

User Manual

Revision 1.000
English

PROFIBUS Master / MQTT - Converter

(Order Code: HD67950-B2)

For Website information:

www.adfweb.com?Product=HD67950-B2

For Price information:

www.adfweb.com?Price=HD67950-B2

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 MQTT products, see also the following links:

Converter MQTT to

www.adfweb.com?Product=HD67747
www.adfweb.com?Product=HD67774
www.adfweb.com?Product=HD67910
www.adfweb.com?Product=HD67930
www.adfweb.com?Product=HD67931
www.adfweb.com?Product=HD67932
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www.adfweb.com?Product=HD67955
www.adfweb.com?Product=HD67B19
www.adfweb.com?Product=HD67B42
www.adfweb.com?Product=HD67C70

(IEC61850 Server)
 (IEC61850 Client)
 (HART)
 (Ethernet)
 (M-Bus)
 (Serial)
 (Modbus Master)
 (Modbus Slave)
 (Modbus TCP Master)
 (Modbus TCP Slave)
 (BACnet Master)
 (BACnet Slave)
 (CAN)
 (CANopen)
 (DALI)
 (DeviceNet Master)
 (DeviceNet Slave)
 (DMX)
 (EtherNet/IP Slave)
 (J1939)
 (KNX)
 (NMEA 0183)
 (NMEA 2000)
 (PROFIBUS Slave)
 (PROFINET)
 (SNMP Manager)
 (SNMP Agent)
 (EtherNet/IP Master)
 (OPC UA Client)
 (OPC UA Server)
 (EnOcean)

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

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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	05/12/2019	Ff	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.

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:

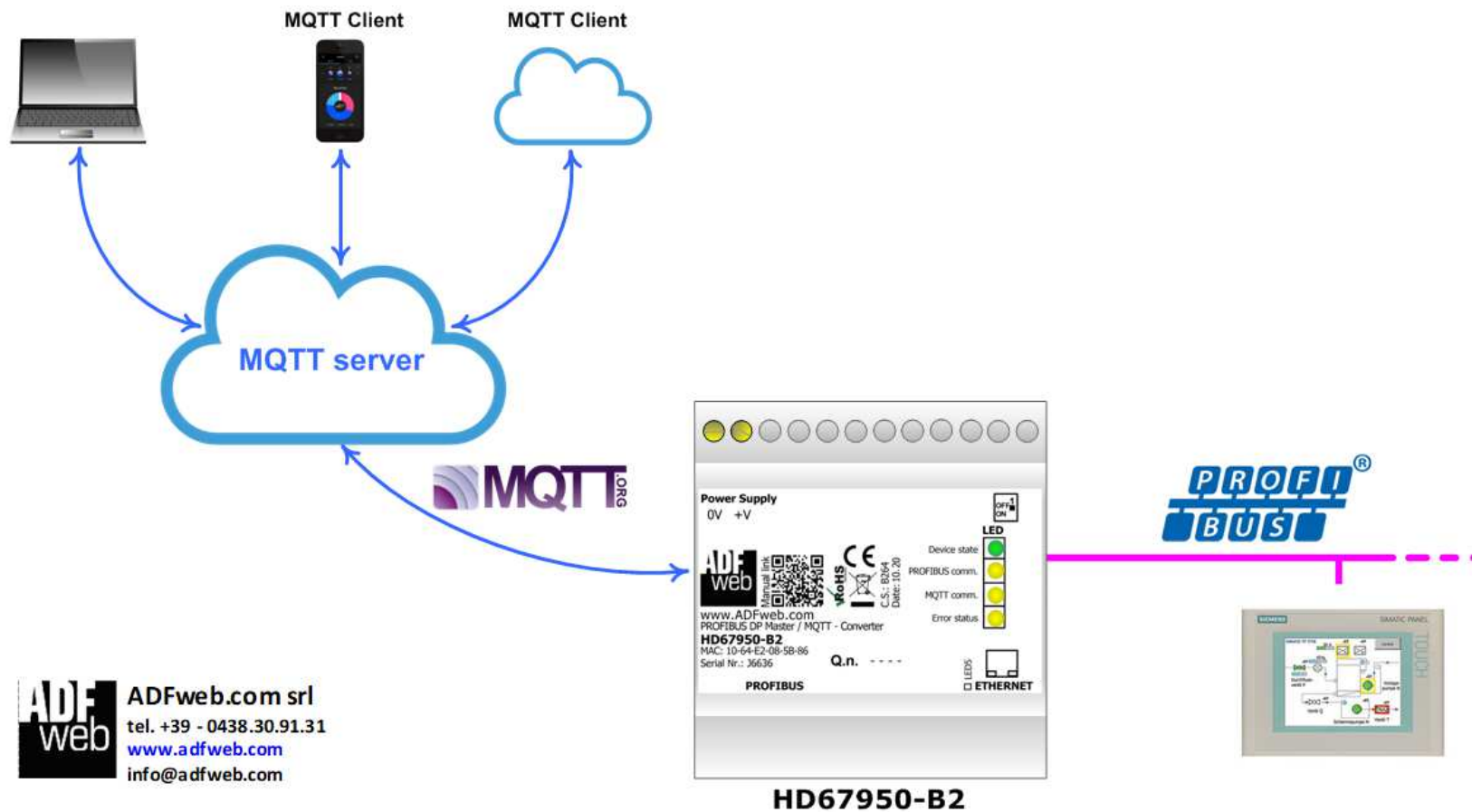


This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

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:



ADFweb ADFweb.com srl
 tel. +39 - 0438.30.91.31
 www.adfweb.com
 info@adfweb.com

CONNECTION SCHEME:

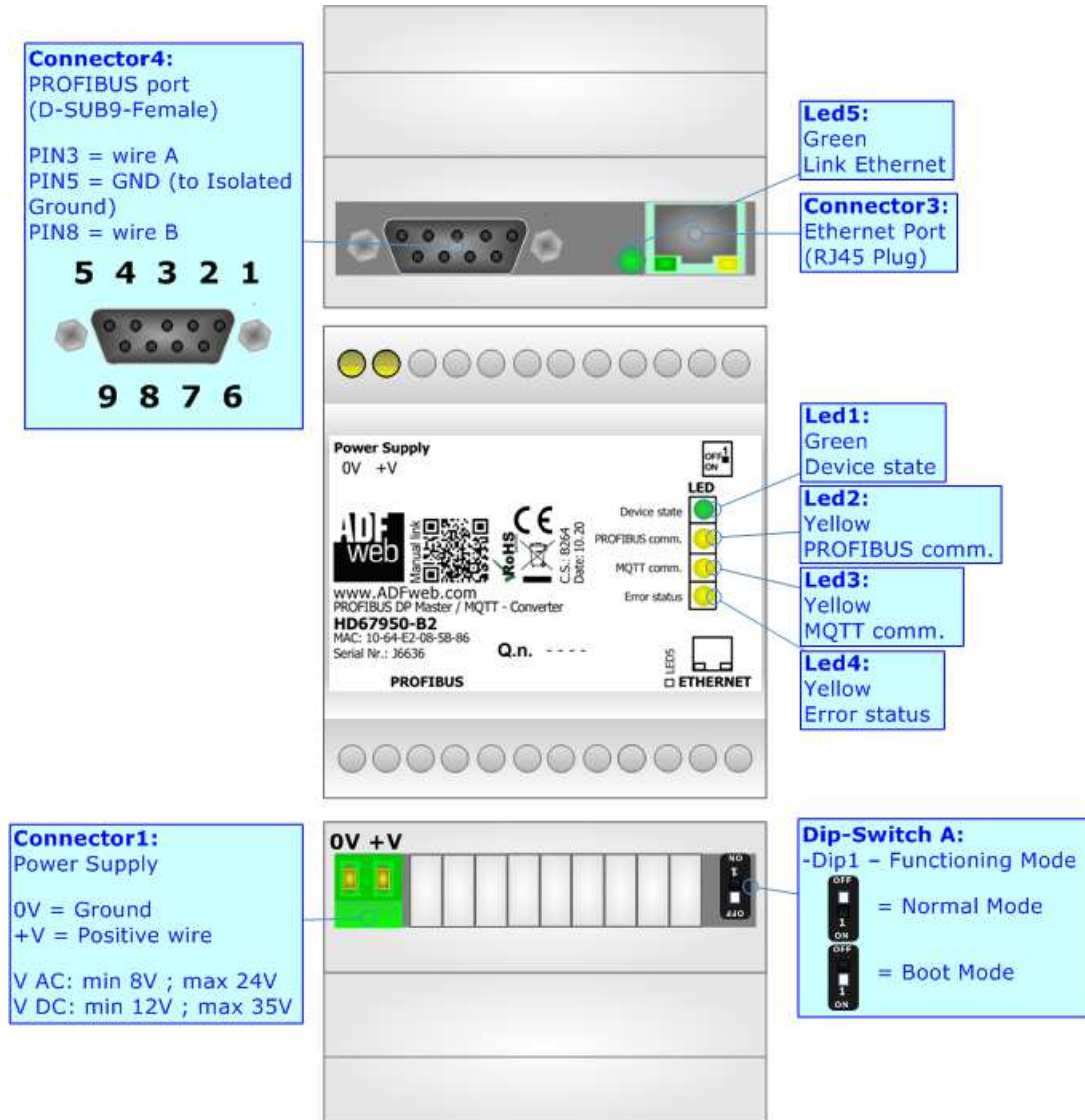


Figure 1: Connection scheme for HD67950-B2

CHARACTERISTICS:

The HD67950-B2 is a PROFIBUS Master / MQTT Converter.

It allows the following characteristics:

- Electrical isolation between Ethernet and PROFIBUS;
- Mountable on 35mm Rail DIN;
- Wide power supply input range: 18...35V DC and 8...24V AC;
- Wide temperature range: -40°C / 85°C [-40°F / +185°F].

CONFIGURATION:

You need Compositor SW67950 software on your PC in order to perform the following:

- Define the parameter of MQTT;
- Define the parameter of PROFIBUS line;
- Define the MQTT topics to be published/subscribed in the MQTT Server;
- Define the list of PROFIBUS slaves accessible by the converter;
- Update the device.

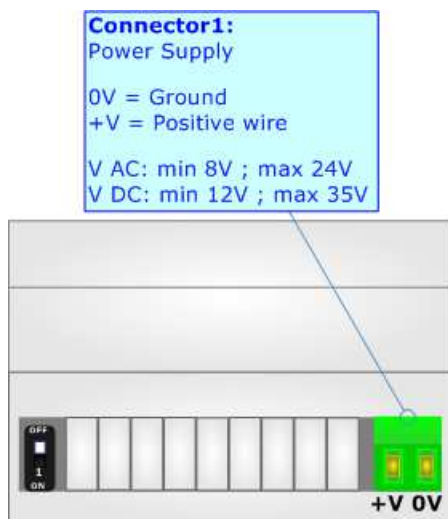
POWER SUPPLY:

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

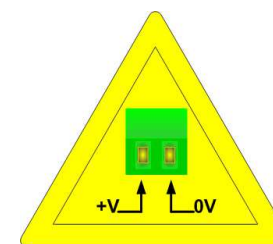
VAC		VDC	
Vmin	Vmax	Vmin	Vmax
8V	24V	12V	35V

Consumption at 24V DC:

Device	Consumption [W/VA]
HD67950-B2	3.5



Caution: Not reverse the polarity power



HD67950-B2

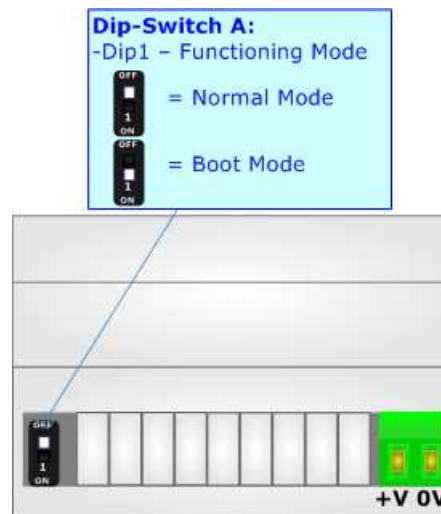
FUNCTION MODES:

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.

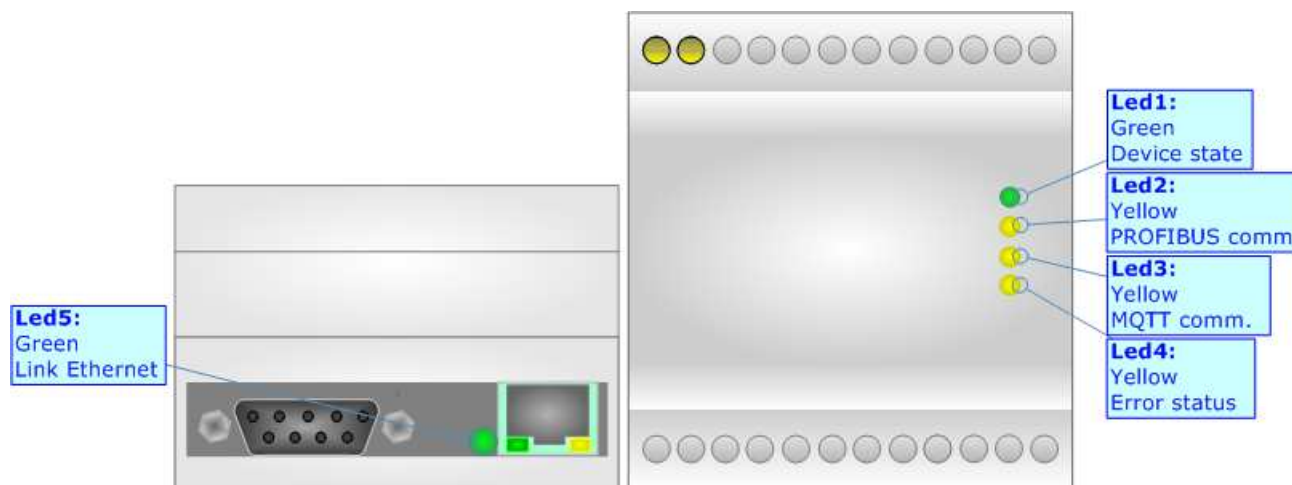
According to the functioning mode, the LEDs will have specifics functions, see 'LEDS' section.



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 (green)	Blinks slowly (~1Hz)	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
2: PROFIBUS communication (yellow)	Blinks when PROFIBUS communication is running	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
3: MQTT communication (yellow)	Blinks when MQTT communication is running	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
4: Error status (yellow)	ON: MQTT not connected or PROFIBUS error OFF: No errors present	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
5: Ethernet Link (green)	ON: Ethernet cable connected OFF: Ethernet cable disconnected	ON: Ethernet cable connected OFF: Ethernet cable disconnected

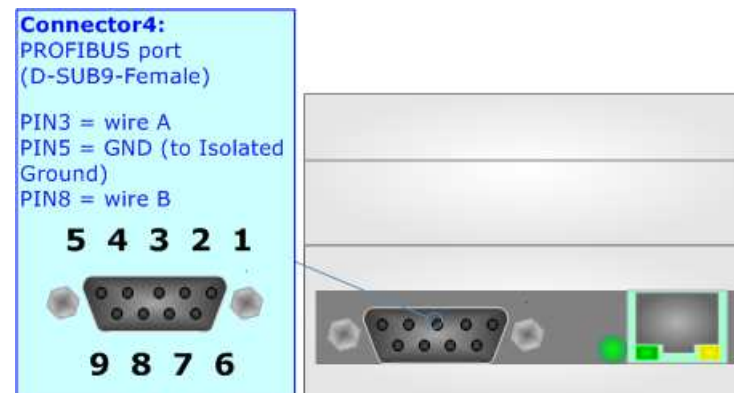


PROFIBUS:

The PROFIBUS uses a 9-pin D-SUB connector. The pin assignment is defined like in the right figure.

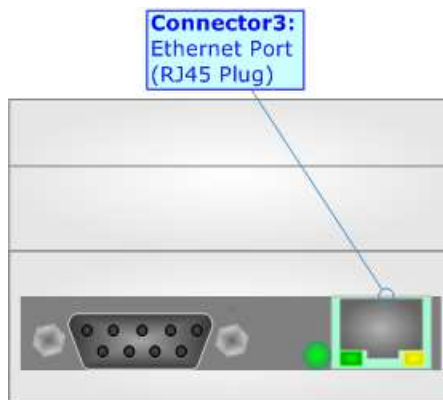
Here some codes of cables:

- Belden: p/n 183079A - Continuous Armor DataBus® ISA/SP-50 PROFIBUS Cable;



ETHERNET:

The Ethernet port is used for programming the device and for MQTT communication. The Ethernet connection must be made using Connector2 of HD67951-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 SW67950:

To configure the Converter, use the available software that runs with Windows called SW67950. 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; 32/64bit).

When launching the SW67950, the window below appears (Fig. 2).



Note:

It is necessary to have installed .Net Framework 4.

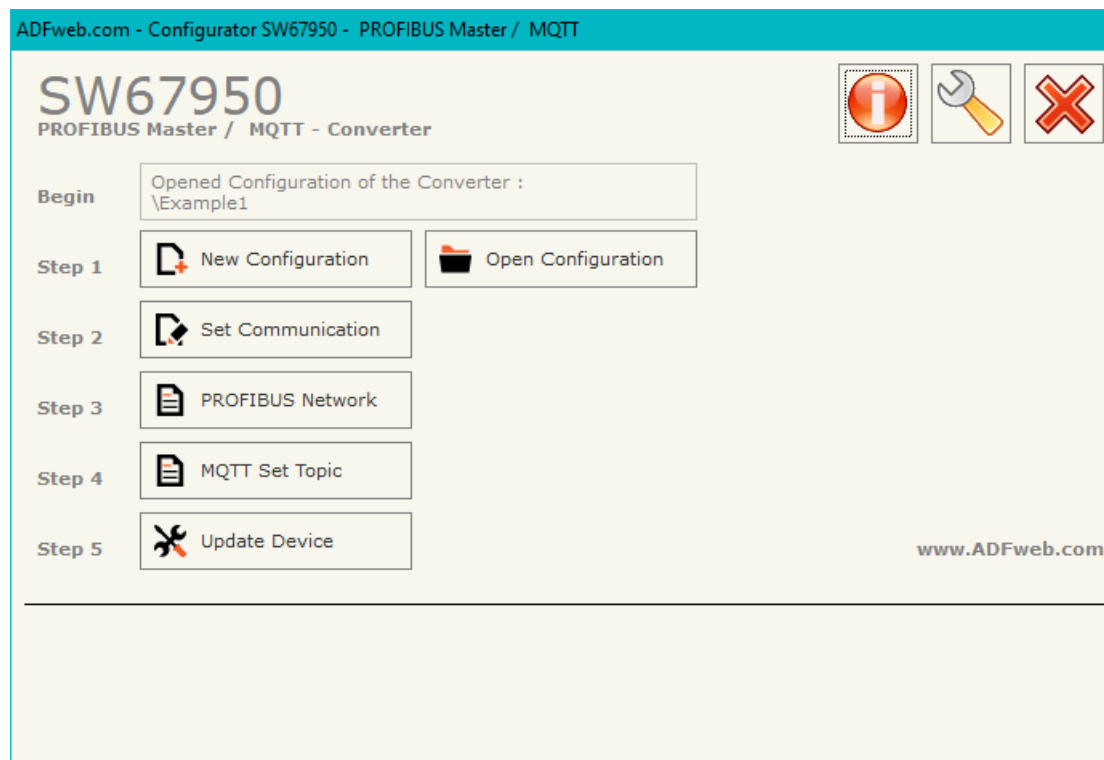
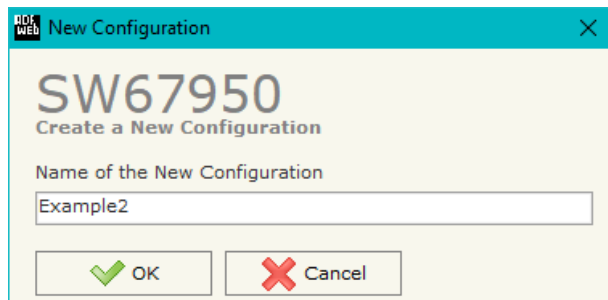


Figure 2: Main window for SW67950

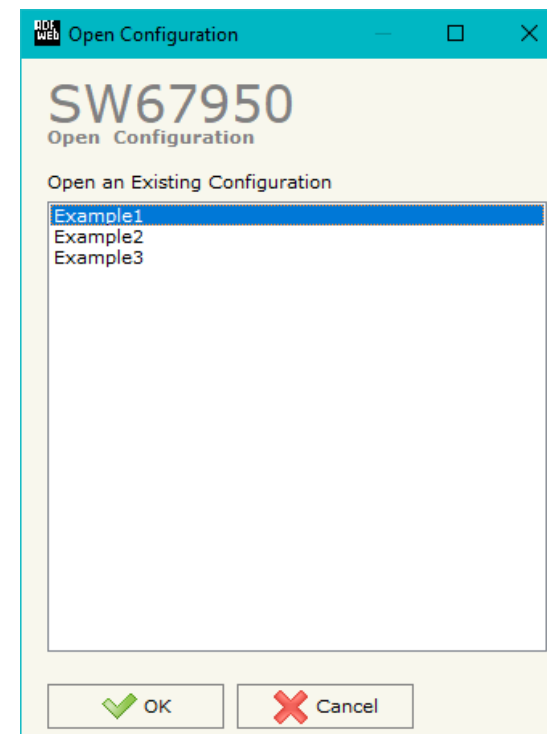
NEW CONFIGURATION / OPEN CONFIGURATION:

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




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

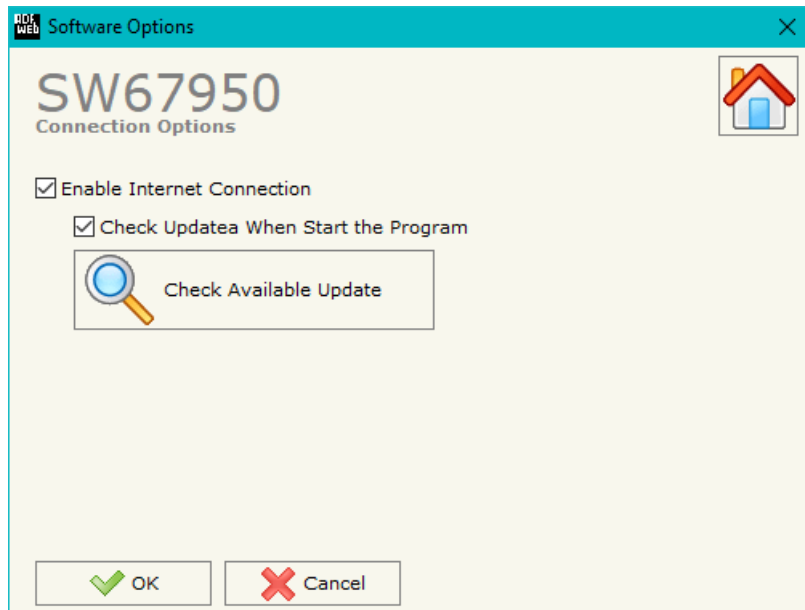
- To clone the configurations of a Programmable “PROFIBUS Master / MQTT - Converter” in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to duplicate 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 SW67950 check automatically if there are updatings when it is launched.

SET COMMUNICATION:

By Pressing the "**Set Communication**" button from the main window for SW67950 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The window is divided in different sections in order to define the different parameters of the converter:

- ➔ PROFIBUS Master
- ➔ MQTT
- ➔ Ethernet
- ➔ TLS (Transport Layer Security)
- ➔ NTP (Network Time Protocol)

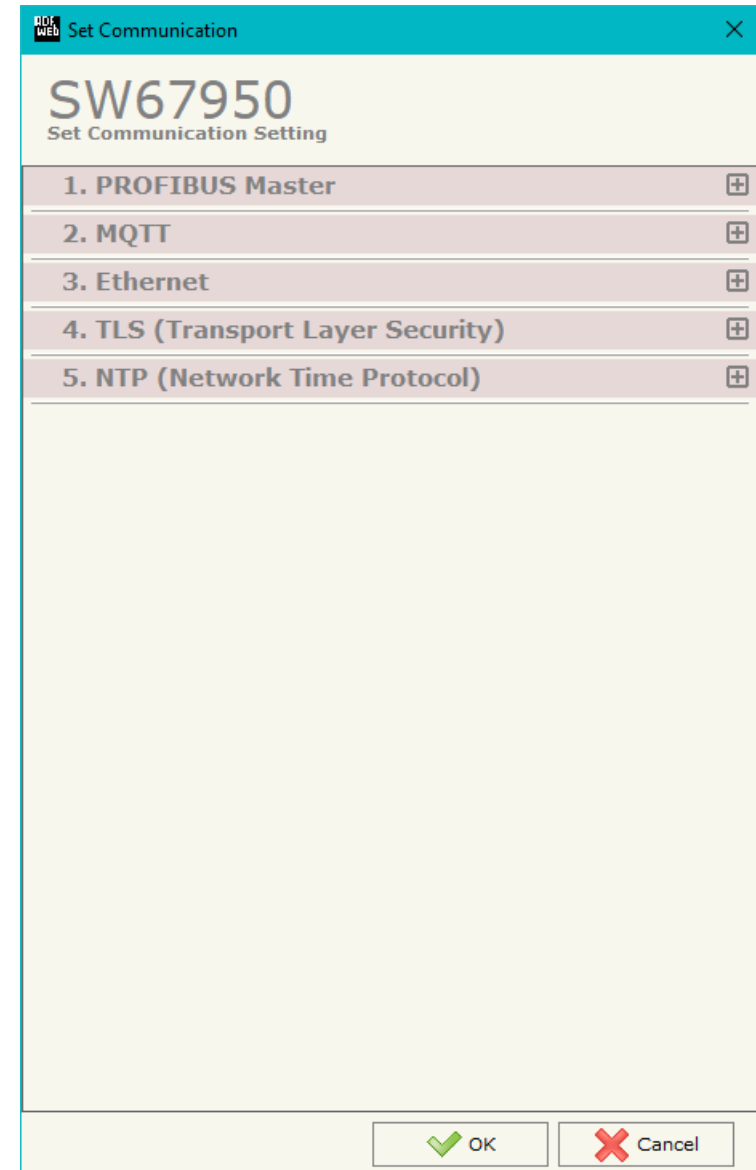


Figure 3a: "Set Communication" window

PROFIBUS MASTER:

This section is used to define the main parameters of PROFIBUS line. The means of the fields are:

The meanings of the fields for PROFIBUS Master are:

- In the field "**ID Device**" the ID for the PROFIBUS side is defined;
- In the field "**Baudrate**" the data rate of PROFIBUS is defined.

MQTT:

This section is used to define the main parameters of MQTT line. The means of the fields are:

- In the field "**Server URL**" the URL or the IP Address of the MQTT Server is defined;
- In the field "**Server Port**" the port used for MQTT communication is defined;
- In the field "**Client ID**" the Client ID of the converter is defined (if ned);
- In the field "**Keep Alive (seconds)**" the delay with which the Keep Alive message is sent on MQTT is defined;
- If the field "**Clean Session**" is checked, the last MQTT messages are deleted by the Server and the Client in case of missing ACK. If unchecked, the Server and the Client hold the last MQTT messages and, in case of incorrect disconnection or missing ACK, they try to send again them since all the ACK messages are exchanged correctly (valid only for QoS 1 and QoS 2);
- If the field "**Will Flag**" is checked, the converter will publish the Will topic at the connection to the Server. With this feature, in case of incorrect disconnection, the Server will publish this topic to all the MQTT Clients that subscribed it;
- In the field "**Topic Name Will**" the topic used for Will message is defined;
- In the field "**Message Will**" the payload of the Will message is defined;
- In the field "**Retained Will**" the converter will send the Will message with Retain flag enabled. In this way, the Server will hold the last Will message;
- In the field "**QoS Will**" the QoS type for Will message is defined;

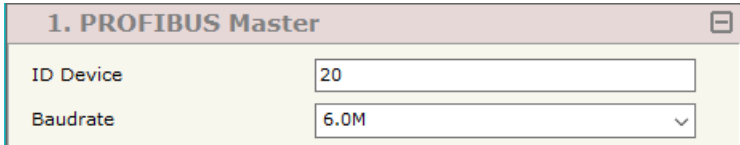


Figure 3b: "Set Communication → PROFIBUS Master" window

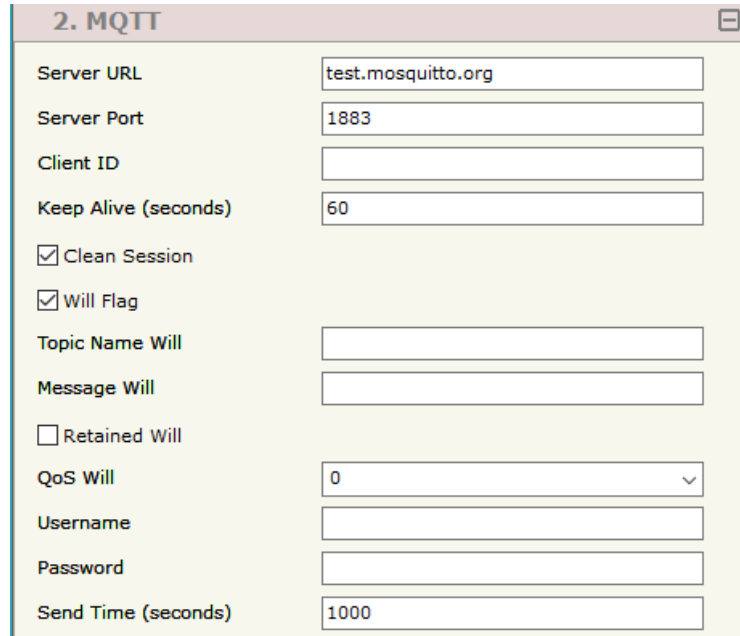


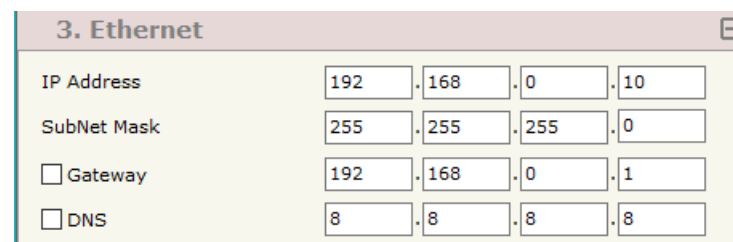
Figure 3c: "Set Communication → MQTT" window

- In the field "**Username**" the username for the connection to the MQTT server is defined;
- In the field "**Password**" the password for the connection to the MQTT server is defined.

ETHERNET:

This section is used to define the general parameters of Ethernet. The means of the fields 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;
- In the field "**DNS**" the DNS address is defined. This field is required if the server address is define by URL and not IP Address.



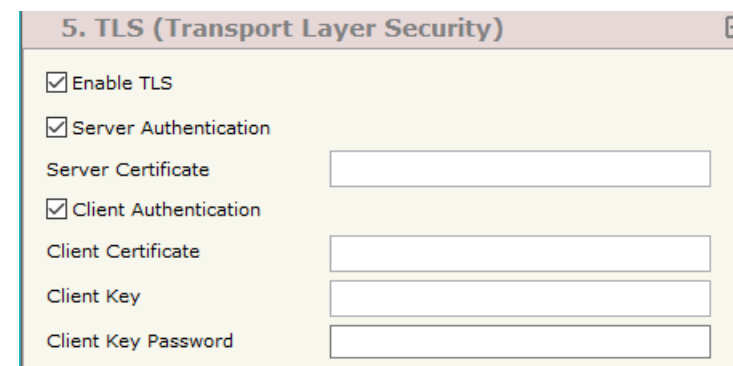
3. Ethernet				
IP Address	192	.168	.0	.10
SubNet Mask	255	.255	.255	.0
<input type="checkbox"/> Gateway	192	.168	.0	.1
<input type="checkbox"/> DNS	8	.8	.8	.8

Figure 3d: "Set Communication → Ethernet" window

TLS (TRANSPORT LAYER SECURITY):

This section is used to define the parameters of TLS protocol. The means of the fields are:

- If the field "**Enable TLS**" is checked, the TLS protocol for secure connection is enabled;
- If the field "**Server Authentication**" is checked, the authentication of the Server using TLS is enabled. If enabled, in the field "**Server Certificate**" the certificate from the Server is defined;
- If the field "**Client Authentication**" is checked, the authentication of the Client using TLS is enabled. If enabled:
 - in the field "**Client Certificate**" the certificate from the Client is defined;
 - in the field "**Client Key**" the private key of the Client is defined;
 - in the field "**Client Key Password**" the password for the private key of the Client is defined.



5. TLS (Transport Layer Security)	
<input checked="" type="checkbox"/> Enable TLS	
<input checked="" type="checkbox"/> Server Authentication	
Server Certificate	<input type="text"/>
<input checked="" type="checkbox"/> Client Authentication	
Client Certificate	<input type="text"/>
Client Key	<input type="text"/>
Client Key Password	<input type="text"/>

Figure 3g: "Set Communication → TLS" window

NTP (NETWORK TIME PROTOCOL):

This section is used to define the parameters of NTP protocol. The means of the fields are:

- ➔ In the field "**Server URL**" the URL or the IP Address of the NTP Server is defined;
- ➔ In the field "**Poll Time (seconds)**" the polling time for the time synchronization is defined.



6. NTP (Network Time Protocol)	
Server URL	<input type="text" value="pool.ntp.org"/>
Poll Time (seconds)	<input type="text" value="1000"/>

Figure 3h: "Set Communication → NTP" window

PROFIBUS NETWORK:

By pressing the "**PROFIBUS Network**" button from the main window for SW67950 (Fig. 2) the window "PROFIBUS Network" (Fig. 4) appears.

In this window is possible to:

- Modify the PROFIBUS Master Options ("**Master PROFIBUS Options**");
- Add a PROFIBUS Slave in the Network of the Master ("**Add Slave PROFIBUS**");
- Modify a PROFIBUS Slave in the Network ("**Modify Slave PROFIBUS**");
- Remove a PROFIBUS Slave from the Network ("**Remove Slave PROFIBUS**");
- Define the BACnet objects related to a slave PROFIBUS ("**Set BACnet Access**").

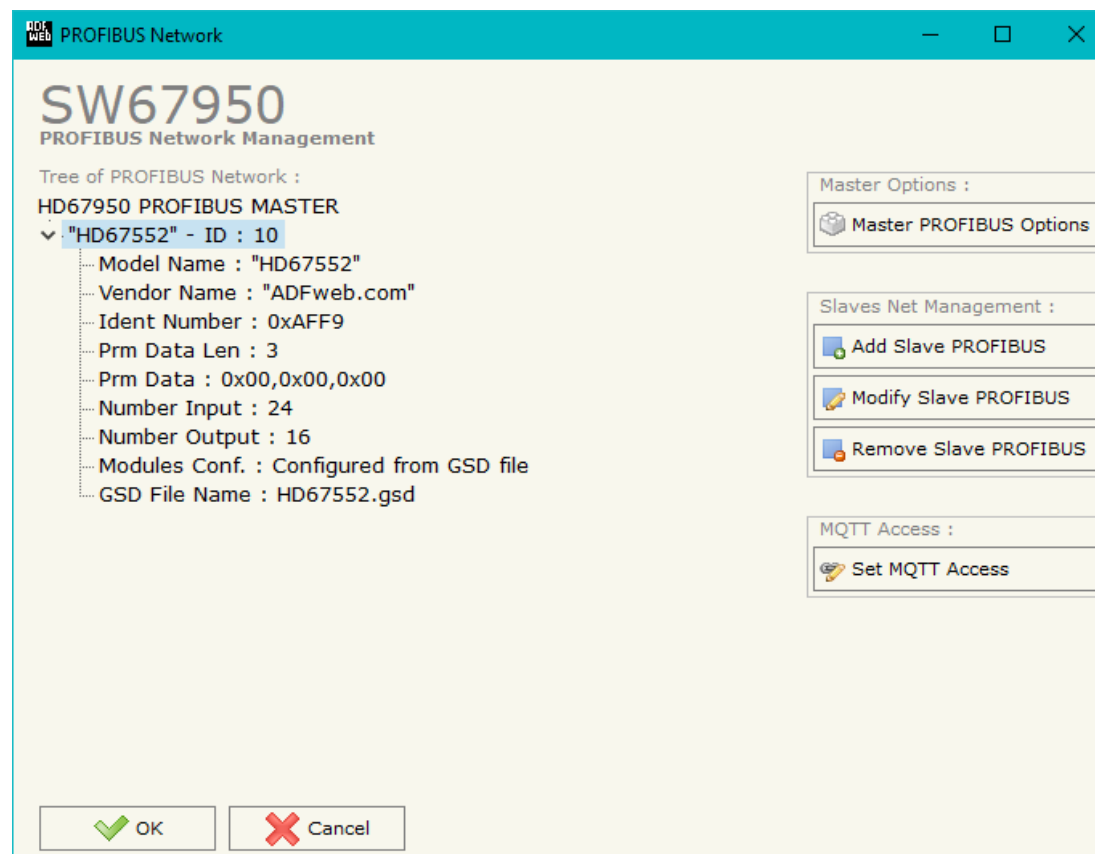


Figure 4: "PROFIBUS Network" window

MASTER PROFIBUS OPTIONS:

By pressing the "**Master PROFIBUS Options**" button from the "PROFIBUS Network" window (Fig. 4) the "PROFIBUS Master Options" window appears (Fig. 5).

In this window is possible to set the WatchDog Time for the PROFIBUS Slaves.

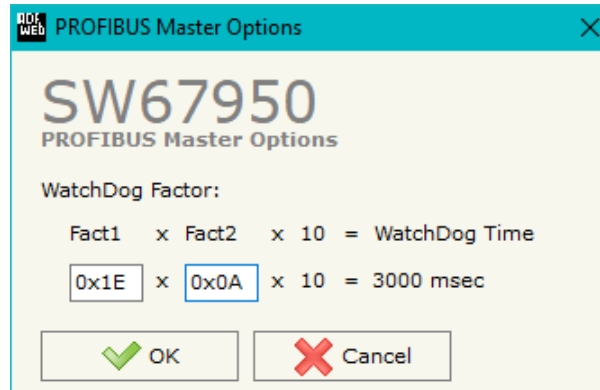


Figure 5: "PROFIBUS Master Options" window

**Note:**

Fact1 and Fact2 could be write in decimal o hexadecimal (with prefix "0x" or "\$") and the values must be between 1 and 255

**Warning:**

The WatchDog time must be between 200 and 650250 milliseconds.

PROFIBUS DEVICE:

By pressing the **"Add Slave PROFIBUS"** and **"Modify Slave PROFIBUS"** button (or double click above an existent PROFIBUS Slave) from the "PROFIBUS Network" window (Fig. 4) the "PROFIBUS Device" window appears (Fig. 6).

In this window is possible to:

- Set the PROFIBUS Slave ID (**"ID Slave PROFIBUS"**);
- Select the Modules present in the PROFIBUS Slave from the Available Modules in GSD file (**"Module Selection"**);
- Modify the User Parameters (if present) of the PROFIBUS device (**"User Parameters"**);
- Modify the Parameters (if present) of the Module Selected (**"Module Parameters"**);
- Watch Features and Baudrate supported from the PROFIBUS device (**"Capabilities"**);
- Select the Sync, Freeze and Reset of Data Options (**"Options"**).

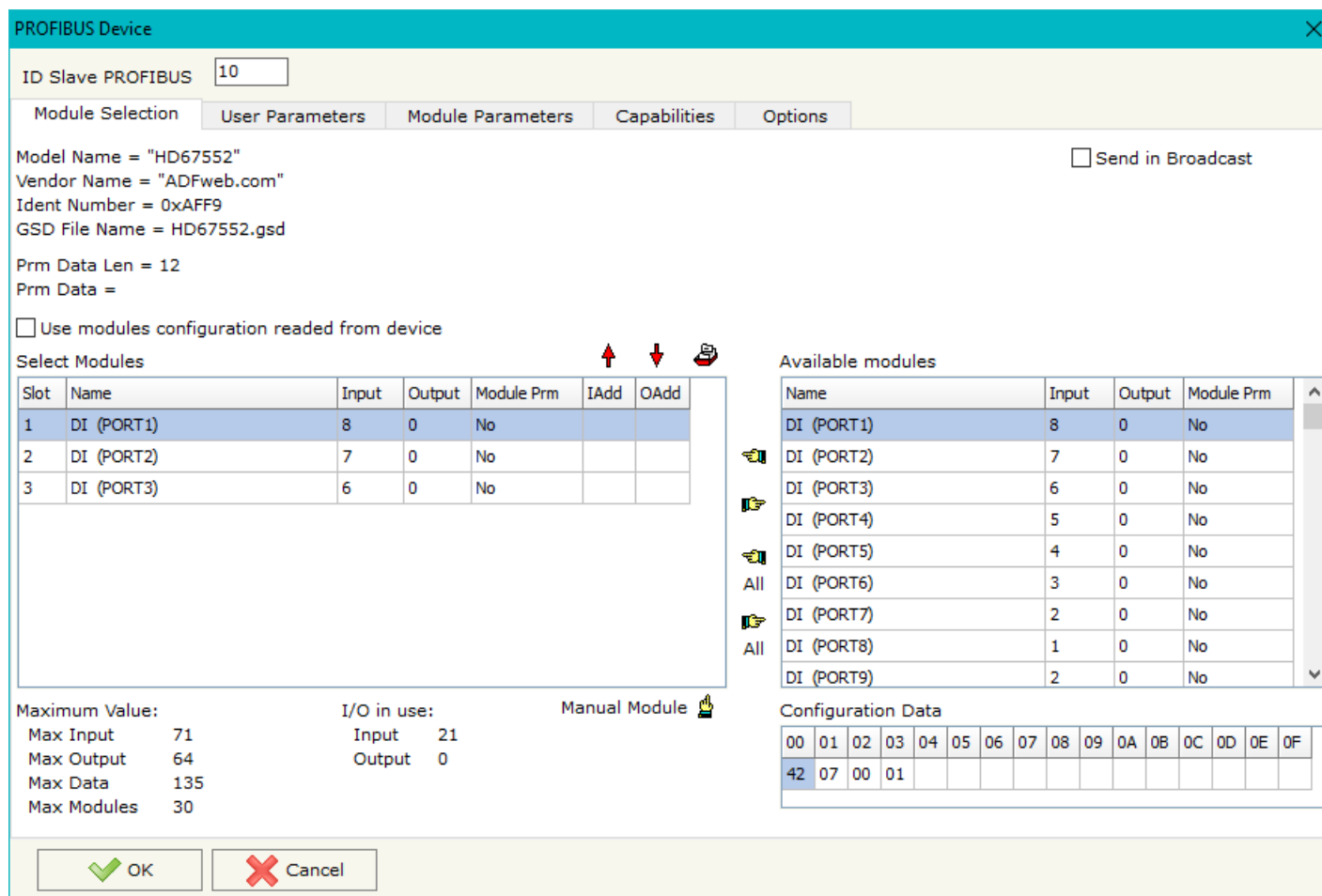


Figure 6: "PROFIBUS Device" window

MODULE SELECTION:

The section "Module Selection" is used to select which Modules are present in the Slave (Fig. 7).

In this section is possible to:

- Check the list of the Modules selected ("Select Modules") (Fig. 7, point (1)) and the list of Modules Available in GSD file ("Available Modules") (Fig. 7, point (7));
- Add a Module from the list of GSD file (Fig. 7, point (6));
- Remove a Module from selected list (Fig. 7, point (5));
- Add all Modules present in the GSD file (Fig. 7, point (4));
- Remove all Modules from selected list (Fig. 7, point (3));
- Insert a Module not present in the GSD file ("**Manual Module**") (Fig. 7 point (2)). For more info see the section "Manual Module" below.

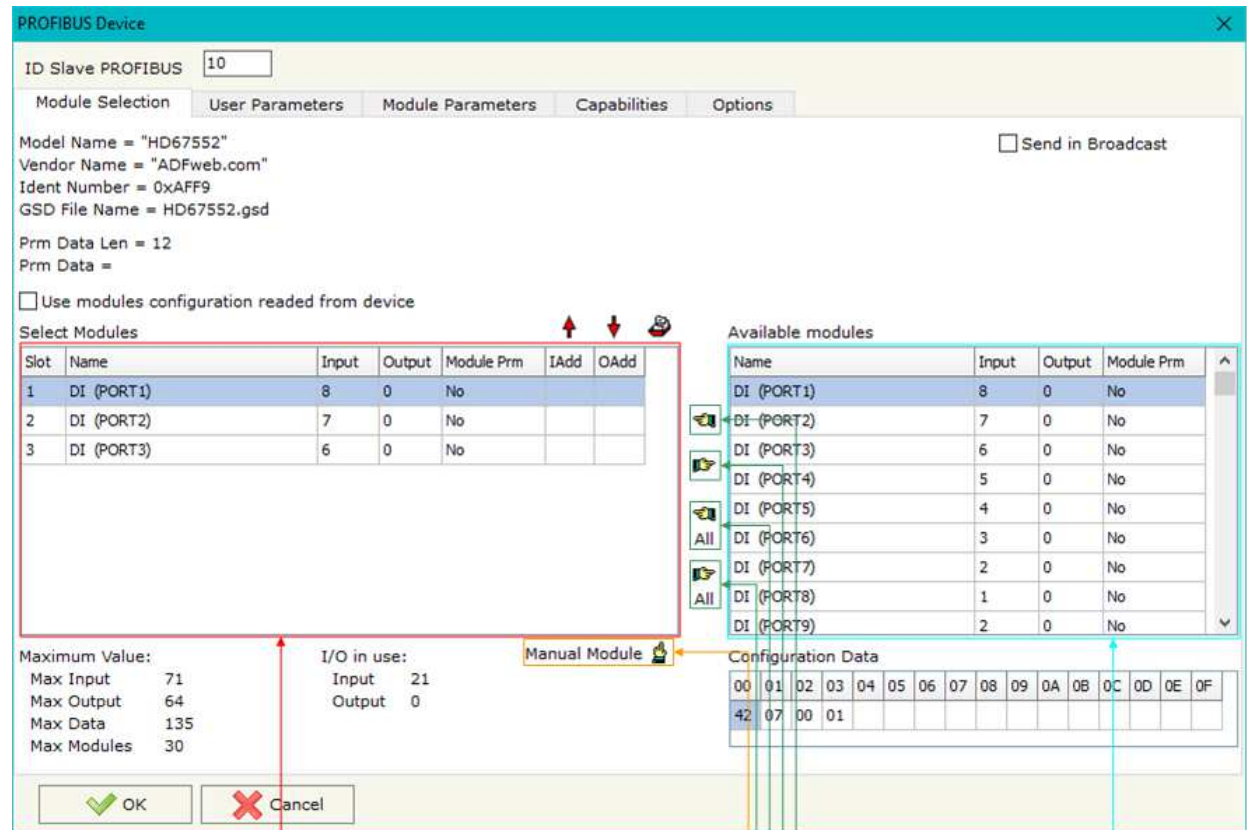


Figure 7: "PROFIBUS Device – Module Selection" window

- (1) List of selected modules
- (2) Add a Module Create Manually
- (3) Delete all Modules selected
- (4) Add all Modules
- (5) Delete selected Module
- (6) Add selected Module
- (7) List of Available Modules in GSD file

By pressing the **Manual Module** button from the "PROFIBUS Device" window (Fig. 6) the "Add Module Manually" window appears (Fig. 8).

In this window is possible to add a Module manually, i.e. writing the configuration of the module (in hexadecimal).

The means of the fields are:

- In the field **Description of Module** a name of the Module is defined;
- In the field **Insert the Configuration of Module (HEX)** the configuration of the module is defined. The configuration must be write in hexadecimal mode (without prefix "0x" o "\$").

To modify a Module inserted manually, is necessary to do a double click on the module to change in the "Select Module" list (Fig. 7, point (1)). It is possible to change only the module inserted manually.



Note:

The Values inserted in the table must be between 00 and FF.

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00																
10																

Figure 8: "Add/Modify Module Manually" window

USER PARAMETERS:

The section “User Parameters” is used to modify the parameters of the PROFIBUS slave (Fig. 9).

In this section there are:

- The List of all Parameters available for the PROFIBUS device (“User Parameters”) (Fig. 9, point (1));
- The Configuration of all parameters in RAW (“Parameters in RAW (Hex)”) (Fig. 9, point(2));
- The “**Use Parameter Inserted Manually**”, enable this option is possible to insert manually the parameters of Device and also of the Modules. Using the “**Modify User Parameters Manually**” button is possible to insert/modify the parametrization of the device (and/or modules). For more info see below. (Fig. 9, point(3));
- The admitted value for the selected parameter. It is possible to select the value desired and confirm it with the “**Apply**” button. If no value appears in this table, the “Min Value” and “Max Value” are the limit of the parameter. (Fig. 9, point(4));
- The “**Apply**” button is used to confirm the new value of the parameter, the “**Default**” button is used to load the factory value for the parameter. In “**New Value**” edit box it is possible to set the new value. (Fig. 9, point(5)).

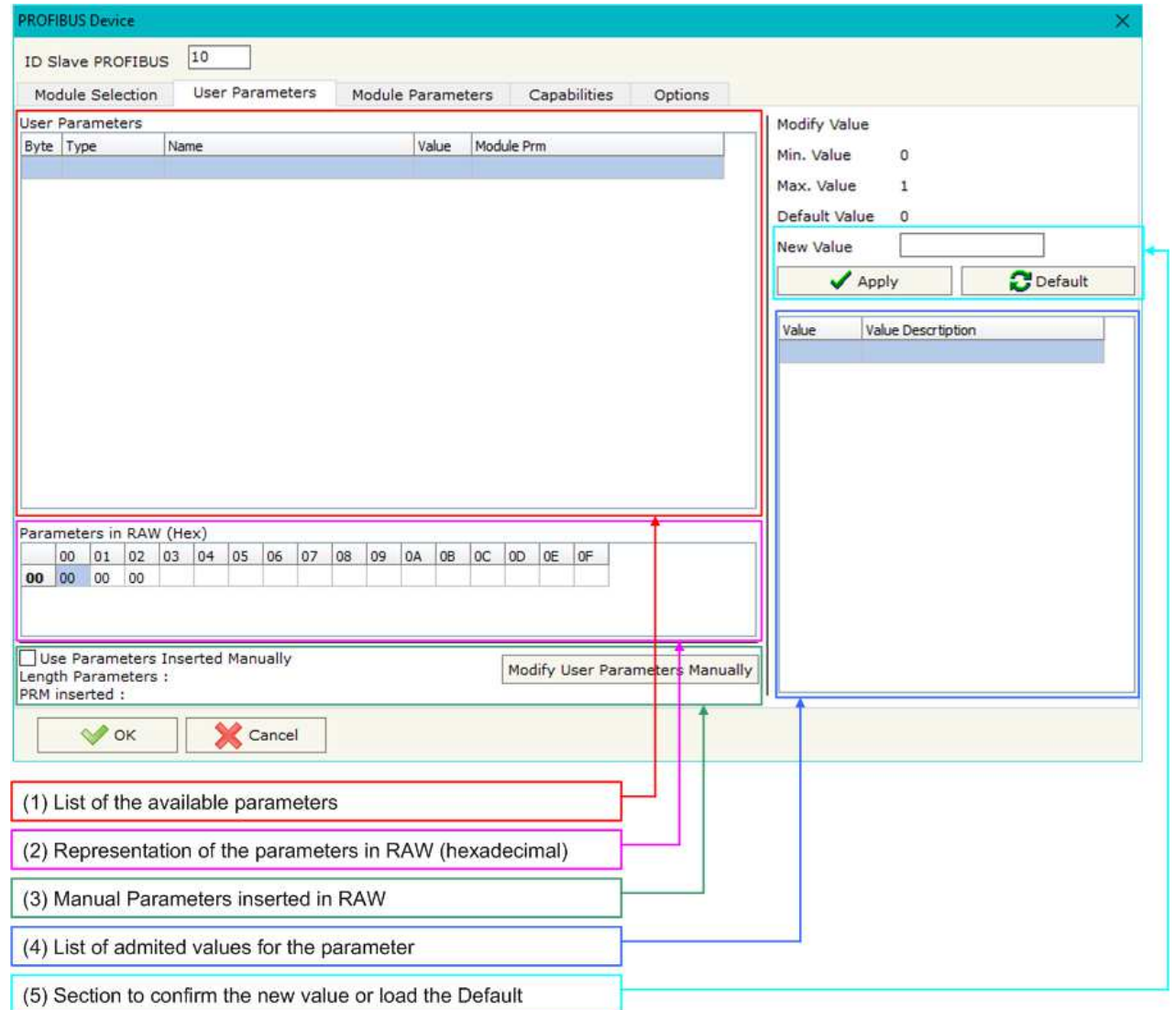


Figure 9: “PROFIBUS Device – User Parameters” window

By pressing the **“Modify User Parameters Manually”** button from the “PROFIBUS Device” window (Fig. 6) the “Add Module Manually” window appears (Fig. 10).

In this window is possible to add/modify the User and/or Modules Parameters manually, i.e. writing the configuration of the parameters (in hexadecimal).

The means of the fields are:

- In the field **“Insert the number of User Parameter”** the number of byte for the parameter have to be inserted;
- In the field **“Insert the Configuration of Module (HEX)”** the configuration of the User and/or Modules Parameters is defined. The configuration must be write in hexadecimal mode (without prefix “0x” o “\$”).



Note:

The Values inserted in the table must be between 00 and FF.

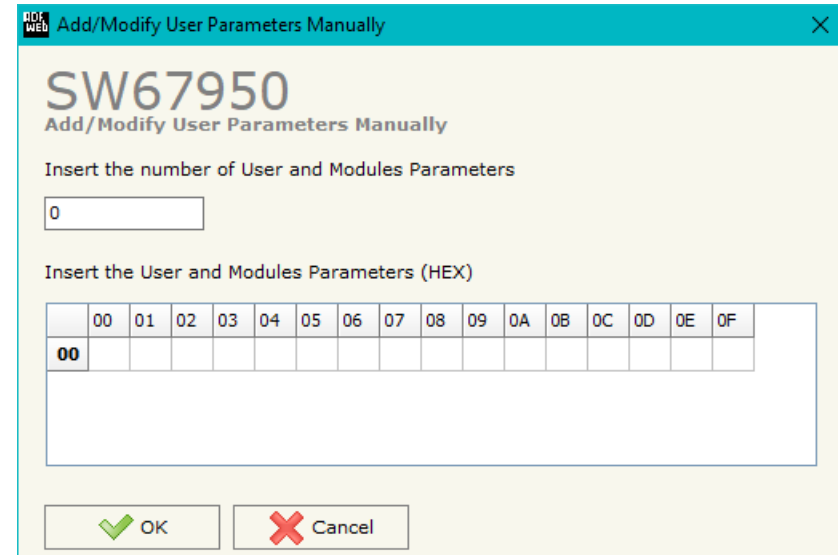


Figure 10: “Add/Modify User Parameters Manually” window

MODULE PARAMETERS:

The section "Module Parameters" is used to modify the parameters of the Modules (Fig. 11).

In this section there are:

- The List of all Module selected in the GSD file ("Available modules") (Fig. 11, point (1));
- The List of all Parameters available for the Module selected ("Parameters of module") (Fig. 11, point (2));
- The Configuration of all parameters in RAW for the Module selected ("Parameters in RAW (Hex)") (Fig. 11, point(3));
- The admitted value for the selected parameter. It is possible to select the value desired and confirm it with the "Apply" button. If no value appears in this table, the "Min Value" and "Max Value" are the limit of the parameter. (Fig. 11, point(4));
- The "Apply" button is used to confirm the new value of the parameter, the "Default" button is used to load the factory value for the parameter. In "New Value" edit box it is possible to set the new value. (Fig. 11, point(5)).

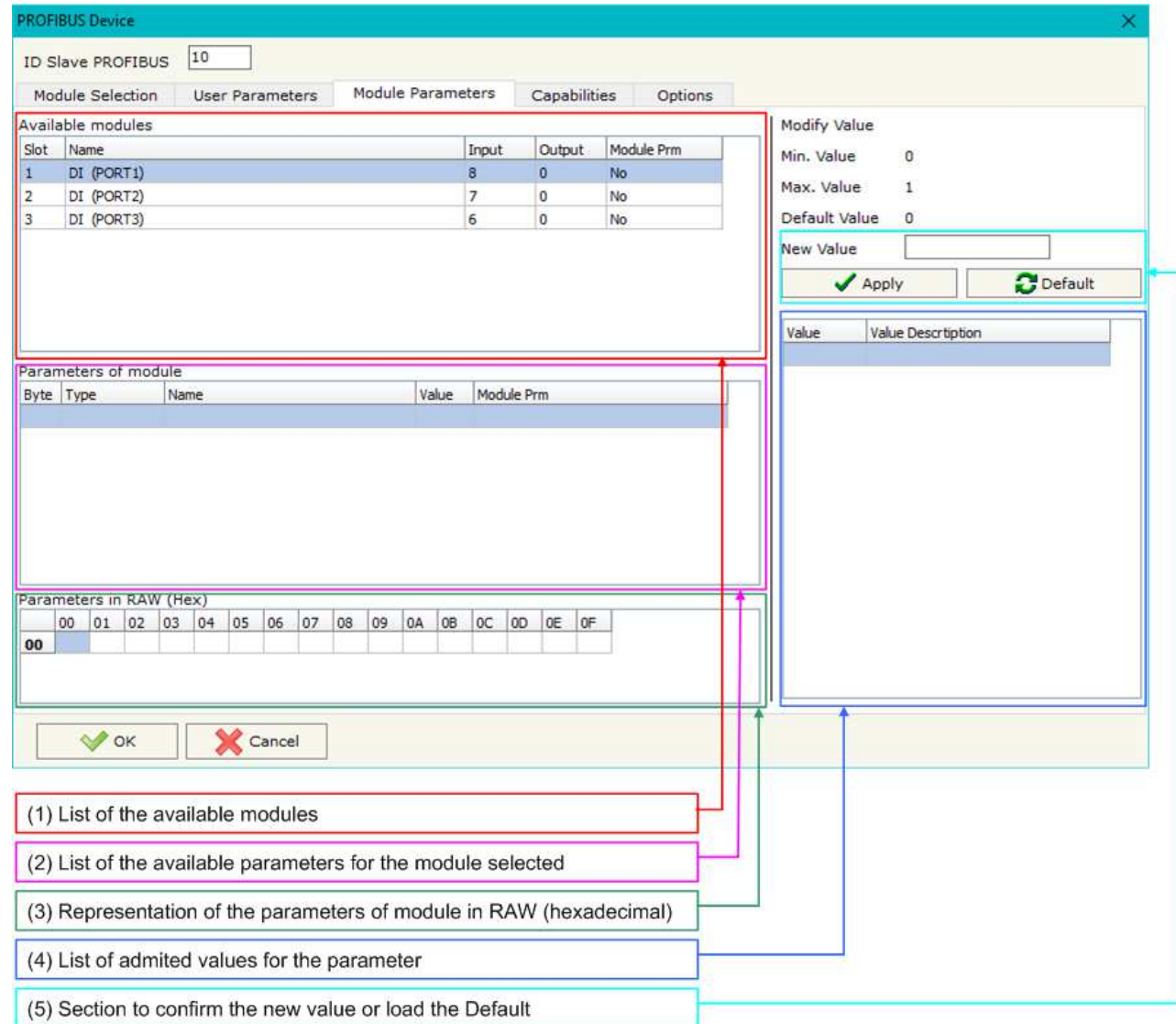


Figure 11: "PROFIBUS Device – Module Parameters" window

CAPABILITIES:

The section “Capabilities” is used only to show which features/baudrates available in the PROFIBUS device. The Green Icon indicate that capability/baudrate is available, the Red Icon indicate no compatibilities with that capability/baudrate (Fig. 12).

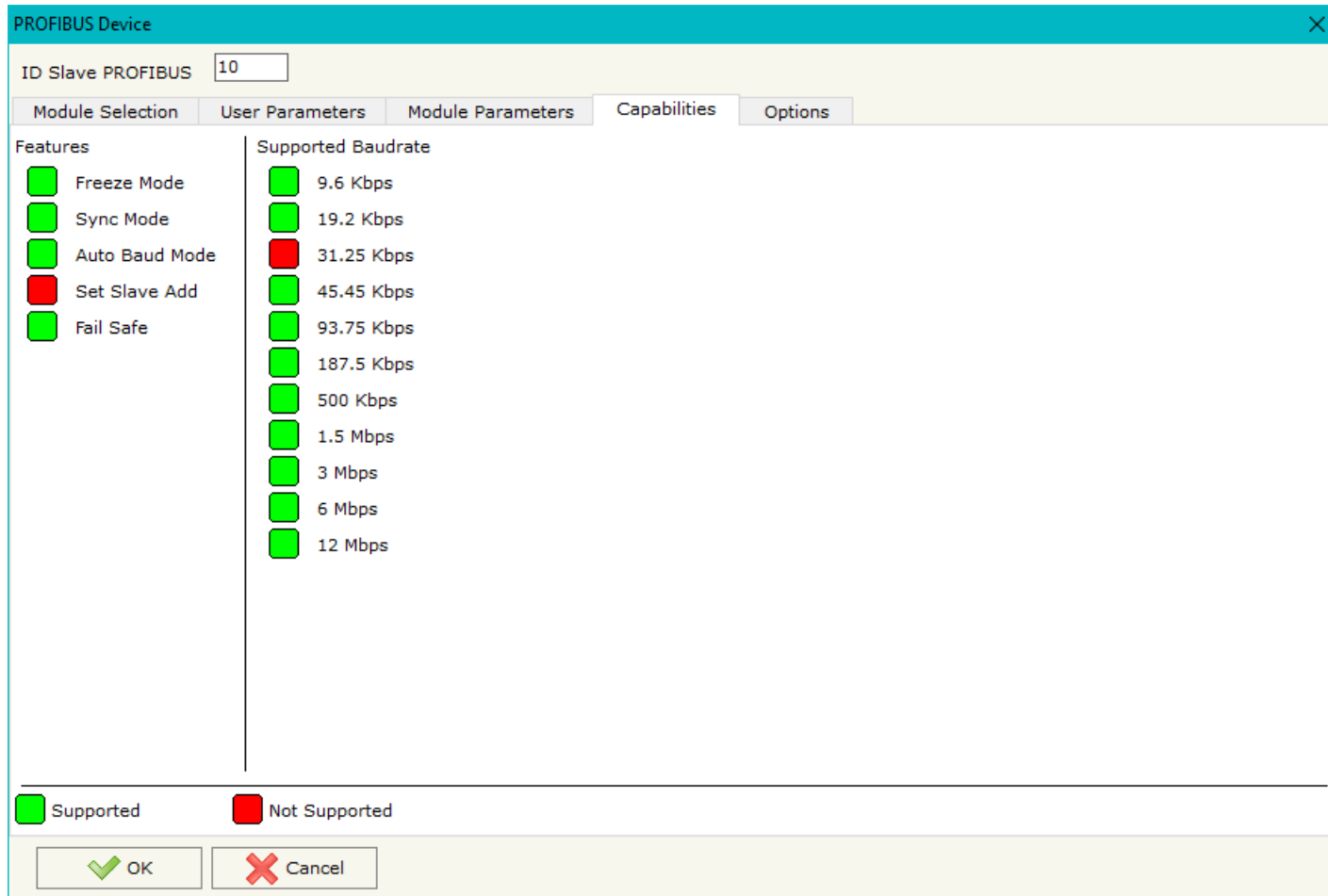


Figure 12: “PROFIBUS Device – Capabilities” window

OPTIONS:

The section "Options" is used to enable some option for each PROFIBUS device (Fig. 13).

The means of the fields are:

- In the field "**Enable Sync**" the PROFIBUS Sync command is enable. This option is enable only if the "Sync Mode" is supported by the device (see Capabilities section to check it);
- In the field "**Enable Freeze**" the PROFIBUS Freeze command is enable. This option is enable only if the "Freeze Mode" is supported by the device (see Capabilities section to check it);
- In the field "**Reset data if PROFIBUS master loses communication from the slave**" is possible to select to cancel the data of the slave if the Master lost the connection with the device;
- In the field "**Reset data if BACnet Master doesn't write data with slave in ... milliseconds**" is possible to

select to cancel the data sented to the slave PROFIBUS if the Converter don't receive a BACnet frame (read/write of present-value property) within the time expressed in the field.

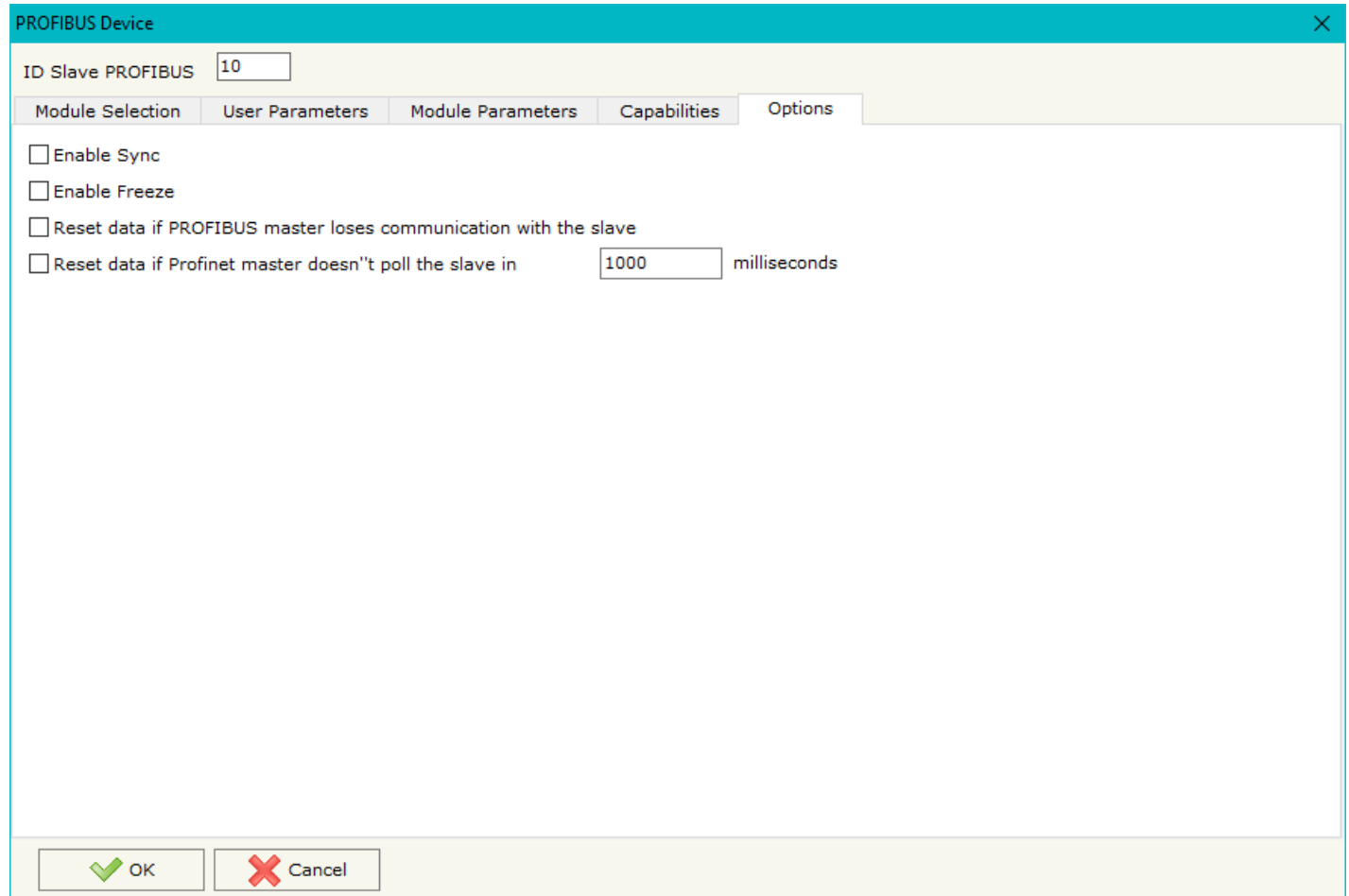


Figure 13: "PROFIBUS Device - Options" window

MQTT SET TOPIC:

By Pressing the **"MQTT Set Topic"** button from the main window for SW67950 (Fig. 2) the window "Set MQTT Topics" appears (Fig. 13). This section is used to define the MQTT topics where the converter will publish the data from PROFIBUS and the topic that the converter will subscribes for writing the data to PROFIBUS.

MQTT PUBLISH

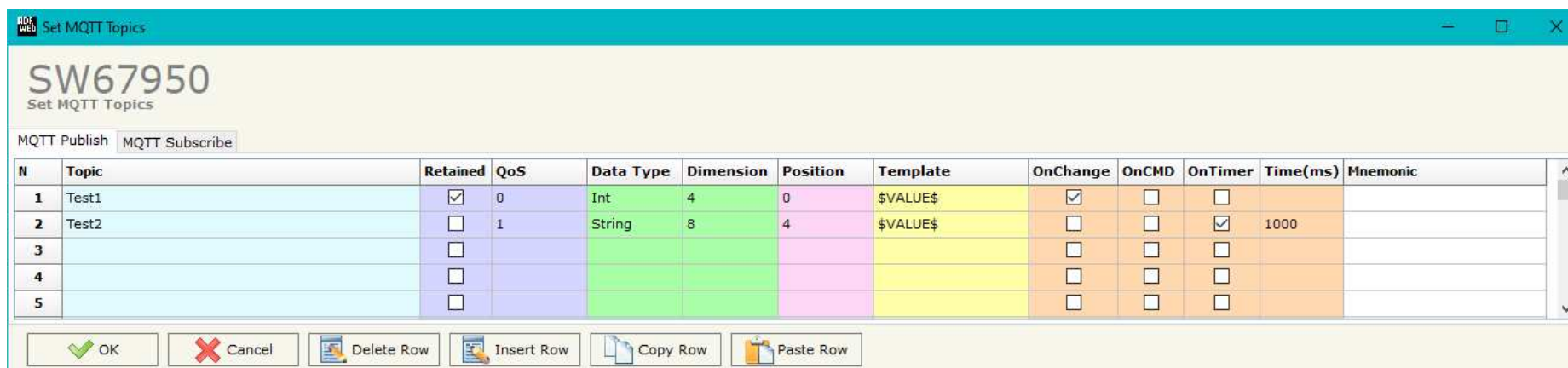


Figure 13a: "Set MQTT Topics → MQTT Publish" window

The means of the fields are:

- In the field **"Topic"** the MQTT topic is defined;
- If the field **"Retained"** is defined, the retained flag is enabled. The MQTT server will hold the last topic published;
- In the field **"QoS"** the QoS level is defined;
- In the field **"Data Type"** the type of data to use is defined;
- In the field **"Dimension"** the dimension in byte of the data is defined;
- In the field **"Position"** the starting byte of the internal memory array where taking the data is defined;
- In the field **"Template"** the structure of the MQTT payload is defined. With a double click on it, it is possible to open a window for editing it;
- If the field **"On Change"** is checked, the converter publishes the topic when the data from PROFIBUS are changed;
- If the field **"On CMD"** is checked, the converter publishes the topic when a new response from PROFIBUS is received;

- If the field **"On Timer"** is checked, the converter publishes the topic cyclically with the delay defined in the field **"Time (ms)"**;
- In the field **"Mnemonic"** a description of the topic is defined.

MQTT SUBSCRIBE

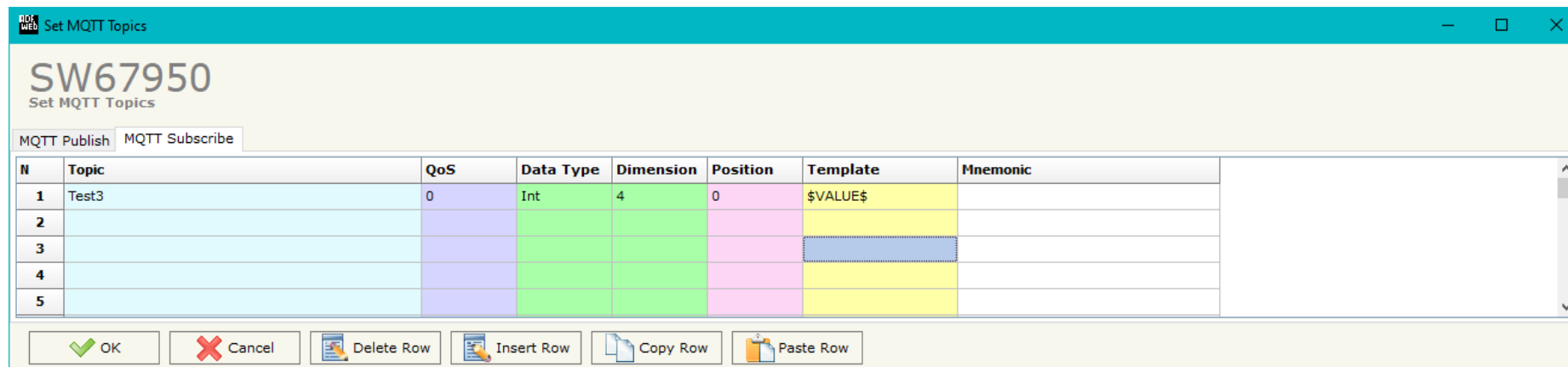


Figure 13b: "Set MQTT Topics → MQTT Subscribe" window

The means of the fields are:

- In the field **"Topic"** the MQTT topic is defined;
- If the field **"Retained"** is defined, the retained flag is enabled. The MQTT server will hold the last topic published;
- In the field **"QoS"** the QoS level is defined;
- In the field **"Data Type"** the type of data to use is defined;
- In the field **"Dimension"** the dimension in byte of the data is defined;
- In the field **"Position"** the starting byte of the internal memory array where placing the data is defined;
- In the field **"Template"** the structure of the MQTT payload is defined. With a double click on it, it is possible to open a window for editing it;
- In the field **"Mnemonic"** a description of the topic is defined.

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.

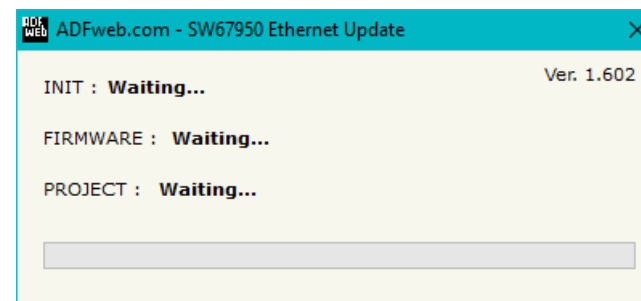
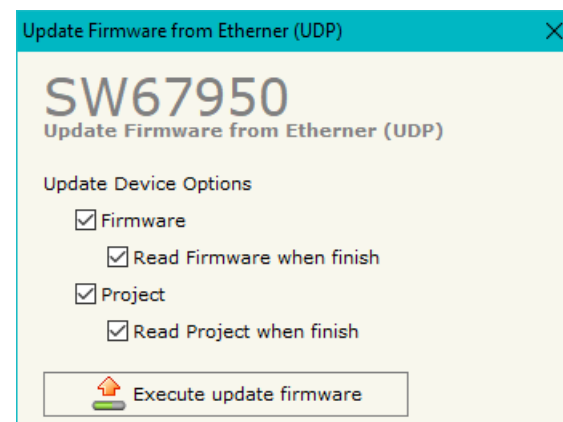
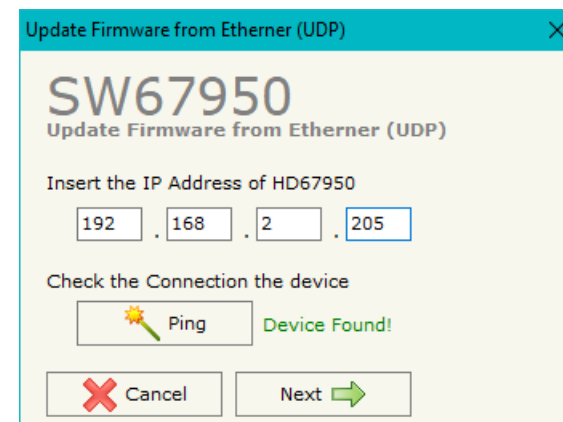


Figure 14: "Update device" windows

**Note:**

When you receive the device, for the first time, you also have to update the Firmware in the HD67950 device.

**Warning:**

If Fig. 15 appears when you try to do the Update try these points before seeking assistance:

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

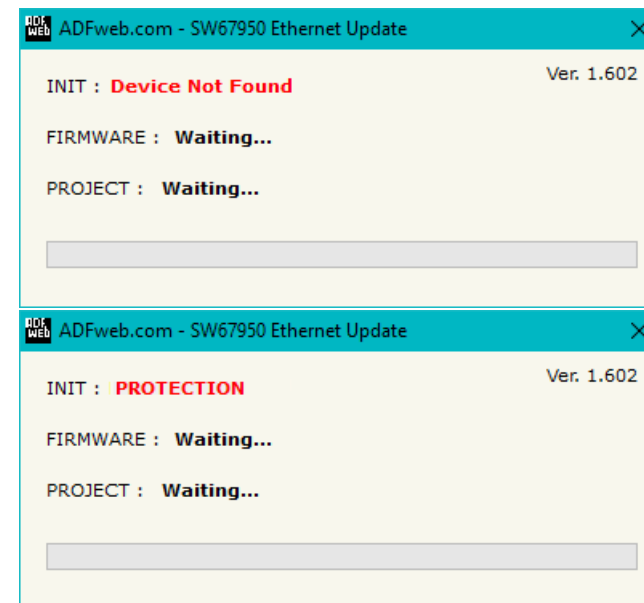


Figure 15: "Error" window

**Warning:**

In the case of HD67950 you have to use the software "SW67950": www.adfweb.com/download/filefold/SW67950.zip.

TEMPLATE STRING: DEFINITION OF MQTT PAYLOAD

In the section "Set Communication" of the SW67950, it is possible to define a Template string for the MQTT messages. The template is necessary in order to define the structure of the payload of the MQTT message and the info contained. It is possible to have a simple text format or a JSON format.

The definition of the template can be done using Key words, used to link a specific information from/to PROFIBUS. The key words used and their meanings are:

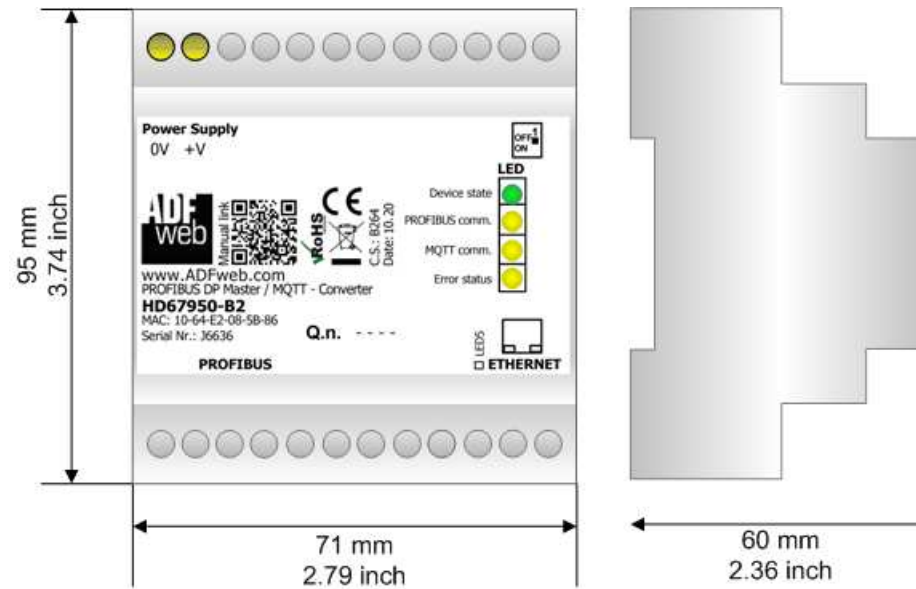
- VALUE: value of the PROFIBUS data
- TIME: date and time of the MQTT message
- DESC: description of the message



Warning:

The key words must be defined between "\$" chars in order to be recognized (Ex.: \$VALUE\$).

MECHANICAL DIMENSIONS:



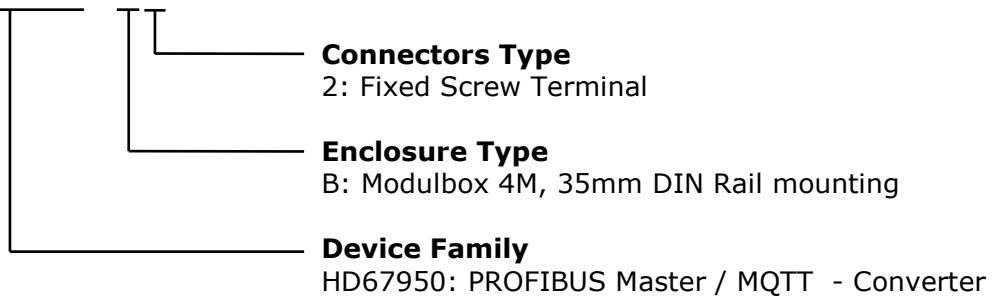
Housing: PVC
Weight: 200g (Approx)

Figure 16: Mechanical dimensions scheme for HD67950-B2

ORDERING INFORMATIONS:

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

HD67950 – B 2



Order Code: **HD67950-B2** - PROFIBUS Master / MQTT – Converter

ACCESSORIES:

Order Code: **AC34011** - 35mm Rail DIN - Power Supply 220/240V AC 50/60Hz – 12 V DC

Order Code: **AC34012** - 35mm Rail DIN - Power Supply 220/240V AC 50/60Hz – 24 V DC

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.

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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