Industrial Electronic Devices

User Manual
Revision 1.000
English

IO-Link Slave / CANopen - Converter
(Order Code: HD67968-B2-IA, HD67968-B2-IB)

For Website information:
www.adfweb.com?Product=HD67968-B2

For Price information:
www.adfweb.com?Price=HD67968-B2-IA
www.adfweb.com?Price=HD67968-B2-IB

Benefits and Main Features:
⊕ Very easy to configure

⊕ Power Supply 18…35V DC and 8…24 V AC

⊕ Temperature range: -40°C/+85°C (-40°F/+185°F)

User Manual

For others IO-Link Slave products, see also the following links:

Converter IO-Link Slave to

www.adfweb.com?Product=HD67961	(Modbus Master)
www.adfweb.com?Product=HD67962	(Modbus Slave)
www.adfweb.com?Product=HD67964	(Modbus TCP Slave)
www.adfweb.com?Product=HD67965	(BACnet Master)
www.adfweb.com?Product=HD67966	(BACnet Slave)
www.adfweb.com?Product=HD67967	(CAN)
www.adfweb.com?Product=HD67969	(DeviceNet Master)
www.adfweb.com?Product=HD67970	(DeviceNet Slave)
www.adfweb.com?Product=HD67971	(EtherCAT Slave)
www.adfweb.com?Product=HD67973	(EtherNet/IP Master)
www.adfweb.com?Product=HD67974	(EtherNet/IP Slave)
www.adfweb.com?Product=HD67977	(J1939)
www.adfweb.com?Product=HD67978	(MQTT)
www.adfweb.com?Product=HD67979	(NMEA0183)
www.adfweb.com?Product=HD67980	(NMEA2000)
www.adfweb.com?Product=HD67983	(PROFINET Master)
www.adfweb.com?Product=HD67984	(PROFINET Slave)
www.adfweb.com?Product=HD67985	(S7comm)
www.adfweb.com?Product=HD67986	(SNMP Manager)
www.adfweb.com?Product=HD67987	(SNMP Agent)

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

ADFweb.com S.r.l.

INDEX:

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	15/12/2023	Ln	All	First release 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.

Industrial Electronic Devices

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.

Industrial Electronic Devices

EXAMPLE OF CONNECTION:

HD67968-B2

CONNECTION SCHEME:

Dip-Switch A:
-Dip1 – Functioning Mode

= Normal   = Boot

Connector1:
Power Supply port

1 = Supply for converter US, +24 V
2 = Not connected
3 = Ground reference US, 0 V
4 = C/Q, IO-Link channel
5 = Not connected

Led2:
Green
IO-Link comm.

Led1:
Green
Device state

Led3:
Green
CANopen comm.

Dip-Switch B:
-Dip1 – Termination CAN line

= Open   = 120 ohm

Led4:
Error state

Connector3:
Ethernet Port
(RJ45 Plug)

Connector2:
CANopen port (Isolated port)

L = Low wire
S = Shield (CAN Gnd)
H = High wire
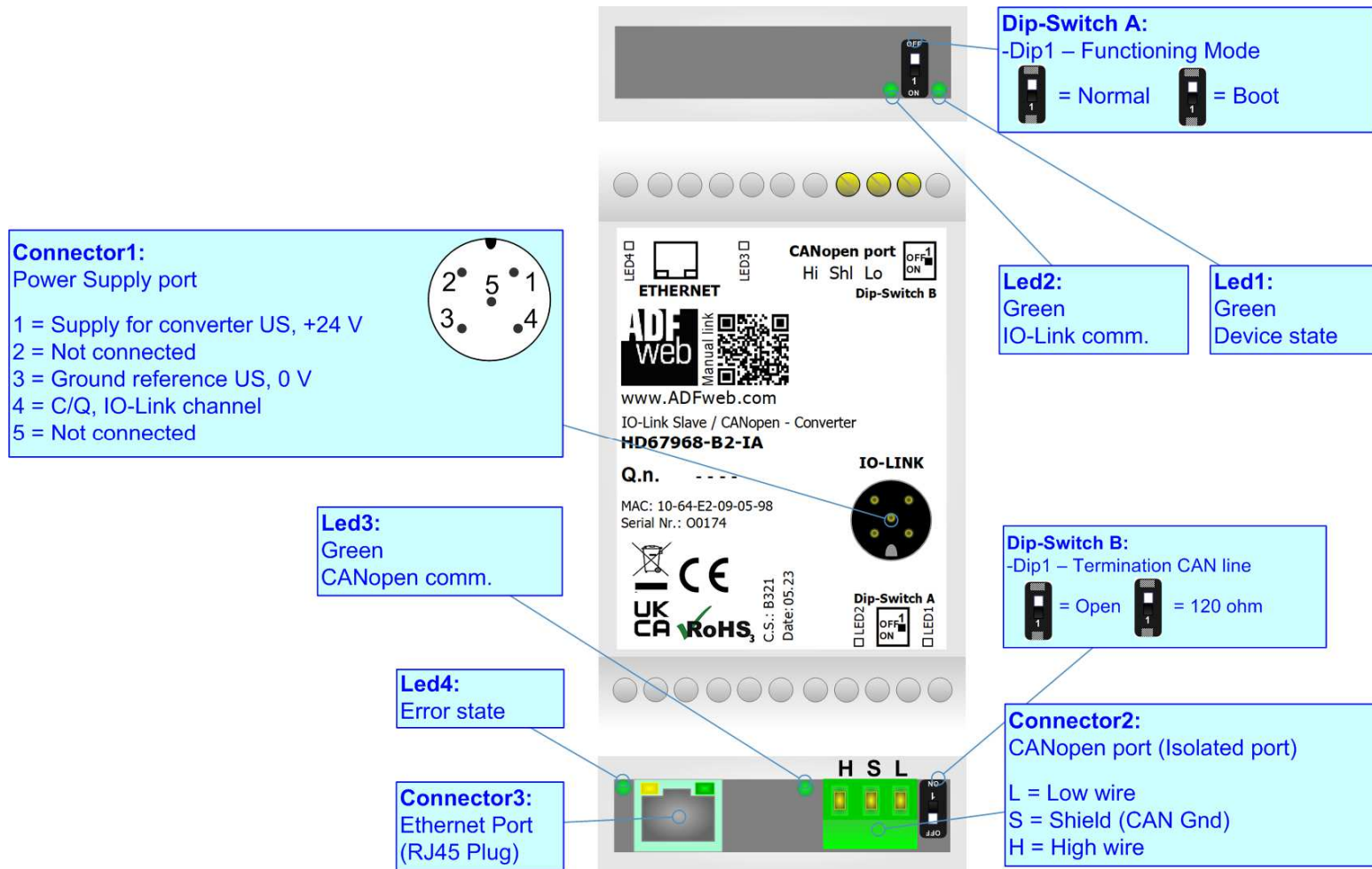
Figure 1a: Connection scheme for HD67968-B2-IA

Industrial Electronic Devices

Connector4:
Power supply for actuators UA (24 V DC)

+ = + 24 V DC
0V = Ground reference

Dip-Switch A:
-Dip1 – Functioning Mode

= Normal   = Boot

Connector1:
Power Supply port

1 = Supply for converter US, +24 V
2 = Supply for actuators UA, +24 V
3 = Ground reference US, 0 V
4 = C/Q, IO-Link channel
5 = Ground reference UA, 0 V

Led2:
Green
IO-Link comm.

Led1:
Green
Device state

Led5:
Green
UA supply
active

CANopen port
Hi Shl Lo
Dip-Switch B

ETHERNET

www.ADFweb.com

IO-Link Slave / CANopen - Converter
HD67968-B2-IB

Q.n.   - - - -

MAC: 10-64-E2-09-05-98
Serial Nr.: O0174
C.S.: B321
Date: 05.23

IO-LINK

UA Supply
0V   +

Dip-Switch A

Led3:
Green
CANopen comm.

Dip-Switch B:
-Dip1 – Termination CAN line

= Open   = 120 ohm

Led4:
Error state

H S L

Connector3:
Ethernet Port
(RJ45 Plug)

Connector2:
CANopen port (Isolated port)

L = Low wire
S = Shield (CAN Gnd)
H = High wire

Figure 1b: Connection scheme for HD67968-B2-IB

Industrial Electronic Devices

CHARACTERISTICS:

The HD67968-B2 is a IO-Link Slave / CANopen Converter.

It allows the following characteristics:

- Up to 1500 bytes in reading and 1500 bytes in writing;
- Mountable on 35mm Rail DIN;
- Two-directional information between CANopen and IO-Link;
- Possibility to have Class A or Class B version in relation to the order code;
- Wide temperature range: -40°C / 85°C [-40°F / +185°F].

CONFIGURATION:

You need Compositor SW67968 software on your PC in order to perform the following:

- Define the parameter of IO-Link line;
- Define the parameter of CANopen line;
- Define the Process Data and parameters of IO-Link side of the converter;
- Define the list of CANopen objects;
- Export the IODD file for the IO-Link Master;
- Update the device.
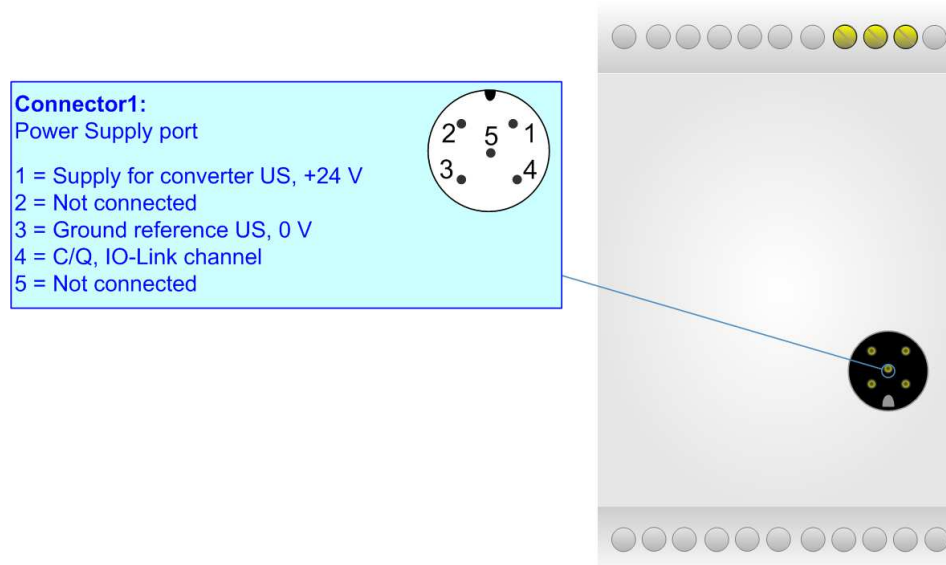
Industrial Electronic Devices

IO-LINK:

IO-Link is the first globally standardized IO technology (IEC 61131-9) that communicates from the controller down to the lowest automation level. This universally applicable interface is a fieldbus-neutral point-to-point connection which uses standard unshielded cables. IO-Link sends all the sensor and actuator signals to the controller and in turn carries controller data to the sensor/actuator level with revolutionary consequences.
It is possible to have IO-Link device of two different type: IO-Link Class A and IO-Link Class B. ADFweb.com's converters can manage both of them in relation to the product code selected.

In both cases, the power supply is taken directly from IO-Link interface and it has a maximum consumption of 2 W (80 mA).
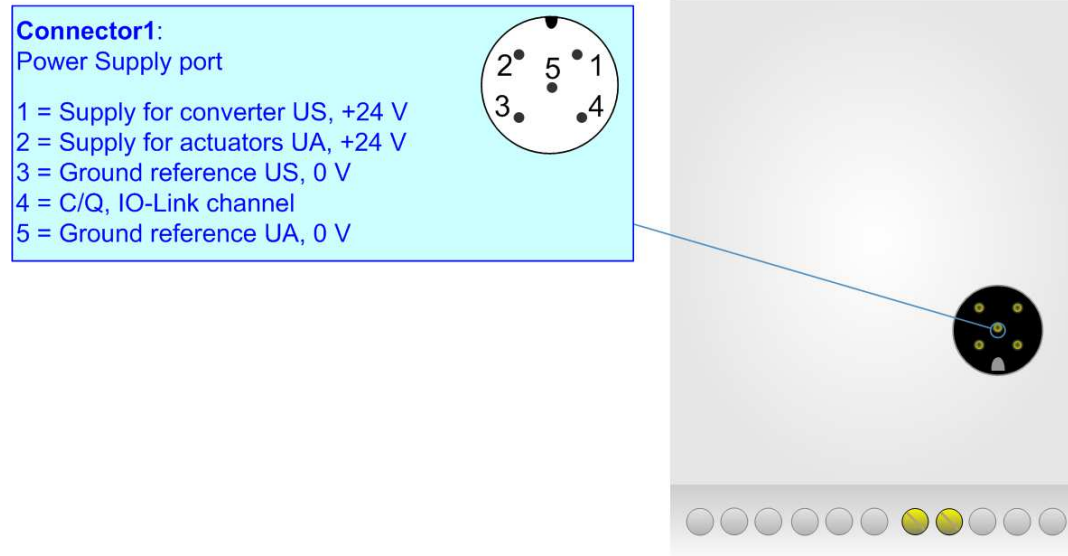
IO-LINK CLASS A:

IO-Link Class A devices uses 3 pins on connectors.

Connector1:
Power Supply port

1 = Supply for converter US, +24 V
2 = Not connected
3 = Ground reference US, 0 V
4 = C/Q, IO-Link channel
5 = Not connected

Industrial Electronic Devices

IO-LINK CLASS B:

IO-Link Class B devices uses 5 pins on connectors and they allow to provide an external auxiliary power UA to feed external actuators.

Connector1:
Power Supply port

1 = Supply for converter US, +24 V
2 = Supply for actuators UA, +24 V
3 = Ground reference US, 0 V
4 = C/Q, IO-Link channel
5 = Ground reference UA, 0 V

Industrial Electronic Devices

POWER SUPPLY FOR ACTUATORS UA (for IO-Link Class B):

The Power Supply for actuators UA is used to provide an additional power supply and it is available just for Class B version.
The output voltage is typically to 24 V DC, but it can arrive up to 35 V DC. The maximum current that can pass is 1 A.

Industrial Electronic Devices
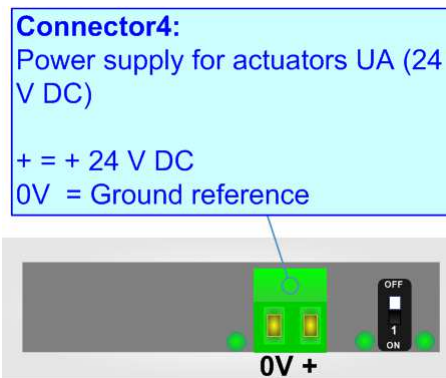
FUNCTION MODES:

The device has got two functions mode depending of the position of the 'Dip1 of Dip-Switch A':

- The first, with 'Dip1 of Dip-Switch A' at "OFF" position, is used for the normal working of the device.
- The second, with 'Dip1 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.
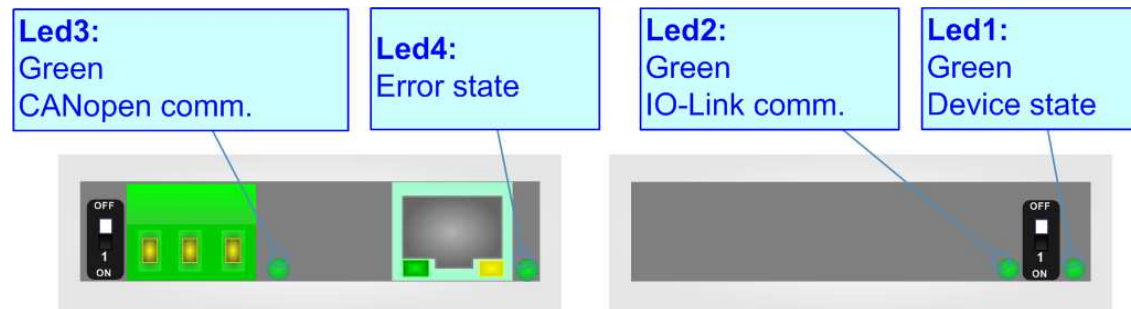
According to the functioning mode, the LEDs will have specifics functions, see 'LEDS' section.

Industrial Electronic Devices
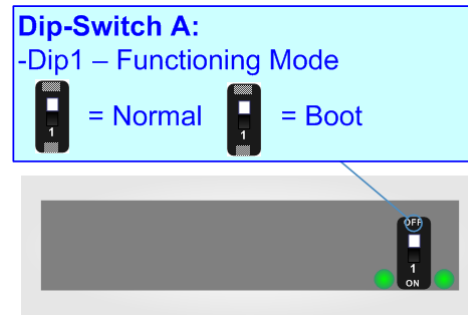
LEDS:

The device has got five 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	Blinks slowly (~1Hz)	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
2: IO-Link communication	**OFF:** IO-Link power supply not present **ON:** IO-Link power supply OK, but no communication **Blinking:** IO-Link powered and communicating	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
3: CANopen communication	It blinks when CANopen message is received	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
4: Error state	**OFF:** no errors **ON:** at least one CANopen request has not correct response from network	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
5: UA supply active (only for Class B version)	**OFF:** UA power supply not present **ON:** UA power supply present	**OFF:** UA power supply not present **ON:** UA power supply present

Led3:
Green
CANopen comm.

Led4:
Error state

Led2:
Green
IO-Link comm.

Led1:
Green
Device state

ETHERNET:

The Ethernet port is used for programming the device.

The Ethernet connection must be made using Connector3 of HD67968-B2 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 is recommended the use of a cross cable.
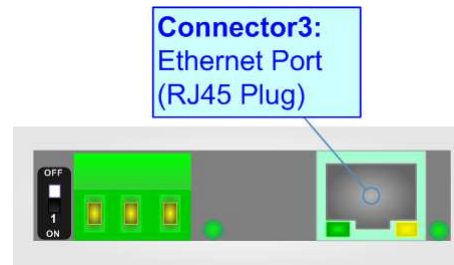
USE OF COMPOSITOR SW67968:

To configure the Converter, use the available software that runs with Windows called SW67968. It is downloadable on the site www.adfweb.com and its operation is described in this document. The software works with MS Windows (XP, Vista, Seven, 8, 10 or 11; 32/64bit).

When launching the SW67968, the window below appears (Fig. 2).

Note:
It is necessary to have installed .Net Framework 4.


Figure 2: Main window for SW67968

Industrial Electronic Devices

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 "IO-Link Slave / 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**".

Industrial Electronic Devices
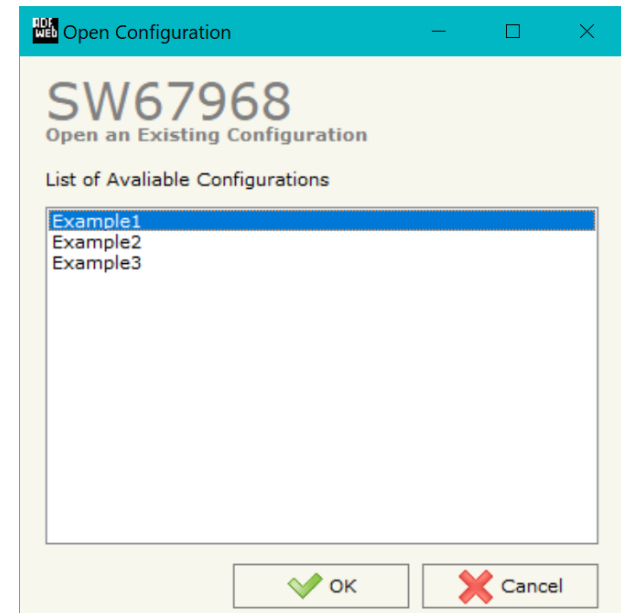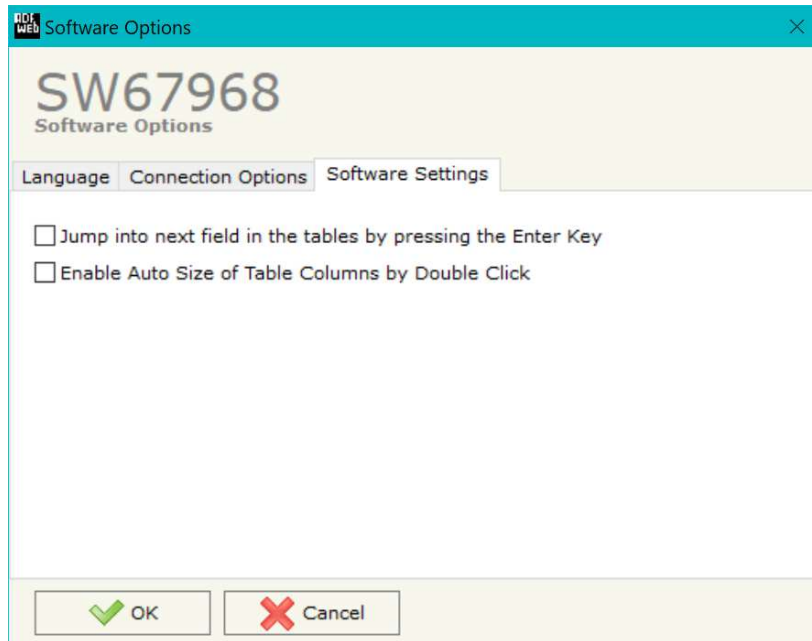
SOFTWARE OPTIONS:

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.
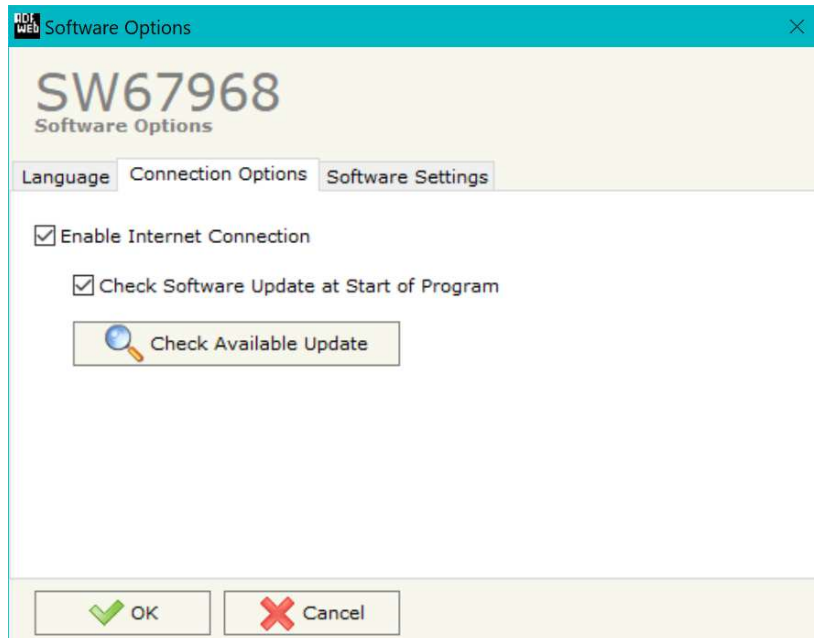
In the section "Connection Options", it is possible to check if there are some updatings of the software compositor in ADFweb.com website.
Checking the option "**Check Software Update at Start of Program**", the SW67968 check automatically if there are updatings when it is launched.

SW67968

Software Options

Language | Connection Options | Software Settings

☐ Jump into next field in the tables by pressing the Enter Key

☐ Enable Auto Size of Table Columns by Double Click

✔ OK   ✖ Cancel

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.

Industrial Electronic Devices

SET COMMUNICATION:

This section define the fundamental communication parameters of two buses, IO-Link and CANopen.

By Pressing the "**Set Communication**" button from the main window for SW67968 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The means of the fields for "Ethernet Connection" are:

- In the field "**Device Name (Hostname)**" the Hostname to assign to the converter is defined;
- If the field "**Obtain an IP Address Automatically (DHCP for Cable Connection)**" is checked, DHCP for LAN connection is enabled;
- If the field "**Enable DNS**" is checked, DNS protocol is enabled;
- In the field "**Primary DNS**" the IP Address of the primary DNS server is defined;
- In the field "**Secondary DNS**" the IP Address of the secondary DNS server is defined.

The means of the fields for "IO-Link Slave" are:

- In the field "**Baudrate**" the standard baudrate used by the IO-Link interface is defined.

The means of the fields for "CANopen" are:

- In the field "**ID Device**" the ID for CANopen side is defined;
- In the field "**Baudrate**" the data rate for 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 Preoperational;
- 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 of all the devices present in the network;
- In the field "**Delay (s)**" the delay before sending the "Start" command for the CANopen is defined;
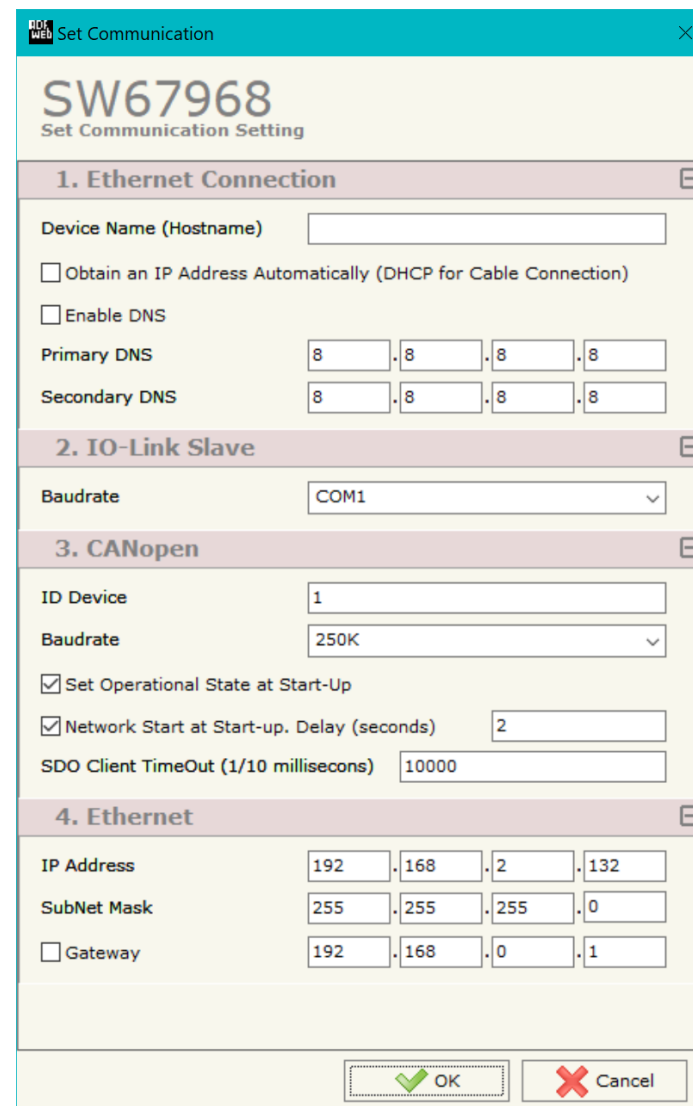
Figure 3: "Set Communication" window

+ If the field "**SDO Client TimeOut (1/10 ms)**" insert a time. It is the maximum time that the device attends for the answer from the Slave interrogated.

The means of the fields for the "Ethernet" section 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 net is defined. This feature can be enabled or disabled pressing the Check Box field. This feature is used for going out of the net;

ADF web

Industrial Electronic Devices

IO-LINK SET ACCESS:

By Pressing the "**IO-Link Set Access**" button from the main window for SW67968 (Fig. 2) the window "IO-Link Slave Set Access" appears (Fig. 4).
This section is used to define the Process Data and the variables where mapping the data read/written from/to the CANopen.
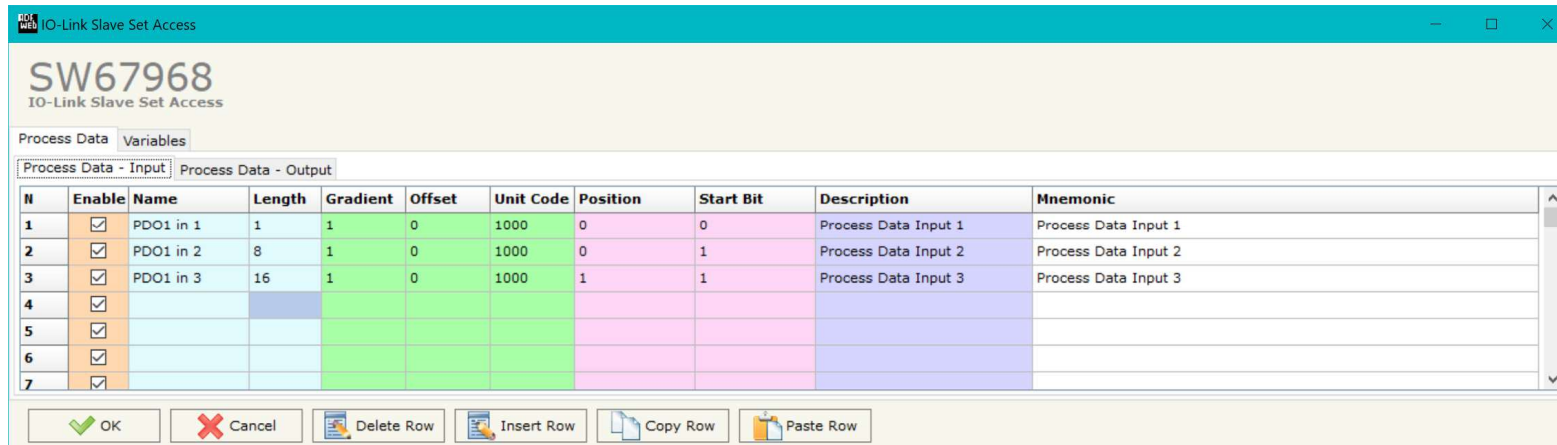
PROCESS DATA

Figure 4a: "IO-Link Slave Set Access → Process Data" window

The means of the fields are:

- If the field "**Enable**" is checked, the IO-Link variable is enabled;
- In the field "**Name**" the name of the IO-Link variable is defined;
- In the field "**Lenght**" the dimension in bit of the variable is defined;
- In the field "**Gradient**" the gradient of the variable is defined;
- In the field "**Offset**" the offset of the variable is defined;
- In the field "**Unit Code**" the unit for the variable is defined;
- In the field "**Position**" the starting byte of the internal memory array where placing the data is defined;
- In the field "**Start Bit**" the starting bit of the selected Position where mapping the data is defined;
- In the field "**Description**" the description of the variable is defined;
- In the field "**Mnemonic**" a note is defined.

Industrial Electronic Devices

VARIABLES

Figure 4b: "IO-Link Slave Set Access → Variables" window

The means of the fields are:

- If the field "**Enable**" is checked, the IO-Link variable is enabled;
- In the field "**Index**" the index of the variable is defined (typically it starts from 64);
- In the field "**Name**" the name of the IO-Link variable is defined;
- In the field "**Access**" the access type is defined;
- In the field "**Lenght**" the dimension in bit of the variable is defined;
- In the field "**Gradient**" the gradient of the variable is defined;
- In the field "**Offset**" the offset of the variable is defined;
- In the field "**Unit Code**" the unit for the variable is defined;
- In the field "**Default Value**" the default value at the start-up is defined;
- In the field "**Position Read**" the starting byte of the internal memory array where placing the data read is defined;
- In the field "**Start Bit Read**" the starting bit of the selected Position where mapping the data is defined;
- In the field "**Position Write**" the starting byte of the internal memory array where placing the data written is defined;
- In the field "**Start Bit Write**" the starting bit of the selected Position where mapping the data is defined;
- In the field "**Description**" the description of the variable is defined;
- In the field "**Mnemonic**" a note is defined.

SET SDO SERVER:

By pressing the "**Set SDO Server**" button from the main window for SW67968 (Fig. 2) the window "Set SDO Server Access" appears (Fig. 5).

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 IO-Link. The second is used to write, using SDO, the data that will be sent to the IO-Link.

The data of the columns have the following meanings:

Figure 5: "Set SDO Server Access" window

- In the field "**Index**" the address of the SDO is defined;
- In the field "**SubIndex**" the second address of the SDO 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 internal memory arrays where read/write first byte of the SDO;
- In the field "**Address Byte2**" insert the address of the internal memory arrays where read/write second byte of the SDO (only if N Byte is 2 or 4);
- In the field "**Address Byte3**" insert the address of the internal memory arrays where read/write third byte of the SDO (only if N Byte is 4);
- In the field "**Address Byte4**" insert the address of the internal memory arrays where read/write fourth byte of the SDO (only if N Byte is 4);
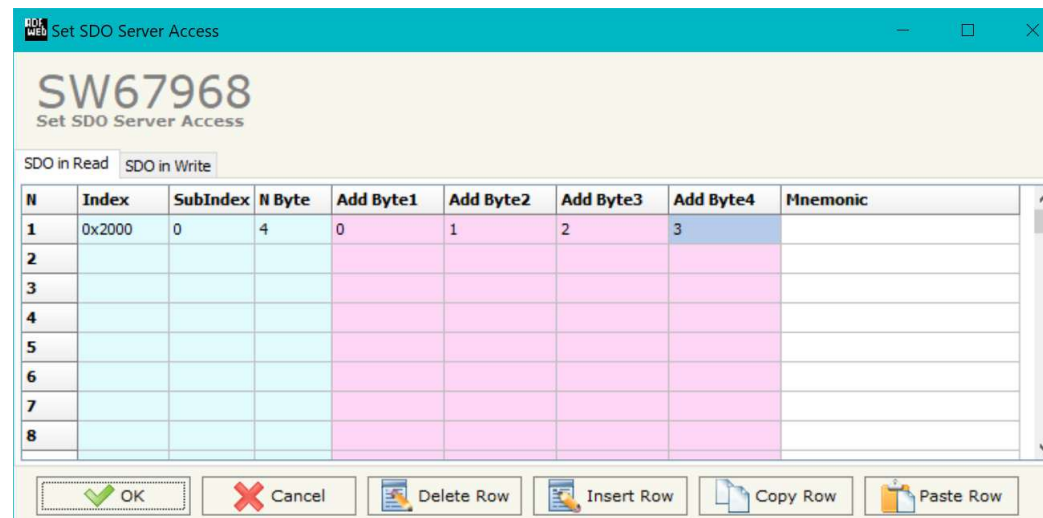- In the field "**Mnemonic**" the description for the SDO is defined.

Industrial Electronic Devices

SET SDO CLIENT:

By pressing the "**Set SDO Client**" button from the main window for SW67968 (Fig. 2) the window "Set SDO Client Access" appears (Fig. 6a and 6b).

With the SDO Client the HD67968 Gateway can read and/or write the data from other devices connected in the network CANopen.

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 them in the internal memory array. The second part is used to write, using the SDO, the data present in the internal memory array to others CANopen devices.

The data of the columns in the "SDO Read" have the following meanings:

- In the field "**Device ID**" insert the ID of the device to read;
- In the field "**Index**" the address for the SDO is defined;
- In the field "**SubIndex**" the second address for the SDO is defined;
- In the field "**N Byte**" the dimension of the SDO is defined (it can be 1, 2, or 4);
- In the field "**Poll Time**" insert the cyclic time to make this request;
- In the field "**Address Byte1**" the address of the internal memory array where coping the first byte of the SDO read is defined;
- In the field "**Address Byte2**" the address of the internal memory array where coping the second byte of the SDO read is defined (only if N Byte is 2 or 4);
- In the field "**Address Byte3**" the address of the internal memory array where coping the third byte of the SDO read is defined (only if N Byte is 4);
- In the field "**Address Byte4**" the address of the internal memory array where coping the fourth byte of the SDO read is defined (only if N Byte is 4);
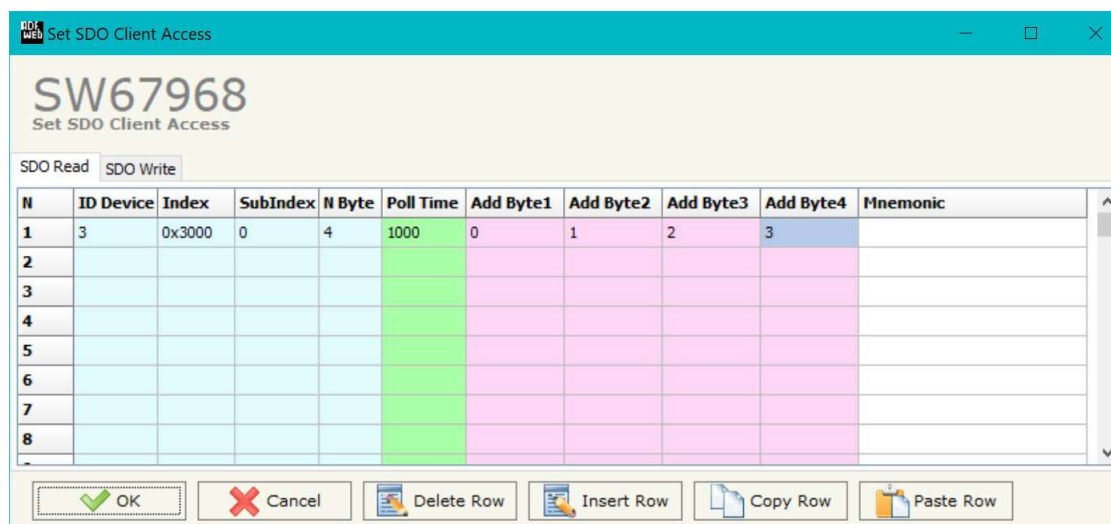- In the field "**Mnemonic**" the description for the SDO is defined.

Figure 6a: "Set SDO Client Access – SDO Read" window

The data of the columns in the "SDO Write" have the following meanings:

➤ In the field "**Device ID**" insert the ID of the device to write;

➤ In the field "**Index**" the address for the SDO is defined;

➤ In the field "**SubIndex**" the second address for the SDO is defined;

➤ In the field "**N Byte**" the dimension of the SDO is defined (it can be 1, 2, or 4);

➤ In the field "**Poll Time**" insert the cyclic time to make this request;

➤ If the field "**On Change**" is checked, the gateway sends the Write SDO request when the data change the value;

Figure 6b: "Set SDO Client Access – SDO Write" window

➤ In the field "**Address Byte1**" the address of the internal memory array where reading the first byte of the SDO write is defined;

➤ In the field "**Address Byte2**" the address of the internal memory array where reading the second byte of the SDO write is defined (only if N Byte is 2 or 4);

➤ In the field "**Address Byte3**" the address of the internal memory array where reading the third byte of the SDO write is defined (only if N Byte is 4);

➤ In the field "**Address Byte4**" the address of the internal memory array where reading the fourth byte of the SDO write is defined (only if N Byte is 4);

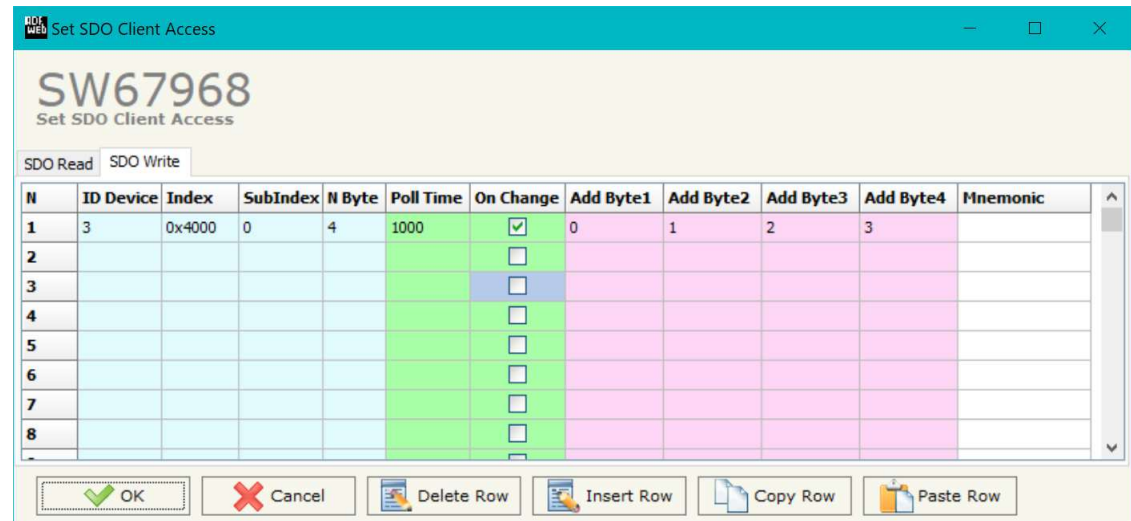➤ In the field "**Mnemonic**" the description for the SDO is defined.

Industrial Electronic Devices

SET PDO ACCESS:

By pressing the "**Set PDO Access**" button from the main window for SW67968 (Fig. 2) the window "Set PDO Access" appears (Fig. 7a and 7b).

This window is made to create the Receive and the Transmit PDO in the CANopen side, and to indicate which bytes are associated to these PDO.
It is divided in two parts, the " Receive PDO" and the " Transmit PDO ". The first part is used to receive PDO in the CANopen network and copy the data in the internal memory array. The second part is used to transmit PDO in the CANopen network with the data of internal memory array.

The data of the columns in the "Receive PDO" have the following meanings:

- In the Field "**Cob-ID**" the address for the PDO is defined;
- In the Field "**Dimension**" the dimension of the PDO is defined (it can be between 1 and 8);
- In the Field "**Add B1**" the first byte where the data will be saved in the internal memory array is defined;
- In the Field "**Add B2**" the second byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 1);
- In the Field "**Add B3**" the third byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 2);

Figure 7a: "Set PDO Access – Receive PDO" window

- In the Field "**Add B4**" the fourth byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 3);
- In the Field "**Add B5**" the fifth byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 4);
- In the Field "**Add B6**" the sixth byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 5);
- In the Field "**Add B7**" the seventh byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 6);
- In the Field "**Add B8**" the eighth byte where the data will be saved in the internal memory array is defined (only if **Dimension** > 7);
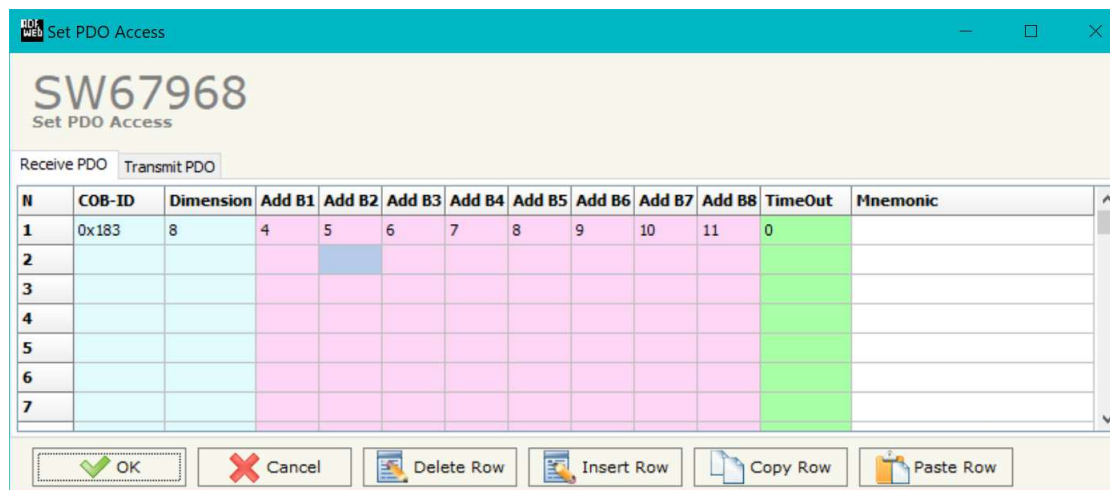
Industrial Electronic Devices

- ✦ The field "**TimeOut**" is used for put at zero the data into IO-Link if the PDO doesn't arrive with a frequency less than the time expressed in the field. If the value in the field is 0, it means that you don't want to use this feature, and so the value is never deleted;
- ✦ In the field "**Mnemonic**" the description for the PDO is defined.

The data of the columns in the "Transmit PDO" have the following meanings:

- ✦ In the Field "**Cob-ID**" the address for the PDO is defined;
- ✦ In the Field "**Dimension**" the dimension of the PDO is defined (it can be between 1 and 8);
- ✦ In the Field "**Add B1**" the first byte where the data will be loaded in the internal memory array is defined;
- ✦ In the Field "**Add B2**" the second byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 1);
- ✦ In the Field "**Add B3**" the third byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 2);

Figure 7b: "Set PDO Access – Transmit PDO" window

- ✦ In the Field "**Add B4**" the fourth byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 3);
- ✦ In the Field "**Add B5**" the fifth byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 4);
- ✦ In the Field "**Add B6**" the sixth byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 5);
- ✦ In the Field "**Add B7**" the seventh byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 6);
- ✦ In the Field "**Add B8**" the eighth byte where the data will be loaded in the internal memory array is defined (only if **Dimension** > 7);
- ✦ In the Field "**Send Time** " insert the interval used to send the PDO. The time is in milliseconds;
- ✦ If the field "**On Change**" is checked, the gateway send the Transmit PDO when the data change the value;
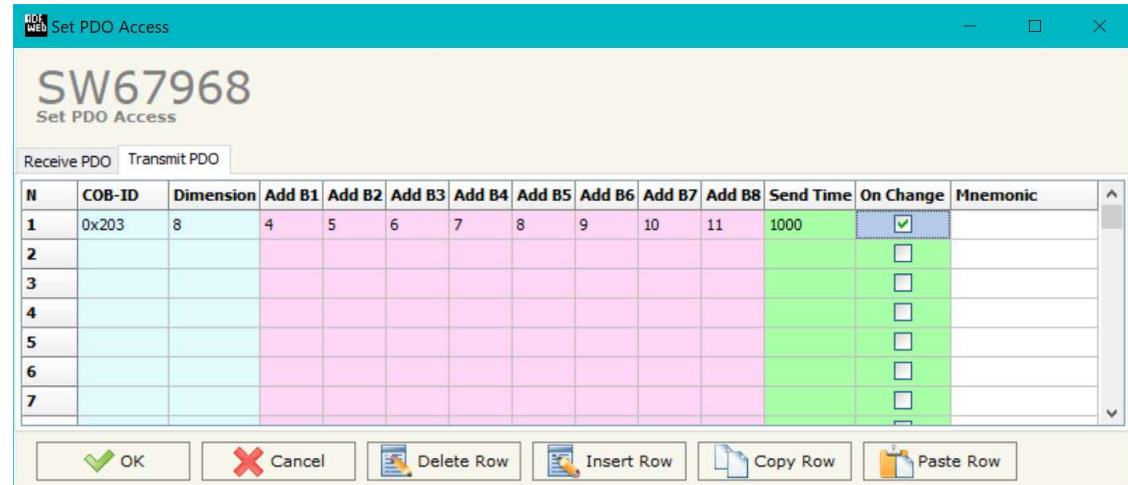- ✦ In the field "**Mnemonic**" the description for the PDO is defined.

IO-LINK IODD FILE:

By pressing the "**IO-LINK IODD FILE**" button it is possible to save the IODD file for the IO-Link Master.

ADF web
Industrial Electronic Devices

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. This by using the Ethernet port.

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

- Turn OFF the Device;
- Put Dip1 of 'Dip-Switch A' in ON position;
- Turn ON the device
- Connect the Ethernet cable;
- Insert the IP "**192.168.2.205**";
- 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 Dip1 of 'Dip-Switch A' in 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;
- 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.

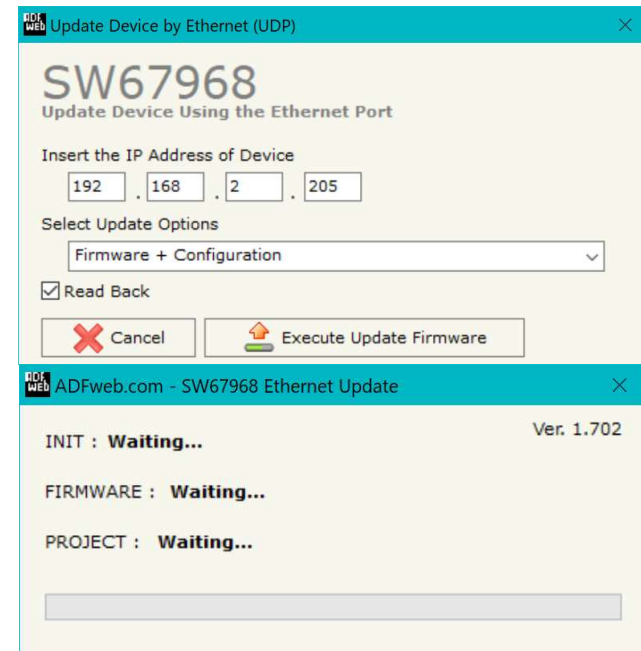At this point the configuration/firmware on the device is correctly updated.

Figure 8: "Update device" windows

ADFweb.com S.r.l.

![ADFweb logo]
Industrial Electronic Devices

Note:
When you receive the device, for the first time, you also have to update the Firmware in the HD67968 device.

Warning:
If Fig. 9 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, 10 or 11 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 or 11 you have to launch the "Command Prompt" with Administrator Rights;
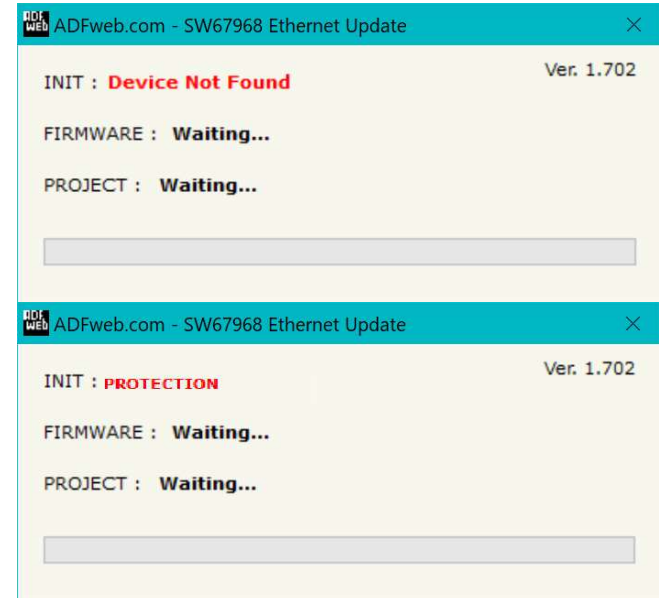
➤ Pay attention at Firewall lock.

Figure 9: "Error" window

Warning:
In the case of HD67968 you have to use the software "SW67968": www.adfweb.com\download\filefold\SW67968.zip.

![ADFweb logo]
Industrial Electronic Devices

MECHANICAL DIMENSIONS:
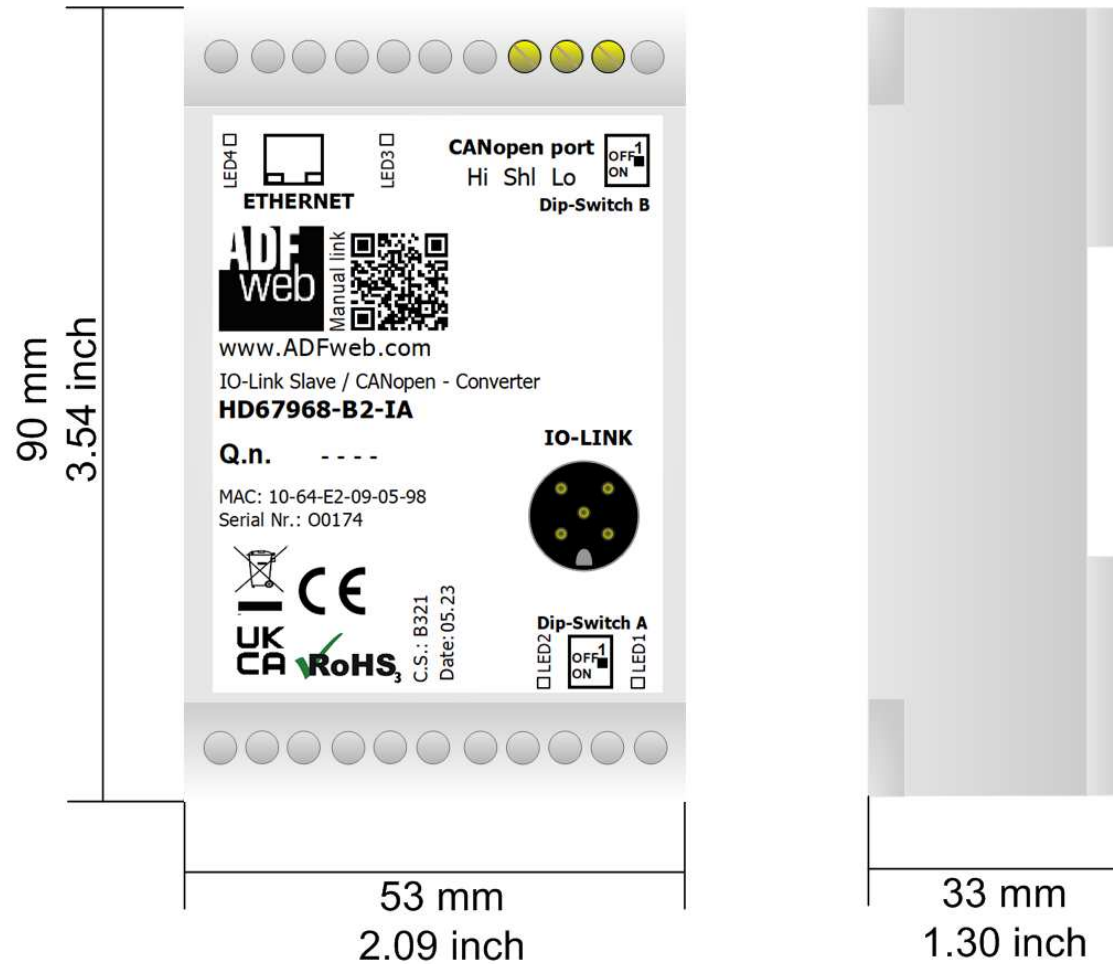
Figure 10: Mechanical dimensions scheme for HD67968-B2-Ix

Industrial Electronic Devices

ORDERING INFORMATIONS:

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

HD67968 – B 2 – Ix

IO-Link Class
A: Class A
B: Class B

Connectors Type
2: Fixed Screw Terminal

Enclosure Type
B: Modulbox 3M, 35mm DIN Rail mounting

Device Family
HD67968: IO-Link Slave / CANopen - Converter
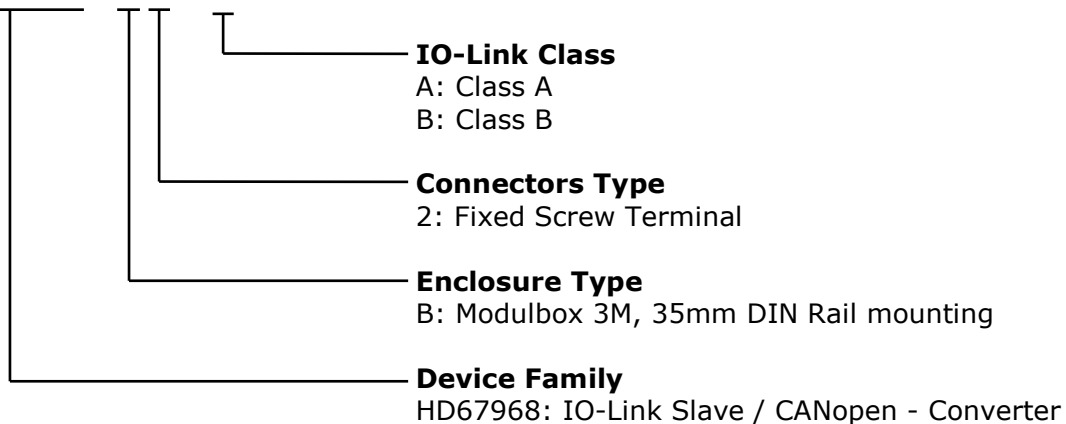
Order Code: **HD67968-B2-IA**   -   IO-Link Slave / CANopen – Converter (Class A)

Order Code: **HD67968-B2-IB**   -   IO-Link Slave / CANopen – Converter (Class B)

Industrial Electronic Devices

DISCLAIMER:

All technical content within this document can be modified without notice. The content of the document is a under continual renewal.
For losses due to fire, earthquake, third party access or other accidents, or intentional or accidental abuse, misuse, or use under abnormal conditions repairs are charged to the user. ADFweb.com S.r.l. will not be liable for accidental loss of use or inability to use this product, such as loss of business income. ADFweb.com S.r.l. shall not be liable for consequences of improper use.

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.

ADFweb.com S.r.l.

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.

ADFweb.com S.r.l.
Via Strada Nuova, 17
IT-31010 Mareno di Piave
TREVISO (Italy)
Phone +39.0438.30.91.31
Fax +39.0438.49.20.99
www.adfweb.com