

# **User Manual**

Revision 1.000 English

# **CANopen / Modbus TCP Slave – Converter**

(Order Code: HD67425)

For Website information:

www.adfweb.com?Product=HD67425

For Price information:

www.adfweb.com?Price=HD67425

## **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)



**User Manual** 

## User Manual CANopen / Modbus TCP Slave

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For other Gateways / Bridges:

## **CAN from/to Modbus**

See also the following links:

www.adfweb.com?product=HD67012
www.adfweb.com?product=HD67514
www.adfweb.com?product=HD67515
(Modbus RTU Slave)
(Modbus TCP Master)
(Modbus TCP Slave)

#### **CANopen from/to Modbus**

See also the following links:

www.adfweb.com?product=HD67001 (Modbus RTU Master)
www.adfweb.com?product=HD67502
www.adfweb.com?product=HD67504
www.adfweb.com?product=HD67505 (Modbus TCP Master)
www.adfweb.com?product=HD67505 (Modbus TCP Slave)

Do you have an your customer protocol?

See the following links:

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



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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 <a href="www.adfweb.com/download/">www.adfweb.com/download/</a> 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:**

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## TRADEMARKS:

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#### **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:



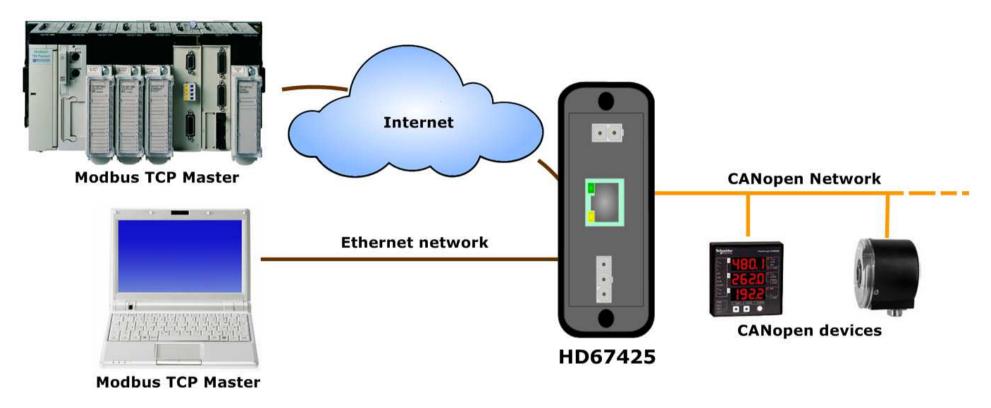
This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

#### **CE CONFORMITY**

The declaration is made by our company. You can send an email to <a href="mailto:support@adfweb.com">support@adfweb.com</a> or give us a call if you need it.

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## **EXAMPLE OF CONNECTION:**



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## **CONNECTION SCHEME:**

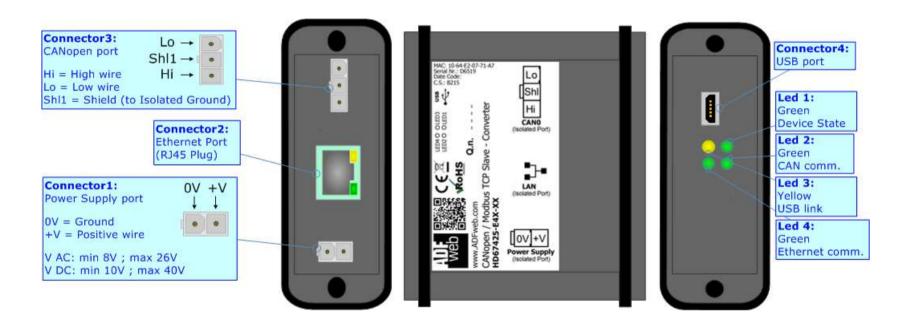


Figure 1a: Connection scheme for HD67425-E4x-xx

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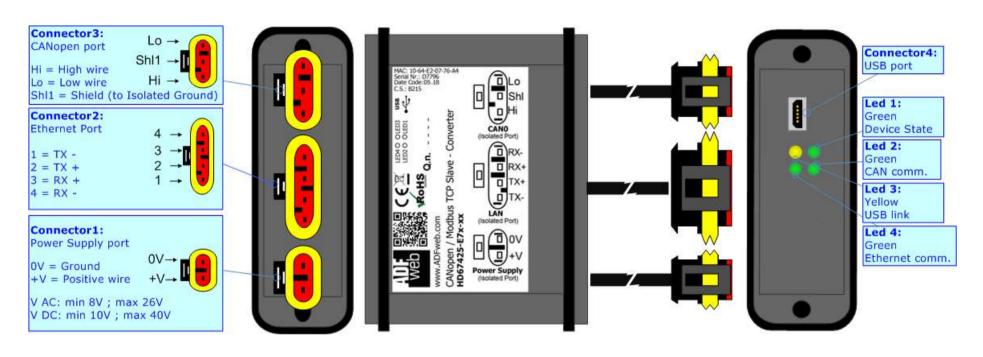


Figure 1b: Connection scheme for HD67425-E7x-xx

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#### **CHARACTERISTICS:**

The "HD67425" series are rugged devices used to interface CANopen devices with a Modbus TCP Master.

With his 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.

The device have these characteristics:

- Triple 4kV isolation between Power Supply / Ethernet / CAN;
- 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 SW67425 software on your PC in order to perform the following:

- Define the parameter of CANopen;
- Define the parameter of Modbus TCP;
- Define that the SDO of the CANopen are accessible from Modbus;
- Define how to update SDO in CANopen from Modbus;
- Define that the EMCY of the CANopen are accessible from Modbus;
- Define how and which EMCY generated in CANopen can be filtered;
- Define which and how the PDO of CANopen are accessible from Modbus;
- → Update the new configurations of the device.

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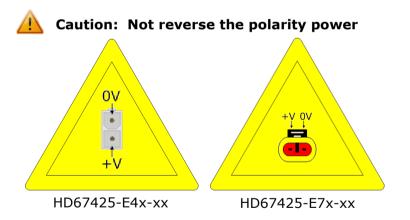
## **POWER SUPPLY:**

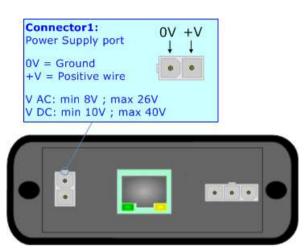
The devices can be powered between a wide range of tensions. For more details see the two tables below.

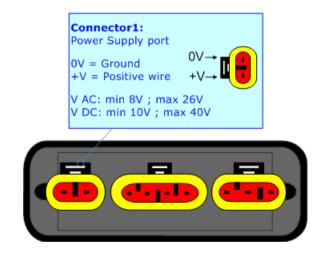
	VAC ~		VDC	
	Vmin	Vmax	Vmin	Vmax
HD67425-Exx-xx	8V	26V	10V	40V

## Consumption at 24V DC:

Device	W/VA
HD67425-Exx-xx	4





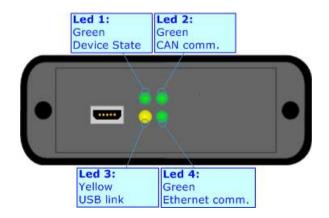


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## LEDS:

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)	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
2: CAN communication (green)	Blinks when CANopen frames are received	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
3: USB link (yellow)	ON: USB cable inserted OFF: USB cable not inserted	ON: USB cable inserted OFF: USB cable not inserted
4: Ethernet communication (green)	Blinks when a Modbus TCP request is received	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress



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## CAN:

The connection of the CANopen in the HD67425-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.

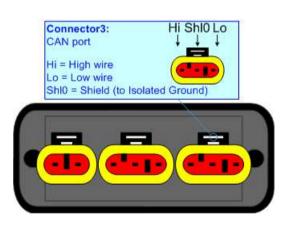
The connection of the CANopen in the HD67425-E7x-xx device must be made with a AMP SuperSeal 1.5 Male connector. The pinout of Female connector of the board is at right side of the page.

The termination of CANopen line, with a  $120\Omega$  resistor, in the HD67425-Exx-xx is made internally of the device; when the order is performed. If the device have the CANopen terminated the code is the follow: HD67425-Exx-Yx; otherwise is this other: HD67425-Exx-Nx.

# Connector3: Hi ShIOLo CAN port Hi = High wire Lo = Low wire ShI0 = Shield (to Isolated Ground)

## 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



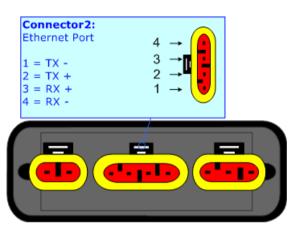
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## **ETHERNET:**

The connection of Ethernet in the HD67425 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.

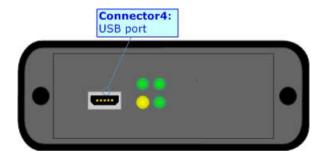
The connection of Ethernet in the HD67425-E4x-xx device must be made with RJ45 connector.

The connection of the Ethernet in the HD67425-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.



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## **USE OF COMPOSITOR SW67425:**

To configure the Converter, use the available software that runs with Windows called SW67425. It is downloadable on the site <a href="https://www.adfweb.com">www.adfweb.com</a> 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 SW67425, the window below appears (Fig. 2).



## Note:

It is necessary to have installed .Net Framework 4.

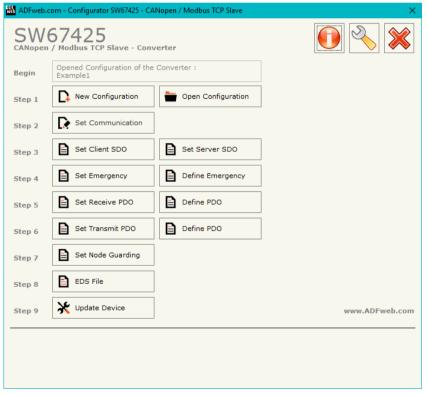


Figure 2: Main window for SW67425

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## **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 "CANopen / Modbus TCP Slave -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".

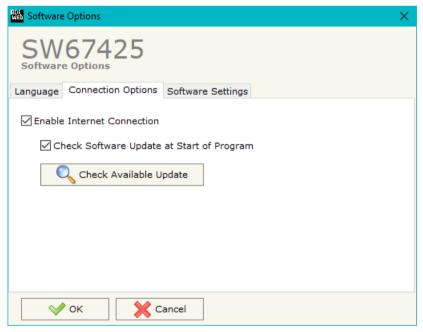


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## **SOFTWARE OPTIONS:**

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 SW67425 check automatically if there are updatings when it is launched.

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In the section "Software Settings", it is possible to enable/disable some keyboard's commands for an easier navigation inside the tables contained in the different sections of the software.

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INFO: www.adfweb.com P.

Phone +39,0438,30,91,31



## **SET COMMUNICATION:**

This section defines the fundamental communication parameters of two Buses, CANopen and Modbus TCP.

By pressing the "Set Communication" button from the main window for SW67425 (Fig. 2) the window "Set communication" appears (Fig. 3).

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

- In the field "Device ID" the ID of the CANopen side is defined;
- ★ In the field "Baud Rate" the data rate of the CANopen line 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 CANopen network is defined. I.e. If it is checked the board sends a command to set the Operational State of all the devices present in the network, after the time defined in the "Delay" field:
- ▼ In the field "Delay (s)" the delay before sending the "Start" command for the CANopen is defined;
- ▶ In the field "SDO Client TimeOut (1/10 ms)" the maximum time that the device attends for the answer from the Slave interrogated is defined;
- ▶ If the field "Set CANopen State on Modbus" is set, it is possible to send the Modbus command (sender word) of Operational/Pre-Operational State to one or all devices in CANopen network.

The sender word must have:

- The high byte with the value of 1 for Operational or 2 for Pre-Operational.
- The low byte must have the address of the device that is commanded to do the action (Operational/PreOperational), if you put zero all the devices present in CANopen network take the state setted;
  - Example if you want to set the state of Operational to the device CANopen with address 3. You must write the word "259" in the field "Add. Word Modbus". Note: 259=0x0103.
- In field "Add. Word Modbus" the address of Modbus register used for this operation is defined.

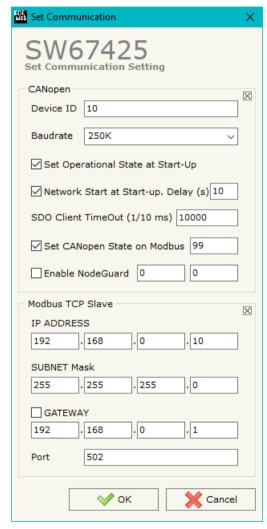


Figure 3: "Set Communication" window

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▶ If the field "Enable NodeGuard" is set, it is possible to enable the NodeGuard of CANopen Slave. The two fields (Modbus Address) are used to indicate which Modbus registers using to save the state of the CANopen device. Every bit represents a CANopen device, if the device is present, the bit is equal to 1 otherwise 0.

The means for the fields for "Modbus TCP Slave" are:

- ▶ In the field "IP Address", the IP address of the Modbus TCP side of the converter is defined;
- ▶ In the field "SubNet Mask" the SubNet Mask of the Modbus TCP side 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 field. This feature is used for going out of the net;
- ▶ In the field "Port" the port used for Modbus TCP communication is defined.

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#### **SET SDO CLIENT:**

By pressing the "Set SDO Client" button from the main window for SW67425 (Fig. 2) the window "SDO Client Access Definition" appears (Fig. 4).

The following objects can be defined in the section "Set SDO Client":

- → Which SDO of the CANopen are accessible from a Modbus TCP;
- Which word of the Modbus are accessible from a SDO of the CANopen.

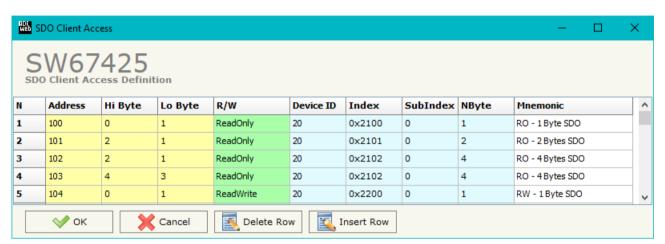


Figure 4: "SDO Client Access Definition" window

The data of the columns have the following meanings:

- ▶ In the field "Address", the Modbus register associated to the SDO is defined;
- ▶ In the field "Hi Byte", the correspondence between the Hi byte of the Modbus register and a SDO byte is defined (it can be set with 0, 1, 2, 3, 4);
  - 1 = First byte of the SDO;
  - o 2 = Second byte of the SDO;
  - 3 = Third byte of the SDO;
  - o 4 = Fourth byte of the SDO;
  - $\circ$  0 = No byte.
- → In the field "Lo Byte", the correspondence between the Lo byte of the Modbus register and a SDO byte is defined (it can be set with 0, 1, 2, 3, 4);
  - o 1 = First byte of the SDO;
  - o 2 = Second byte of the SDO;
  - 3 = Third byte of the SDO;
  - 4 = Fourth byte of the SDO;
  - $\circ$  0 = No byte.
- In the field "R/W", the type of SDO is defined (ReadOnly or ReadWrite);

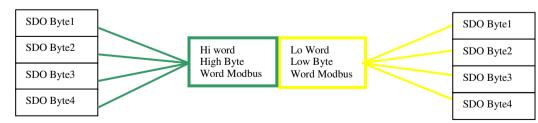


Figure 5: Scheme of the word configuration

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- ▶ In the field "Device ID", the ID of the CANopen device is defined;
- ▶ In the field "Index", the Index of the SDO is defined;
- ★ In the field "SubIndex", the SubIndex of the SDO is defined;
- → In the field "NByte", the dimension of the SDO is defined;
- ▶ In the field "Mnemonic", a description is defined.

## Example 1:

If you want to write data in the form of SDO in the CANopen from the Modbus network on the device at the address:

- Address 1;
- → Index 0x200A;
- → SubIndex 1;
- → By dimensions 2 bytes.

By the following word Modbus on the Gateway:

→ Address 0x1900.

In the above scenario:

The Modbus Master can read (note RW=0):

- → to the address Modbus of the Gateway (Note: the one specified in the "Set Communication");
- to the word Modbus 0x1900 (note: Address 0x1900);
- → the first byte of the SDO found in the low byte of the Modbus register (note: Lo Byte=1);
- → the second byte of the SDO found in high byte of the Modbus word (note: Hi Byte=2);

## The SDO:

- two byte dimension (note: NByte=2);
- → belonging to a CANopen device ID 1 (note: Device ID=1);
- ♦ of the following coordinates: Index 0x200A and SubIndex 1.

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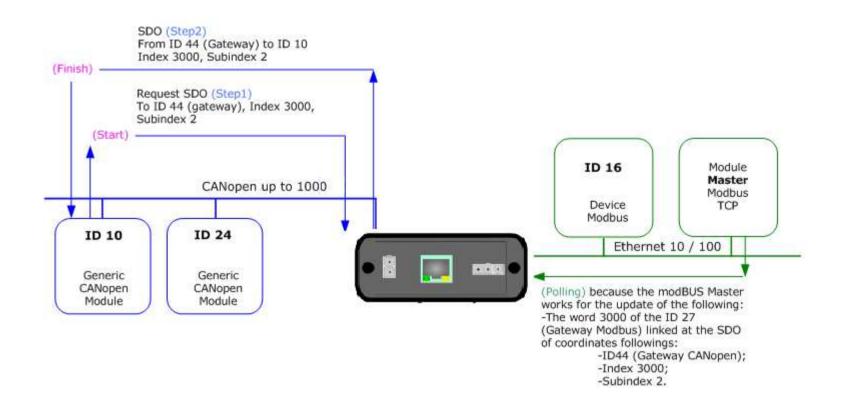


Figure 6: Chart of SDO request from Modbus side

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#### **SET SDO SERVER:**

By pressing the "**Set SDO Server**" button from the main window for SW67425 (Fig. 2) the window "SDO Server Access Definition" appears (Fig. 7).

The following objects can be defined in the section "Set SDO Server":

- Which SDO object are accessible from the other devices of the CANopen network and the Modbus registers to read/write this informations;
- → Which Modbus registers are accessible to read/write a SDO object.



Figure 7: SDO Server Access Definition

The data of the columns have the following meanings:

- → In the field "Address", the Modbus register associated to the SDO is defined;
- ▶ In the field "Hi Byte", the correspondence between the Hi byte of the Modbus register and a SDO byte is defined (it can be set with 0, 1, 2, 3, 4);
  - 1 = First byte of the SDO;
  - o 2 = Second byte of the SDO;
  - 3 = Third byte of the SDO;
  - o 4 = Fourth byte of the SDO;
  - $\circ$  0 = No byte.
- → In the field "Lo Byte", the correspondence between the Lo byte of the Modbus register and a SDO byte is defined (it can be set with 0, 1, 2, 3, 4);
  - o 1 = First byte of the SDO;
  - o 2 = Second byte of the SDO;
  - 3 = Third byte of the SDO;
  - $\circ$  4 = Fourth byte of the SDO;
  - $\circ$  0 = No byte.
- ▼ In the field "R/W", the type of SDO is defined (ReadOnly or ReadWrite);



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- → In the field "Index", the Index of the SDO is defined;
- → In the field "SubIndex", the SubIndex of the SDO is defined;
- → In the field "NByte", the dimension of the SDO is defined;
- → In the field "Mnemonic", a description is defined.

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## **SET EMERGENCY:**

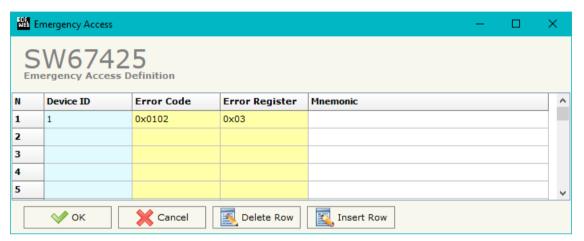


Figure 8: "Emergency Access Definition" window

By pressing the "Set Emergency" button from the Main Window for SW67425 (Fig. 2) the window "Emergency Access Definition" appears (Fig. 8).

- → In the field "Device ID", the Node ID of your CANopen device that transmit the EMCY is defined;
- → In the field "Error Code", the value of your error code (the maximum value is 0xFFFF) is defined;
- → In the field "Error Register", the value of your error register (the maximum value is 0xFF) is defined;
- → In the field "Mnemonic", a description is defined.

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#### **DEFINE EMERGENCY:**

By pressing the "Define Emergency" button from the main window for SW67425 (Fig. 2) the window "Define Modbus Registers for Emergency Frames" appears (Fig. 9):

- ♣ In the field "List of Emergency defined" there is the list of Emergency that you inserted in "Set Emergency" Section
- → In the field "List of Modbus Registers" there are the Modbus words.
- **▶** In the field "Create/Modify a Modbus Register" you can define the index of the Modbus registers and the bytes of the can frame that you map in.

## For example:

Click on the frame, insert the valid address in the field "Index of Modbus Register", select the byte position (Byte 1 in High Modbus byte and Byte 3 in Low Modbus byte), click the "Create" button, in the field "List of Modbus Registers" appears the new Modbus register created with the data that it contains.

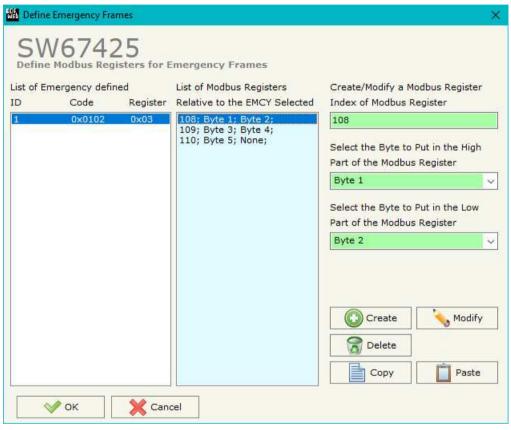


Figure 9: "Define Modbus Registers for Emergency Frames" window

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## **SET RECEIVE PDO:**

By pressing the "Receive COB" button from the main window for SW67425 (Fig. 2) the window "Receive CAN Frames Definition" appears (Fig. 10). In this section, it is possible to define the PDO frames that the converter will receive from CANopen network.

The window appears like below:

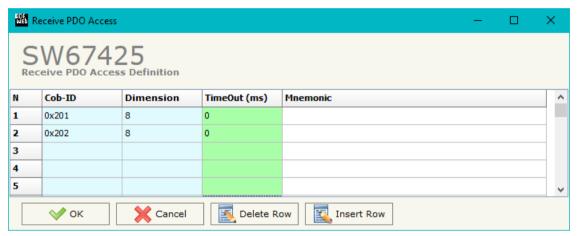


Figure 10: "Receive PDO Access Definition" window

- ▼ In the field "Dimension", the number of bytes of the PDO (the maximum dimension is 8 Bytes) is defined;
- → If the field "TimeOut" the TimeOut is defined; after the TimeOut defined, the value of the data of the PDO become "0";
- ▶ In the field "Mnemonic" a description of the frame is defined.

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#### **DEFINE PDO:**

By pressing the "**Define PDO**" button near "Set Receive PDO" from the main window for SW67425 (Fig. 2) the window "Define Modbus Registers for PDO Frames" appears (Fig. 11):

- → In the field "List of Receive CAN Frames" there is the list of PDO frames that you inserted in "Set Receive PDO" Section
- → In the field "List of Modbus Registers" there are the Modbus words.
- → In the field "Create/Modify a Modbus Register" you can define the index of the Modbus register and the bytes of the PDO frame that you map in.

## For example:

Click on the frame, insert the valid address in the field "Index of Modbus Register", select the byte position (Byte 1 in High Modbus byte and Byte 3 in Low Modbus byte), click the "Create" button, in the field "List of Modbus Registers" appears the new Modbus register created with the data that it contains.

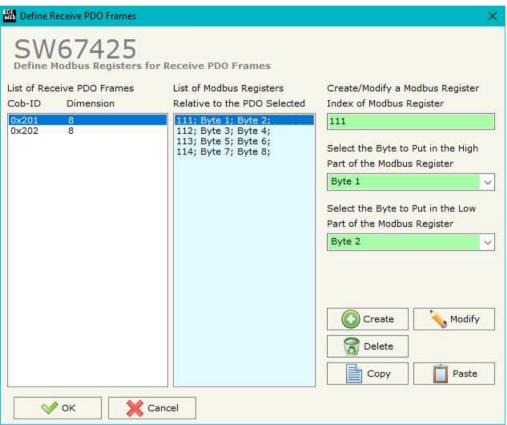


Figure 11: "Define COB" window

## **TRANSMIT COB:**

By pressing the "Set Transmit COB" button from the main window of SW67425 (Fig. 2) the window "Transmit CAN Frames Definition" appears (Fig. 12): in this section, it is possible to define the PDO frames that the converter will send to the CANopen network.

The window appears like below:

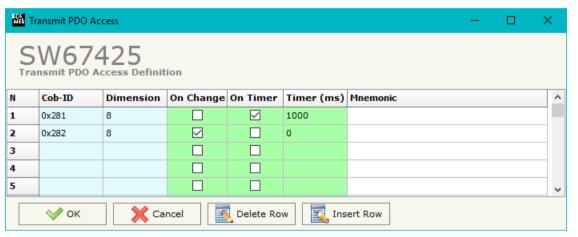


Figure 12: "Transmit PDO Access Definition" window

- In the field "Cob-ID", the Cob-ID of the PDO is defined;
- ▶ In the field "Dimension", the number of bytes of the PDO (the maximum dimension is 8 Bytes) is defined;
- ▶ If the field "On Change" is checked the CAN frame is sent when the data written from Modbus TCP side changes;
- → If the field "On Timer" is checked the CAN frame is sent cyclically;
- ▶ In the field "Timer (ms)" insert the cyclic delay;
- → In the field "Mnemonic", the description for the frame is defined.

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## **DEFINE PDO**

By pressing the "**Define COB**" button near "Set Transmit PDO" from the main window for SW67425 (Fig. 2) appears. The window "Define Modbus Registers for Transmit PDO Frames" appears (Fig. 13):

- → In the field "List of Transmit CAN Frames" there is the list of PDO that you inserted in "Set Transmit PDO" section.
- → In the field "List of Modbus Registers" there are the Modbus words.
- → In the field "Create/Modify a Modbus Register" you can define the index of the Modbus register and the bytes of the PDO frame where you write it.
- With the field "Send PDO frame on Modbus Write" it is possible to decide when to send the PDO frame. If a Modbus word has written "False "in this field, the PDO frame is not sent immediately but it is sent when another word that have this field "True" is written.

## For example:

Click on the frame, insert the valid address in the field "Index of Modbus Register", select the byte position (Byte 1 in High Modbus byte and Byte 2 in Low Modbus byte), click the "Create" button, in the field "List of Modbus Registers" appears the new Modbus register created.

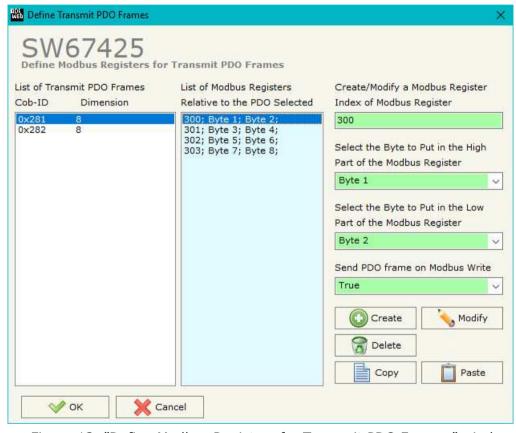


Figure 13: "Define Modbus Registers for Transmit PDO Frames" window

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## **SET NODE GUARDING**

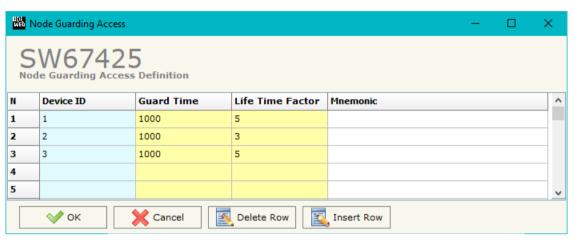


Figure 14: "Node Guarding Access Definition" window

By pressing the "Set Node Guarding" button from the Main Window of SW67425 (Fig. 2) the "Node Guarding Access Definition" window appears (Fig. 14).

- → In the field "Device ID", the address of the device that you want to control is defined. It is possible to insert up to 32 address;
- → In the field "Guard Time", the Guard Time is defined. This value indicates the delay between two interrogations;
- → In the field "Life Time Factor", the number of attempts before considering the device absent is defined;
- → In the field "Mnemonic", a description is defined.

## **EDS FILE:**

By Pressing the "EDS File" button from the main window for SW67425 (Fig. 2) it is possible to generate the EDS file to be imported into the CANopen Client.

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## **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.





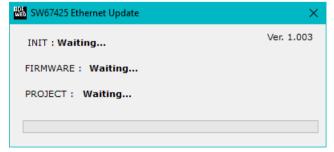


Figure 15: "Update Device" windows



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## 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 HD67425 device.



## Note:

When you receive the device, for the first time, you also have to update the Firmware in the HD67425 device.

Warning:

If Fig. 16 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;



Figure 16: "Protection" window

- ▶ 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 HD67425 you have to use the software "SW67425": <a href="www.adfweb.com\download\filefold\SW67425.zip">www.adfweb.com\download\filefold\SW67425.zip</a>.

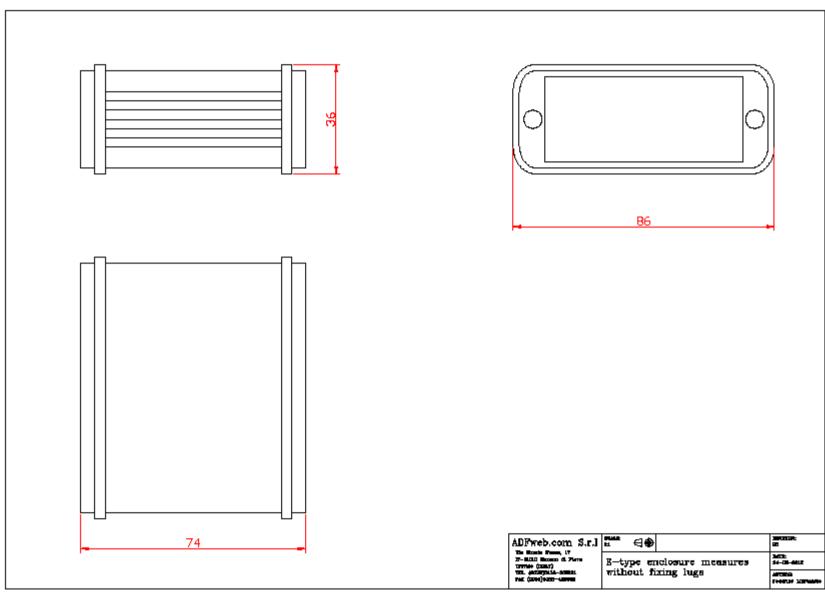
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*INFO:* <u>www.adfweb.com</u> *Phone* +39.0438.30.91.31

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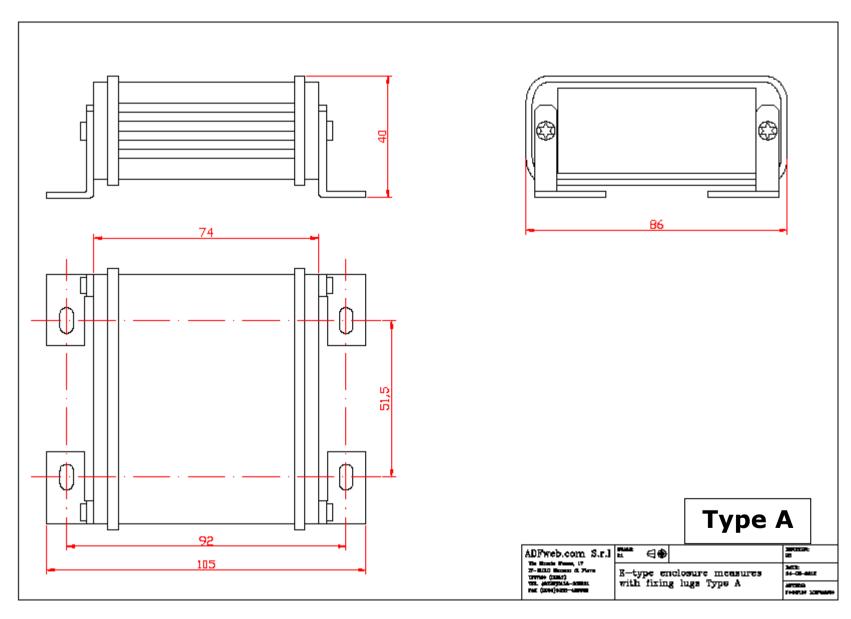
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## **MECHANICAL DIMENSIONS:**



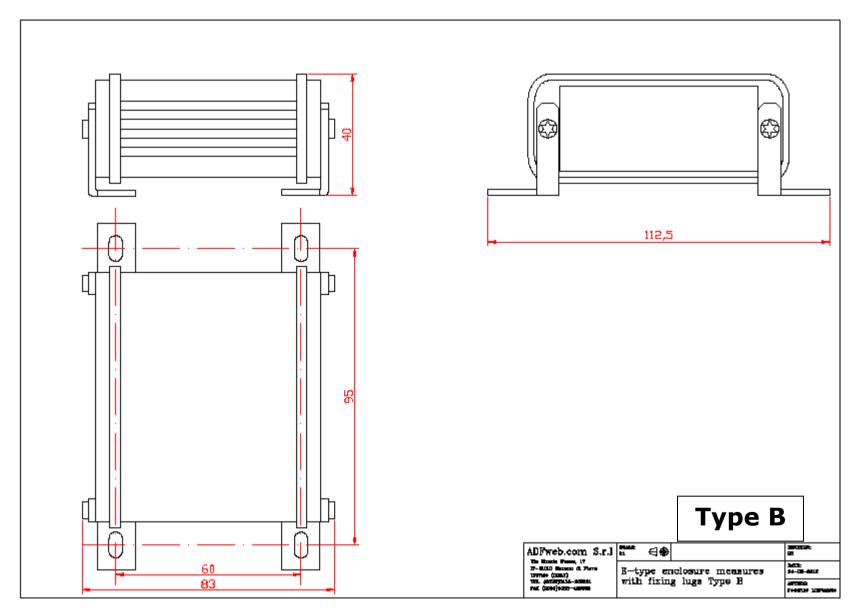


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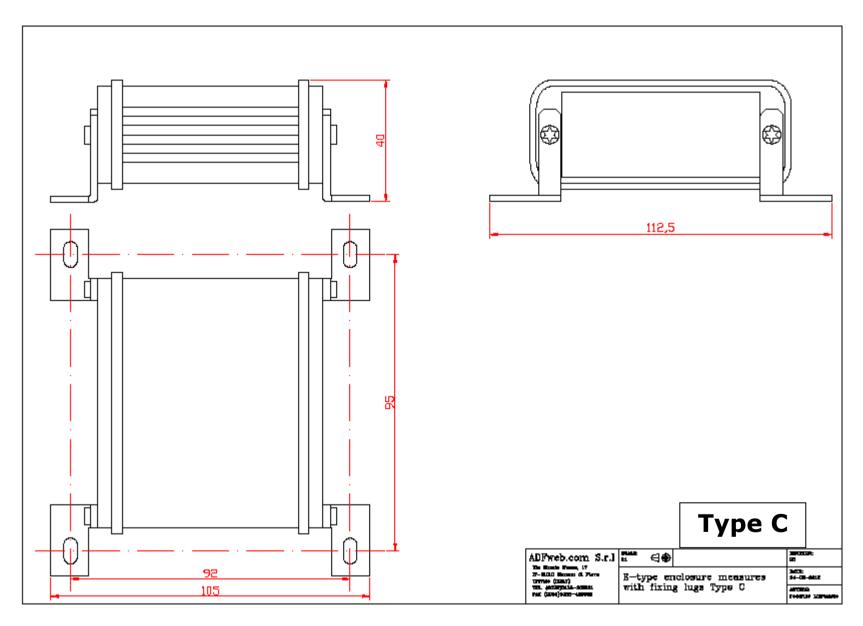
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Industrial Electronic Devices

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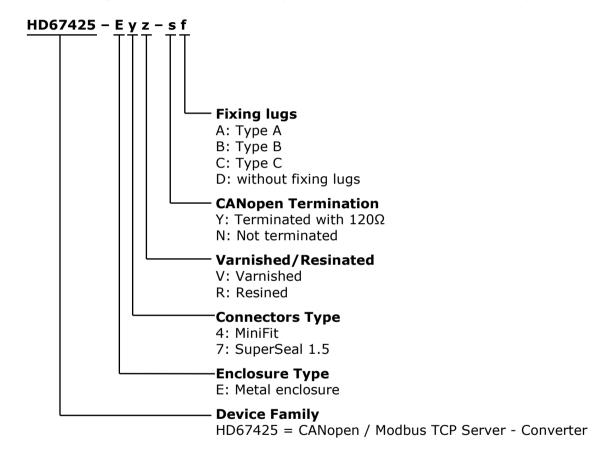


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## **ORDERING INFORMATIONS:**

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



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## **ACCESSORIES:**

Order Code: **AC34011** - Rail DIN - Power Supply 220/240V AC 50/60Hz - 12 V DC

Order Code: **AC34012** - Rail DIN - Power Supply 220/240V AC 50/60Hz - 24 V DC

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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## **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 **RoHS** electronic equipment (commonly referred to as Restriction of Hazardous Substances Directive or RoHS).

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## **CE MARKING**

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



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## **WARRANTIES AND TECHNICAL SUPPORT:**

For fast and easy technical support for your ADFweb.com SRL products, consult our internet support at <a href="www.adfweb.com">www.adfweb.com</a>. 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 <a href="https://www.adfweb.com">www.adfweb.com</a>. 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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