B8	Send Time	On Change	Mnemonic
1	0x201	8	20	21	22	23	24	25	26	27	1000	<input type="checkbox"/>	
2	0x202	8	28	29	30	31	32	33	34	35	2000	<input type="checkbox"/>	
3	0x203	8	36	37	38	39	40	41	42	43	200	<input checked="" type="checkbox"/>	
4	0x204	8	44	45	46	47	48	48	49	50	500	<input checked="" type="checkbox"/>	
5	0x205	8	52	53	54	55	56	57	58	59	3000	<input checked="" type="checkbox"/>	

Figure 6b: "Set PDO Access – Transmit PDO" window

EDS FILE:

By Pressing the "**EDS File**" button from the main window for SW67596 (Fig. 2) it is possible to generate the EDS file to be imported into the CANopen Client.

UPDATE DEVICE VIA UDP:

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

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

- Turn OFF the Device;
- Put Dip2 of 'Dip-Switch A' at ON position;
- Turn on the device
- Connect the Ethernet cable;
- Insert the IP **"192.168.2.205"**;
- 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"** turn off the Device;
- Put Dip2 of 'Dip-Switch A' at OFF position;
- Turn on the device.

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 update.

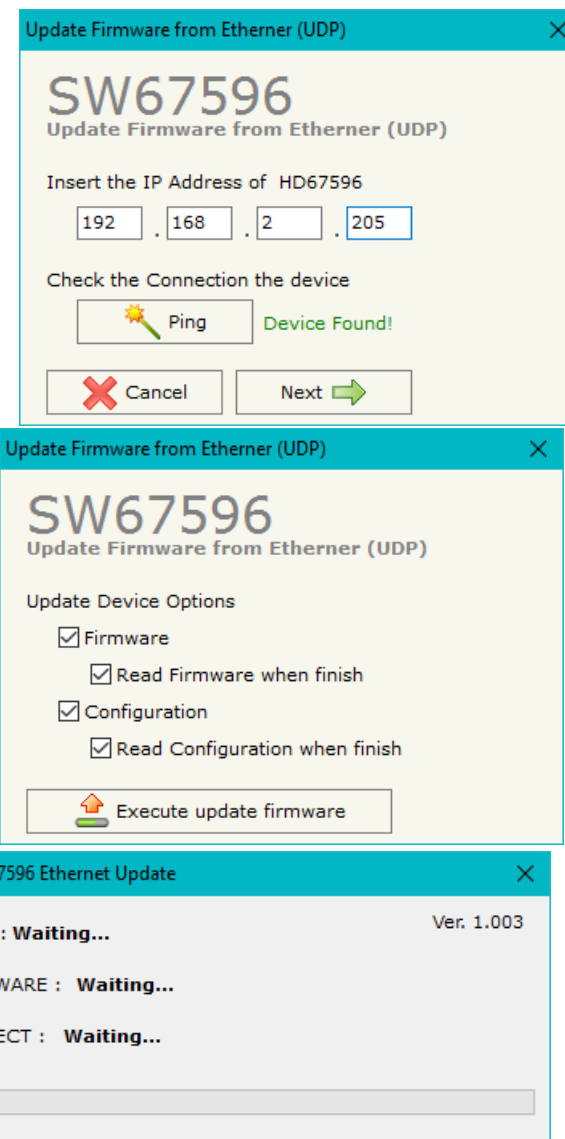


Figure 7: "Update device" windows



Note:

When you install a new version of the software it is better if the first time you do the update of the Firmware in the HD67596-A1 device.



Note:

When you receive the device, for the first time, you have to update also the Firmware in the HD67596-A1 device.



Warning:

If the Fig. 8 appears when you try to do the Update before require assistance try these points:

- Try to repeat the operations for the updating;
- Try with another PC;
- Try to restart the PC;
- Check the LAN settings;
- Check the Wi-Fi 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.



In the case of HD67596-A1 you have to use the software "SW67596": www.adfweb.com/download/filefold/SW67596.zip.

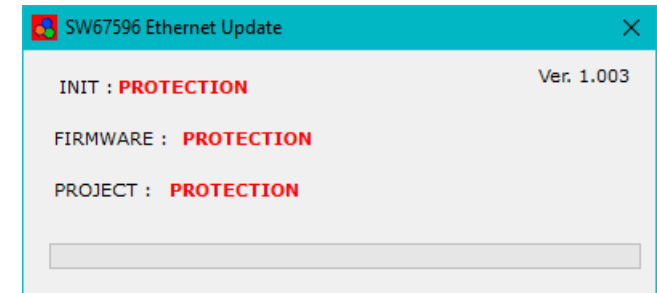


Figure 8: "Protection" window

SENDING ASYNCHRONOUS CAN MESSAGES FROM ETHERNET

The converter allows to send asynchronous CAN messages (for example a NMT message) directly from Ethernet to CANopen. The Ethernet message to send to the converter must have this structure:

Byte Number	Description
1÷4	COB-ID of the CAN message to send
5÷(4+n)	Data of the CAN message

n=Number of Byte to Write

To choose the type of CAN (2.0A or 2.0B) of the frame that the converter will send, it is necessary to put the most significant bit of the byte 1 to:

- 0: CAN 2.0A;
- 1: CAN 2.0B.

To send the Ethernet frame to the converter, there are two different ways:

- Using the EtherNet/IP;
- Using the tunneling port of the converter.

MODE 1: ETHERNET/IP

In this case, to send a CAN message from Ethernet to CANopen, it is necessary to use the assembly 103 (0x66) of the EtherNet/IP. The messages to send will have these parameters:

- Service: Set Attribute Single;
- Class: 4 (0x04);
- Instance: 103 (0x66);
- Attribute: 3 (0x03).

Example:

We want to send the NMT message "Start" to the CANopen device 5. The Ethernet frame will have these characteristics:
CAN Type=2.0A; Frame: Cob_ID=0x0000; Data=0x0105.

So the string of hexadecimal numbers to be send to the converter is: [00][00][00][00][01][05].

MODE 2: TUNNELING PORT

In this case, to send a CAN message from Ethernet to CANopen, it is necessary to send an UDP message to the Tunneling port of the converter (by default is 2000).

Example:

We want to send the NMT message "Start" to the CANopen device 5. The Ethernet frame will have these characteristics:

CAN Type=2.0A; Frame: Cob_ID=0x0000; Data=0x0105.

So the string of hexadecimal numbers to be send to the converter is: [00][00][00][00][01][05].

MECHANICAL DIMENSIONS:

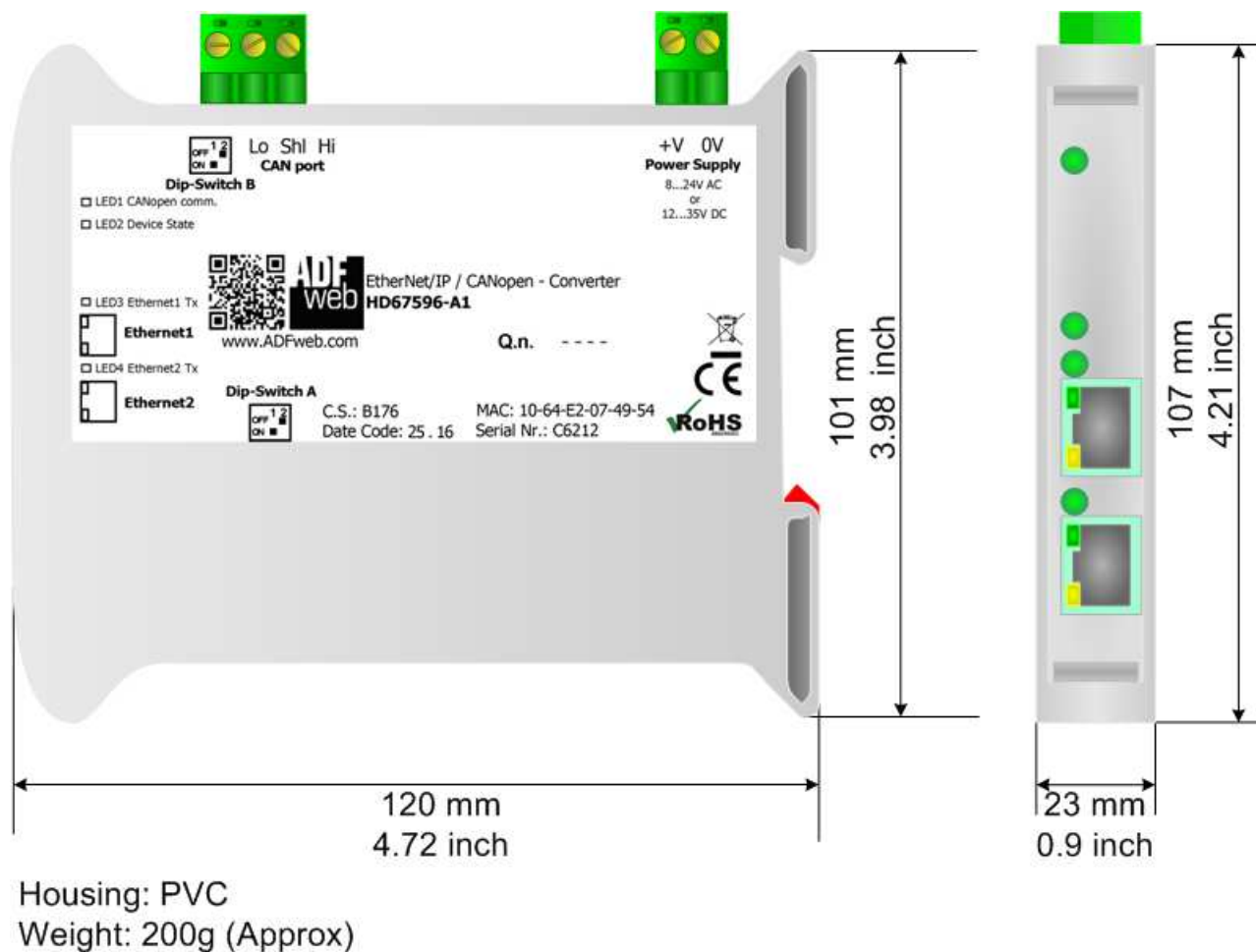
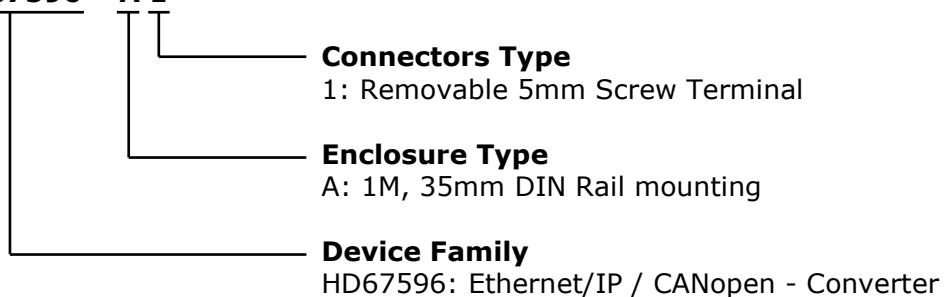


Figure 9: Mechanical dimensions scheme for HD67596-A1

ORDERING INFORMATION:

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

HD67596 – A 1

Order Code: **HD670596-A1** - Converter Ethernet/IP / CANopen Converter

ACCESSORIES:

Order Code: **AC34001** - 35mm Rail DIN - Power Supply 220/240V AC 50/60Hz – 12 V AC

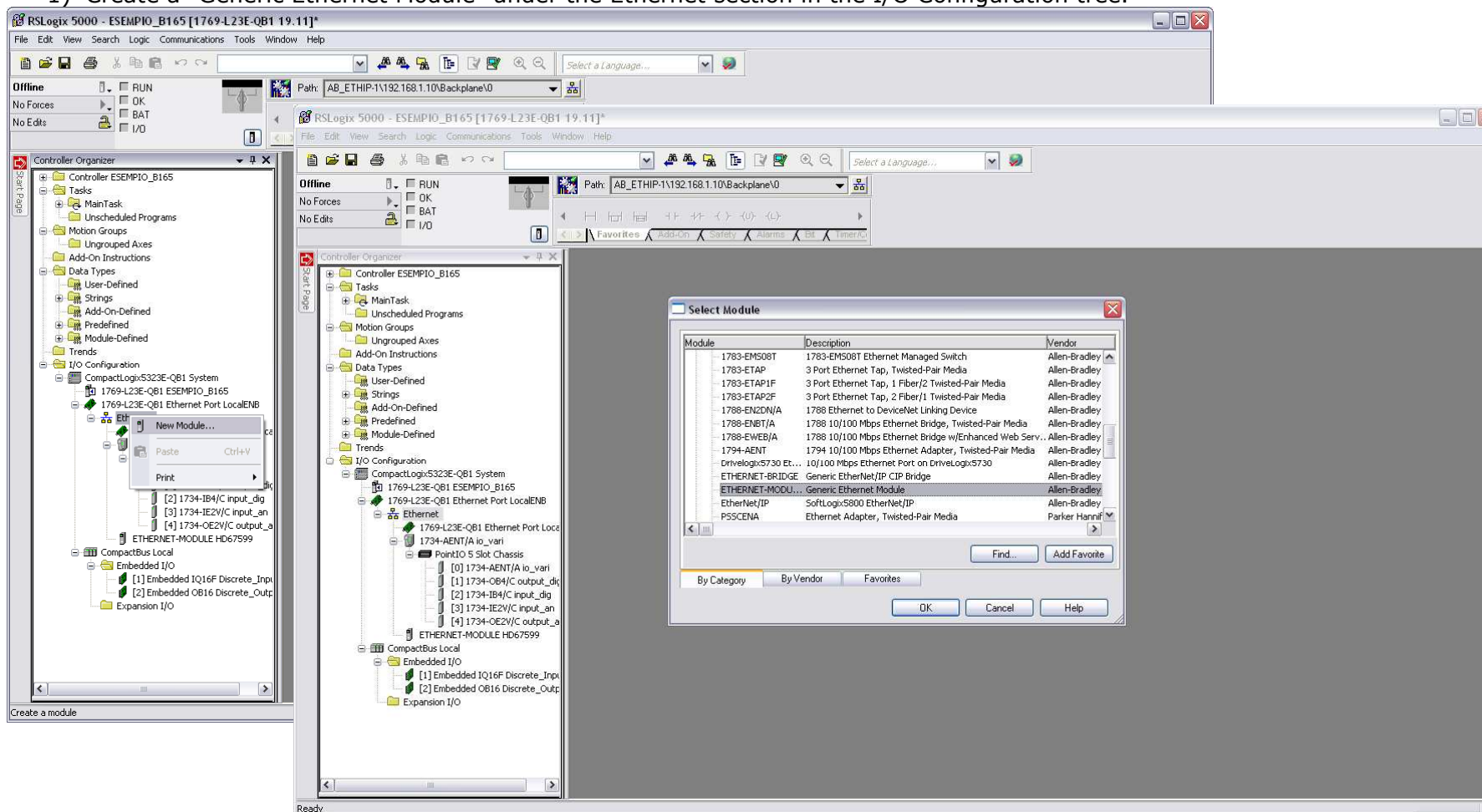
Order Code: **AC34002** - 35mm Rail DIN - Power Supply 110V AC 50/60Hz – 12 V AC

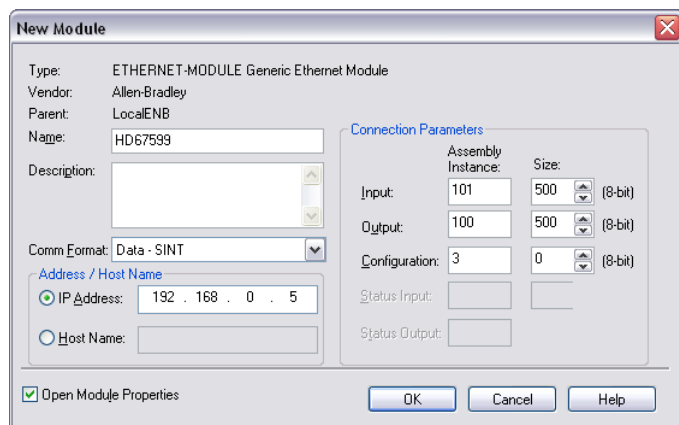
PLC CONFIGURATION:

The configuration and commissioning of the EtherNet/IP Converter as described on the following pages was accomplished with the help of the "RSLogix 5000" software of Rockwell Automation. In case of using a control system from another supplier please attend to the associated documentation.

These are the steps to follow:

- 1) Create a "Generic Ethernet Module" under the Ethernet section in the I/O Configuration tree.





2) Edit the settings of the new Generic Ethernet Module. As shown in the screen shot below, the module was named "HD67596" and the IP-address assigned is 192.168.0.5.

For the Comm Format "Data - SINT" shall be selected as the data type.

The HD67596-A1 can uses up to 500 bytes for input assembly instance 101 and 500 bytes for output assembly instance 100.

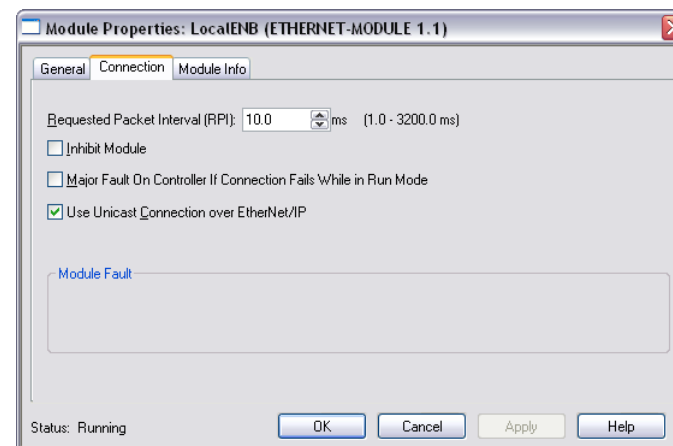
RSLogix 5000 requires a configuration assembly instance. Both modules do not provide a configuration assembly instance. Therefore it is allowed to select an instance of 3 and to set the value to zero.

3) The setting of 10msec for the "Requested Packet Interval (RPI)" is adequate but it is possible to change this value as required. A lower value of 2ms shall not be selected.

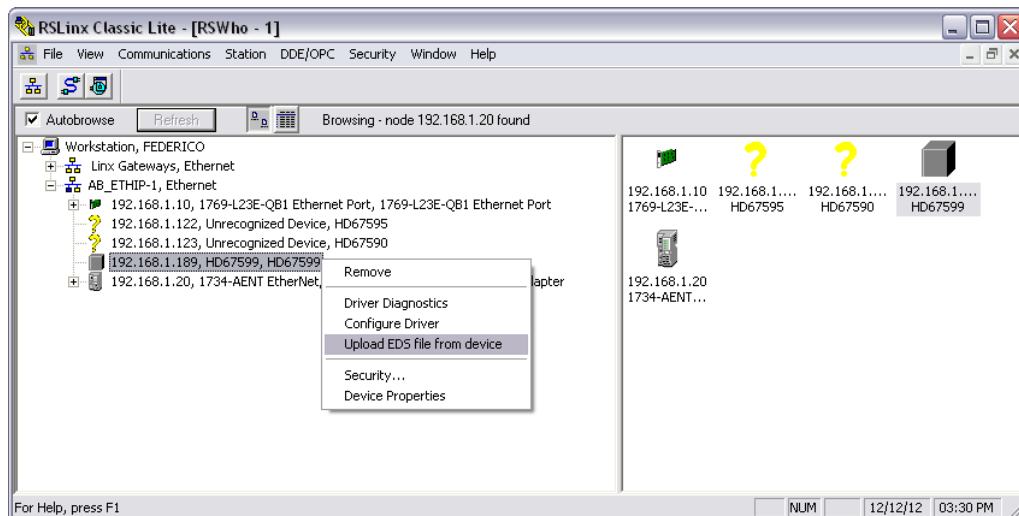


Warning:

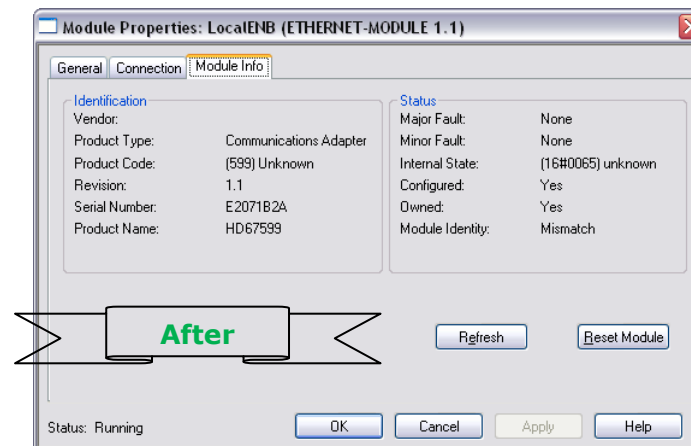
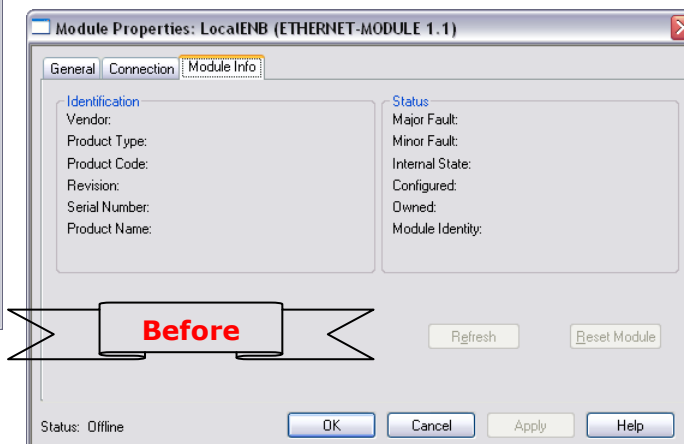
The field "Use Unicast Connection over EtherNet/IP" must be checked.



4) After the configuration is completed, the controller tags are created.



5) With "RSLinx Classic Lite", after have done a network scan (RSWho), and finding the EtherNet/IP device, it is possible to load the EDS file for the device in order to have the "Module Info" compiled.



DISCLAIMER:

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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. Otherwise contact us at the address 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. 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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