User Manual

Revision 1.001
English

KNX / MQTT - Converter

(Order Code: HD67947-B2, HD67947-G43-B2)

For Website information:
www.adfweb.com?Product=HD67947-B2

For Price information:
www.adfweb.com?Price=HD67947-B2
www.adfweb.com?Price=HD67947-G43-B2

Benefits and Main Features:

- Power Supply 18…35V DC and 8…24 V AC
- Temperature range: -40°C/+85°C (-40°F/+185°F)



For others MQTT products, see also the following links:

Converter MQTT to

www.adfweb.com?Product=HD67930	**(Ethernet)**
www.adfweb.com?Product=HD67931	**(M-Bus)**
www.adfweb.com?Product=HD67932	**(Serial)**
www.adfweb.com?Product=HD67933	**(Modbus Master)**
www.adfweb.com?Product=HD67934	**(Modbus Slave)**
www.adfweb.com?Product=HD67935	**(Modbus TCP Master)**
www.adfweb.com?Product=HD67936	**(Modbus TCP Slave)**
www.adfweb.com?Product=HD67937	**(BACnet Master)**
www.adfweb.com?Product=HD67938	**(BACnet Slave)**
www.adfweb.com?Product=HD67939	**(CAN)**
www.adfweb.com?Product=HD67940	**(CANopen)**
www.adfweb.com?Product=HD67941	**(DALI)**
www.adfweb.com?Product=HD67942	**(DeviceNet Master)**
www.adfweb.com?Product=HD67943	**(DeviceNet Slave)**
www.adfweb.com?Product=HD67944	**(DMX)**
www.adfweb.com?Product=HD67945	**(EtherNet/IP)**
www.adfweb.com?Product=HD67946	**(J1939)**
www.adfweb.com?Product=HD67948	**(NMEA 0183)**
www.adfweb.com?Product=HD67949	**(NMEA 2000)**
www.adfweb.com?Product=HD67950	**(PROFIBUS Master)**
www.adfweb.com?Product=HD67951	**(PROFIBUS Slave)**
www.adfweb.com?Product=HD67952	**(PROFINET)**
www.adfweb.com?Product=HD67953	**(SNMP Manager)**
www.adfweb.com?Product=HD67954	**(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

User Manual

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UPDATED DOCUMENTATION:

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

- Updated
- Related to the product you own

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

With this "Document Code" go to web page www.adfweb.com/download/ and search for the corresponding code on the page. Click on the proper "Document Code" and download the updates.

REVISION LIST:

Revision	Date	Author	Chapter	Description
1.000	05/12/2017	Ff	All	First release version
1.001	01/07/2025	Mdb	All	New design

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:

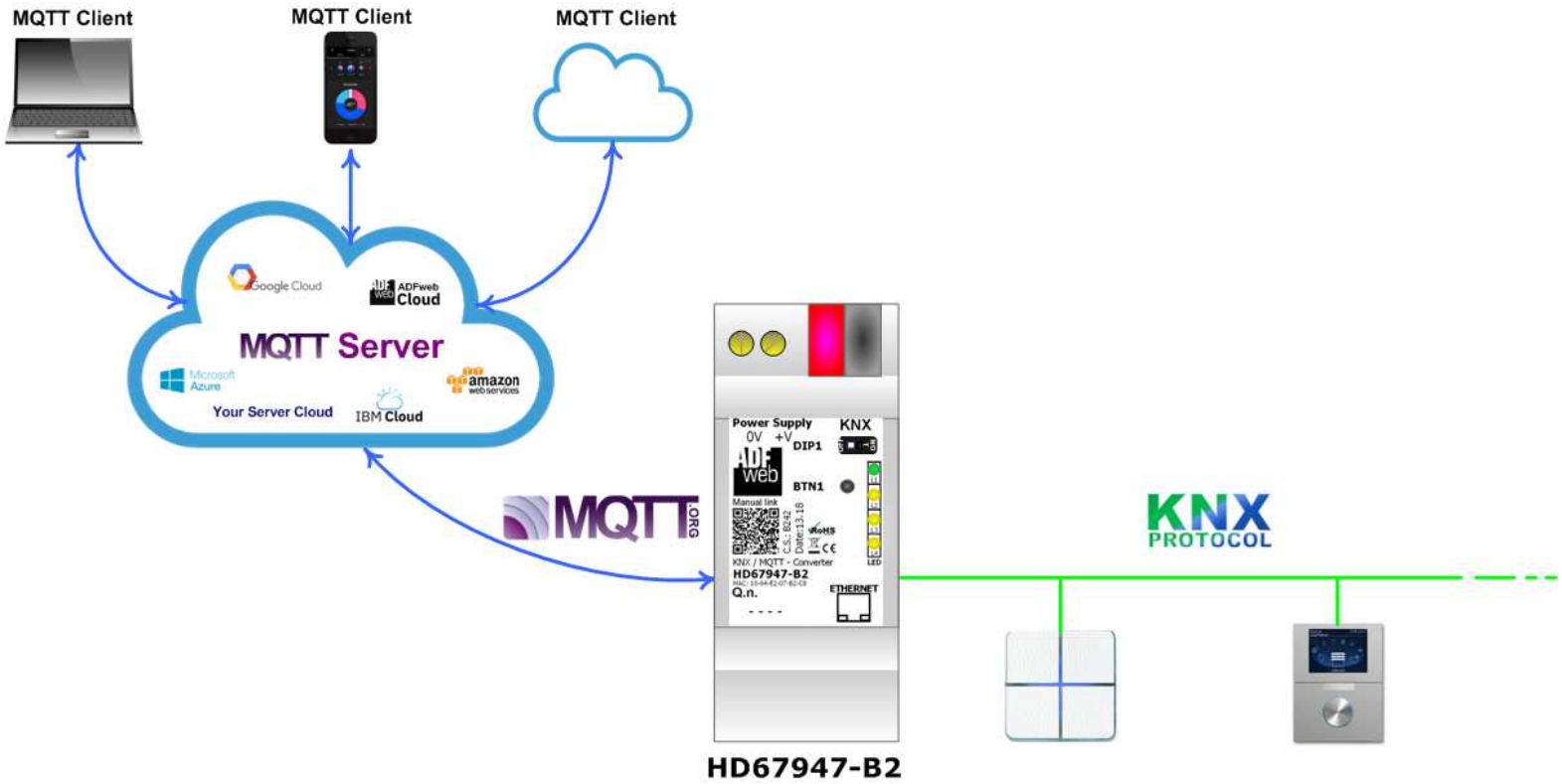


This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

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

CONNECTION SCHEME:

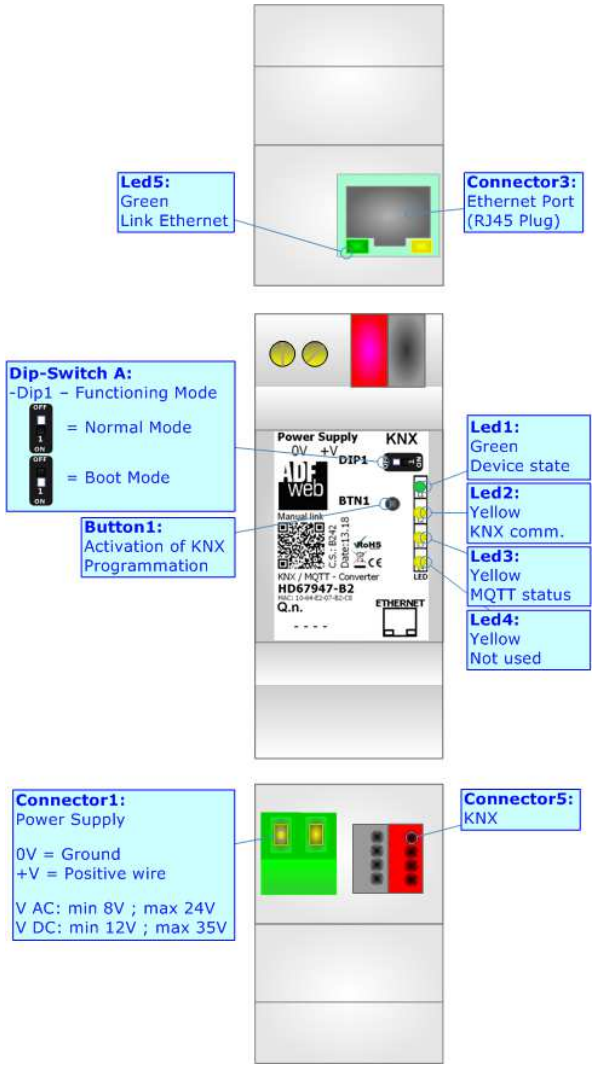


Figure 1a: Connection scheme for HD67947-B2

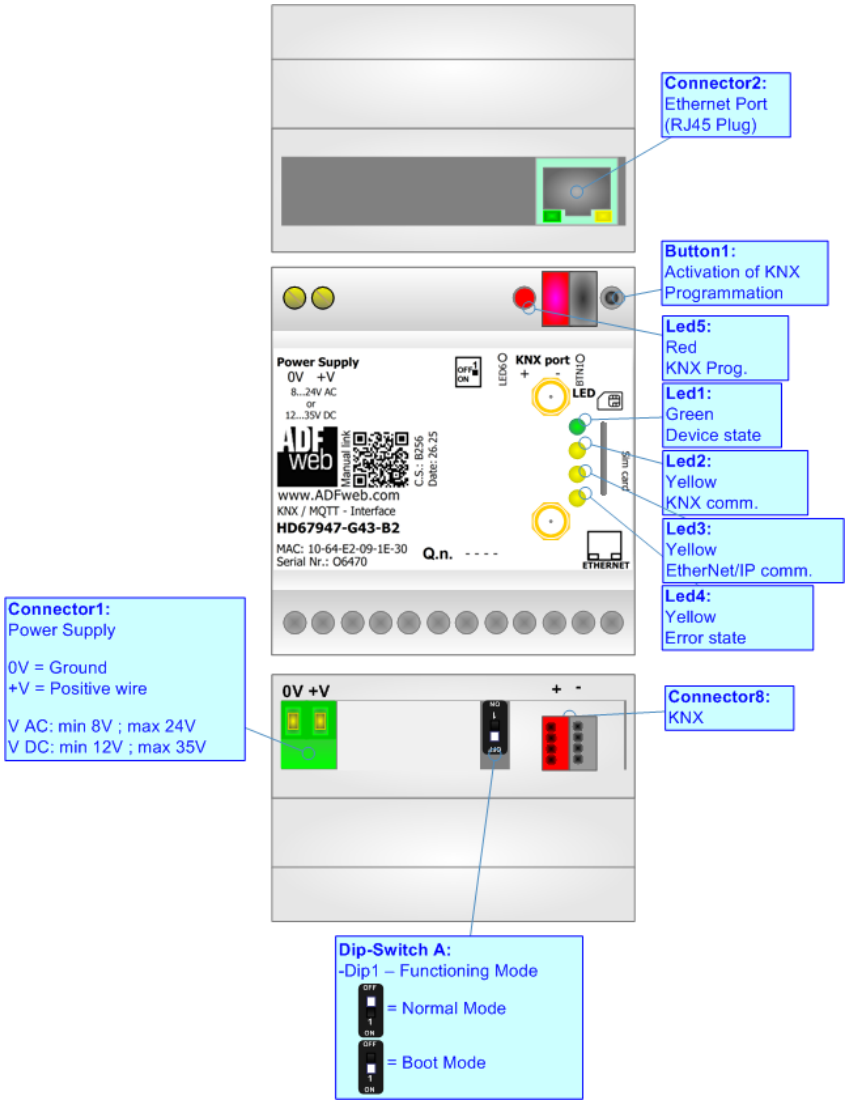


Figure 1b: Connection scheme for HD67947-G43-B2

CHARACTERISTICS:

The HD67947-B2 and HD67947-G43-B2 are a KNX / MQTT Converters.

It allows the following characteristics:

- Electrical isolation between Ethernet and KNX;
- 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 SW67947 software on your PC in order to perform the following:

- Define the parameter of MQTT;
- Define the parameter of KNX line;
- Define the MQTT topics to be published/subscribed in the MQTT Server;
- Define the list of KNX data points to read/write;
- Update the device.

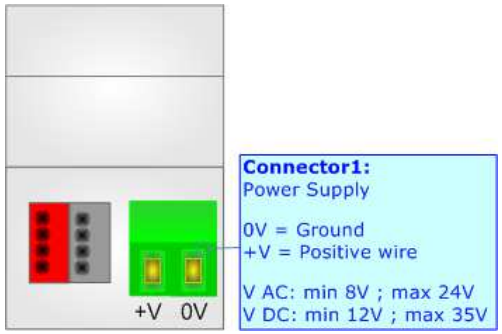
POWER SUPPLY:

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

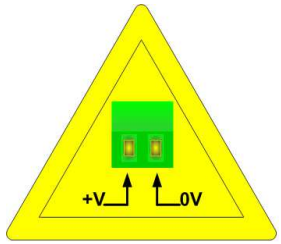
VAC ~		VDC ⎓	
Vmin	**Vmax**	**Vmin**	**Vmax**
8V	**24V**	**12V**	**35V**

Consumption at 24V DC:

Device	Consumption [W/VA]
HD67947-B2	3.5
HD67947-G43-B2	3.5



Caution: Not reverse the polarity power



HD67947-B2
HD67947-G43-B2

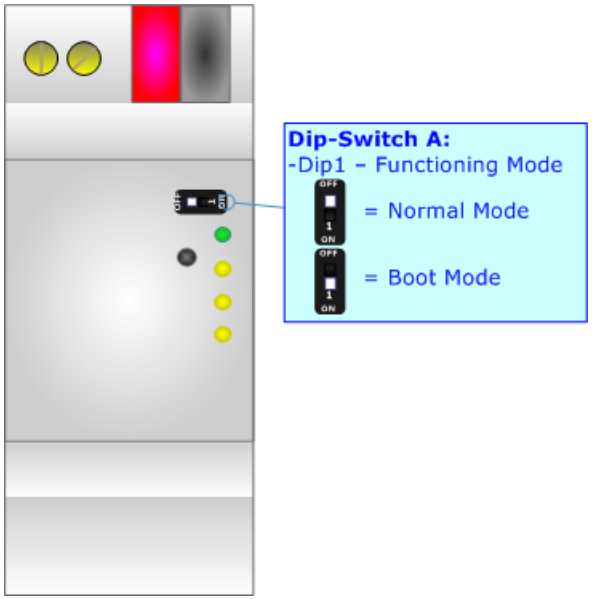
FUNCTION MODES:

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.

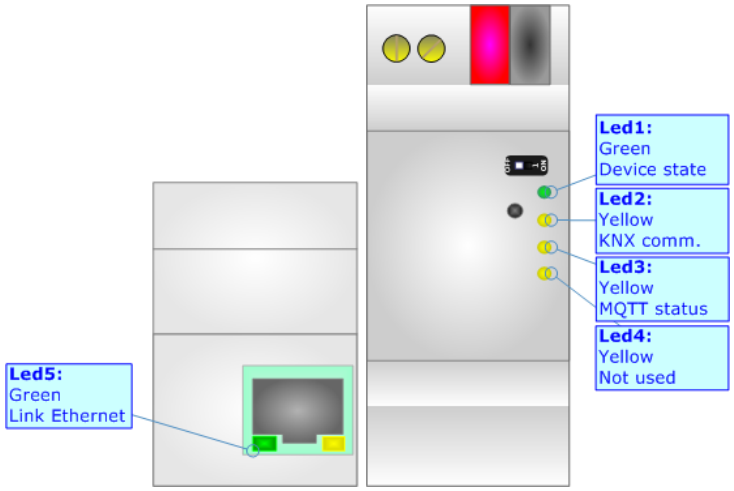
According to the functioning mode, the LEDs will have specifics functions, see 'LEDS' section.



LEDS:

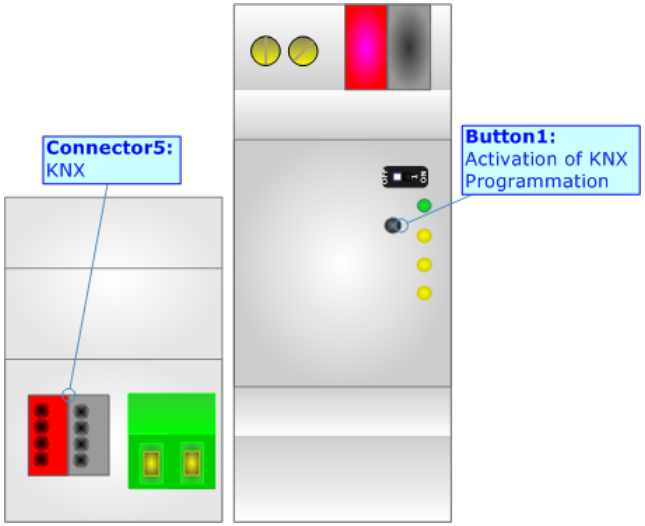
The device has got five LEDs that are used to give information of the functioning status.
The various meanings of the LEDs are described in the table below.

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: KNX comm. (yellow)	Blinks when KNX communication is running	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
3: MQTT status (yellow)	**ON:** MQTT not connected **OFF:** MQTT connected **Blinking:** MQTT communication	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
4: Not used (yellow)	OFF	**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



KNX:

KNX is the standard that allows the automated and decentralized management of the technologic plans of a big typology of structures: commercial buildings, factories, houses, public locals, schools and so on.
KNX can be used in all the applications and functions for the building automations: from lighting to control dampers, to the security, to the heating monitoring, to the conditioning, to the hydric control and alarms, to energy management and so on.

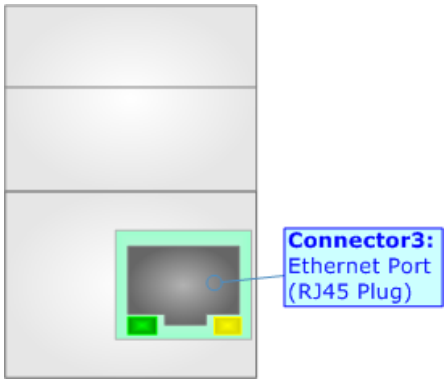


Characteristics	Description TP1-256
Medium	Shielded Twisted Pair
Topology	Linear, Star, Tree or mixed
Baudrate	9600 bps
Device supplying	Normal: bus powered devices Optional: remote powered devices
Device power consumption	3 mA- 12 mA
Power Supply Unit (PSU)	DC 30 V
Number of PSU's per physical Segment	Max. 2
Number of connectable devices per physical Segment	Max. 256
Number of addressable devices per physical Segment	Max. 255
Total cable length per physical Segment	Max. 1000 m
Distance between two devices	Max. 700 m

(*) Taken from KNX specifications

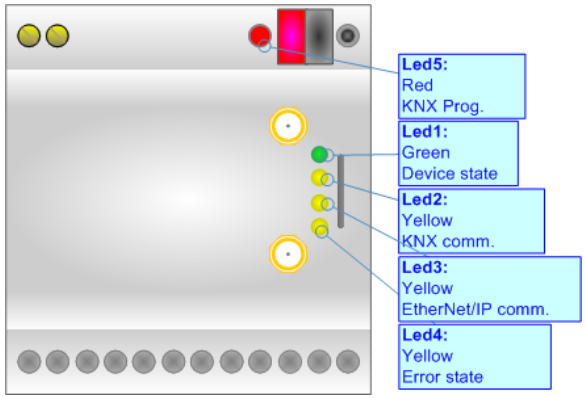
ETHERNET:

The Ethernet port is used for programming the device and for MQTT communication.
The Ethernet connection must be made using Connector3 of HD67947-xxx-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.



MOBILE:

The HD67947-G43-B2 uses LTE module. The Antenna connector is a SMA Female ('Female Outer Shell' and 'Female Receptacle') so the Antenna must have a SMA Male connector. The physical SIM card type is Micro-Sim.



USE OF COMPOSITOR SW67947:

To configure the Converter, use the available software that runs with Windows called SW67947. 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 SW67947, the window below appears (Fig. 2).

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

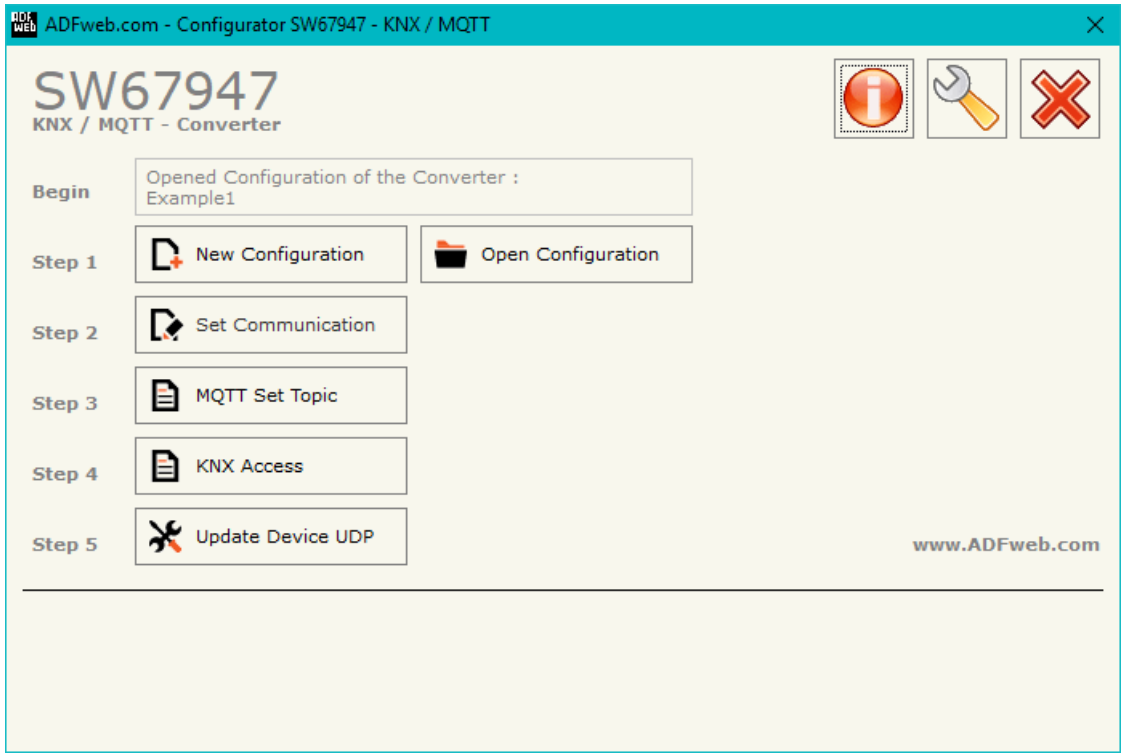
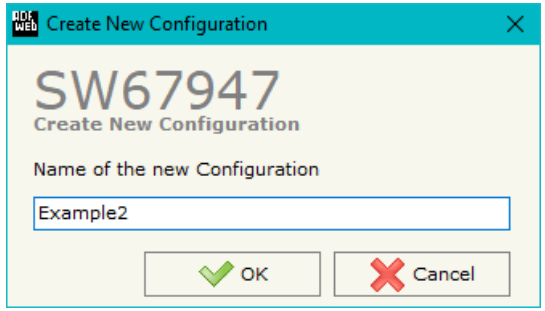


Figure 2: Main window for SW67947

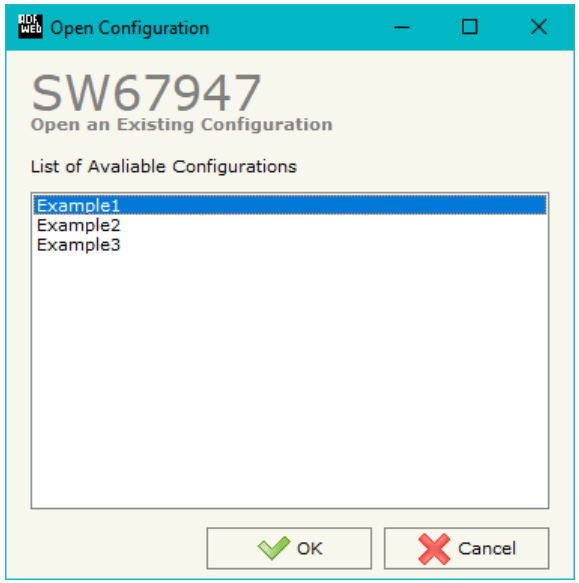
NEW CONFIGURATION / OPEN CONFIGURATION:

The "**New Configuration**" button creates the folder which contains the entire device's configuration.



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

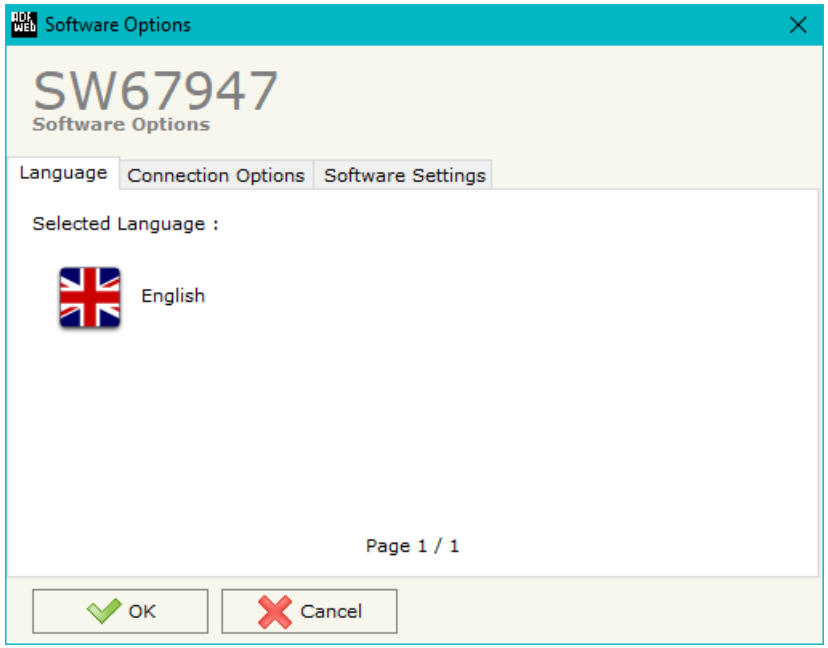
- To clone the configurations of a Programmable "KNX / MQTT - Converter" in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to duplicate the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

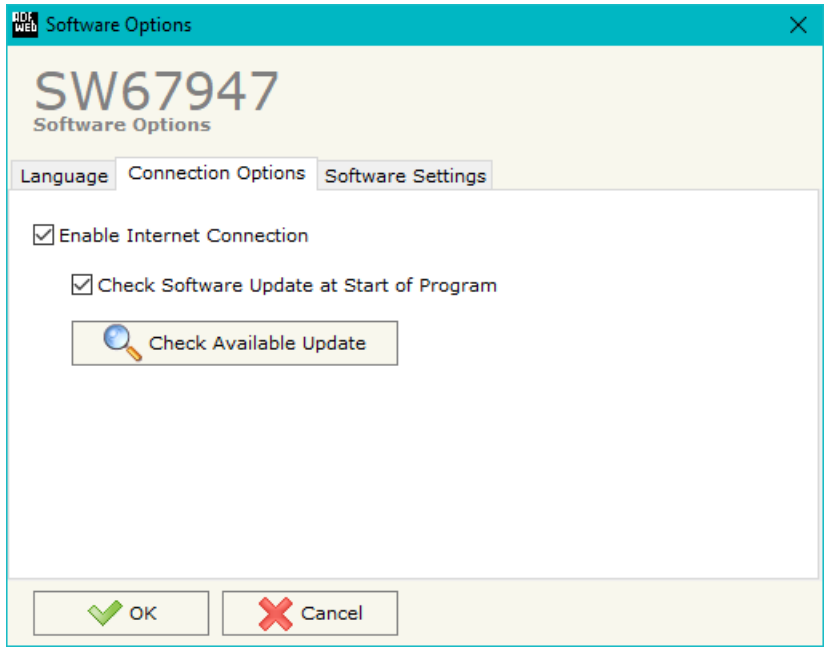


SOFTWARE OPTIONS:

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 SW67947 check automatically if there are updatings when it is launched.



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.

SET COMMUNICATION:

By Pressing the "**Set Communication**" button from the main window for SW67947 (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:

- Select Device
- Ethernet Connection
- KNX
- MQTT
- Ethernet
- TLS (Transport Layer Security)
- NTP (Network Time Protocol)
- Wi-Fi
- GSM / GPRS / LTE

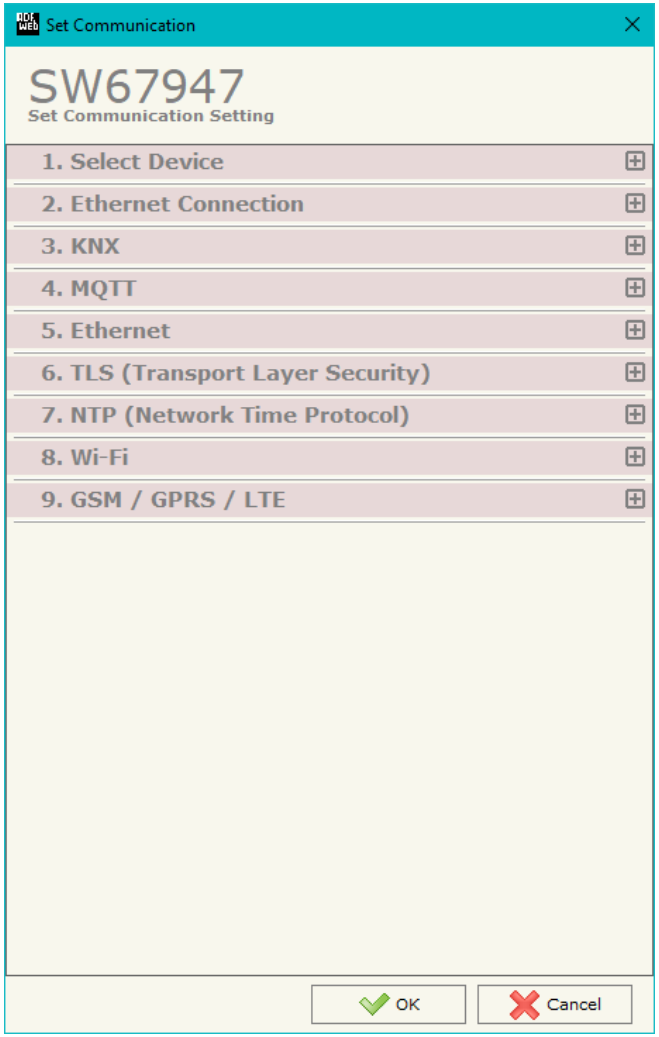


Figure 3a: "Set Communication" window

SELECT DEVICE:

This section is used to . The mean of the field is:

- Only Ethernet Cable: hardware with LAN only;
- Ethernet cable + Wi-Fi: hardware with LAN and Wi-Fi;
- Ethernet Cable + Mobile connection: hardware with LAN and mobile module.



Figure 3b: "Set Communication → Select Device" window

ETHERNET CONNECTION:

This section i used to define the main parameters of the Ethernet connection. The means of the fields 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 "**Obtain an IP Address Automatically (DHCP for Wi-Fi Connection)**" is checked, DHCP for Wi-Fi 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.

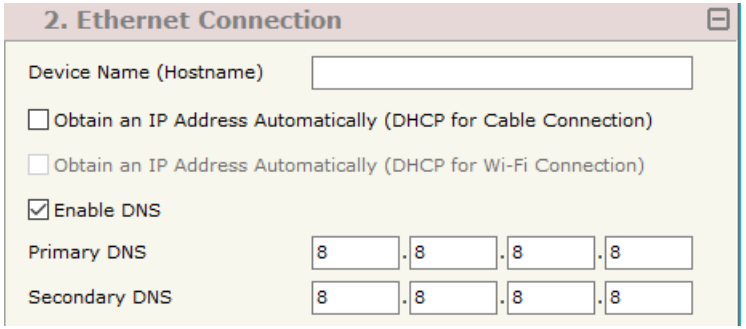


Figure 3c: "Set Communication → Ethernet connection" window

KNX:

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

- In the field "**Type**" the type of KNX is defined (fixed to 'KNX TP');
- In the field "**ID Device**" the ID of the KNX side of the converter is defined.

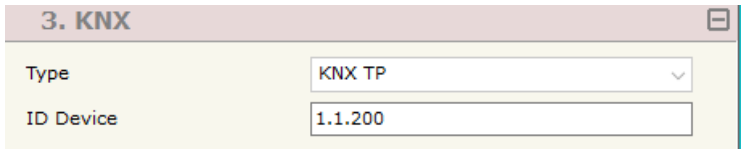


Figure 3d: "Set Communication → KNX" window

MQTT:

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

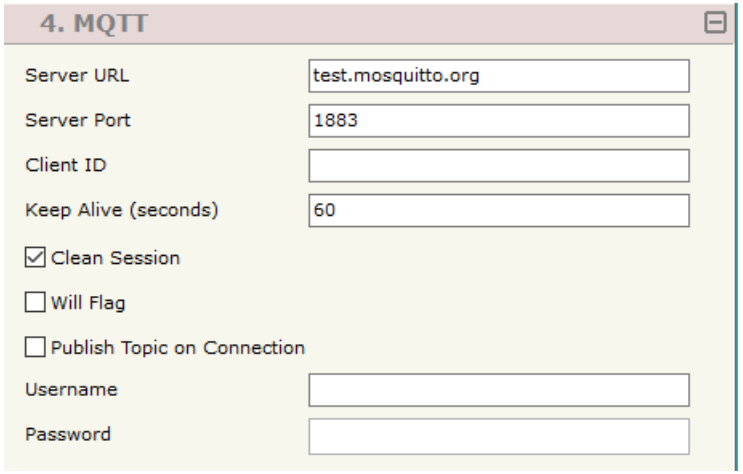


Figure 3e: "Set Communication → MQTT" window

- 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;
- If the field "**Publish Topic on Connection**" is checked, the converter will publish a topic at the connection to the Server;
- 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:

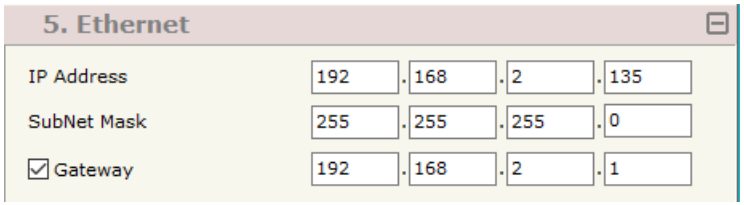


Figure 3f: "Set Communication → Ethernet" window

- 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;

TLS (TRANSPORT LAYER SECURITY):

This section is used to . The mean of the field is:

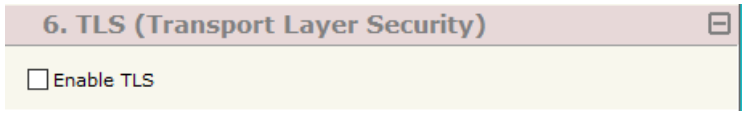


Figure 3g: "Set Communication → TLS" window

- 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 "**CA Certificate**" the CA certificate is defined;
  - 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.

NTP (NETWORK TIME PROTOCOL):

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

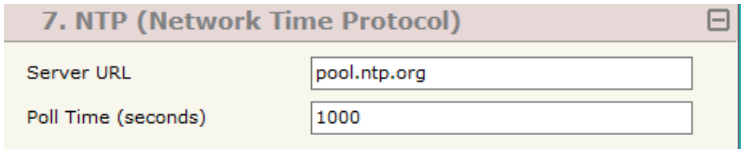


Figure 3h: "Set Communication → NTP" window

- 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.

WI-FI:

This section is used to define the general parameters of Wi-Fi. It is possible to defined the type of Wi-Fi communication:

- Access Point;
- Client.

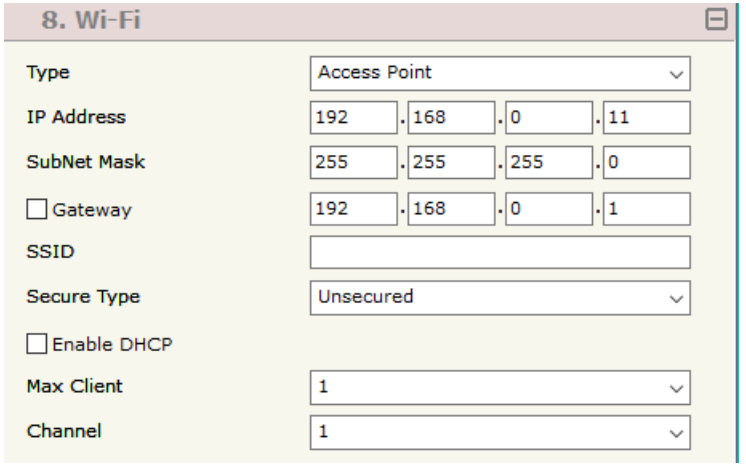


Figure 3i: "Set Communication → Wi-Fi" window

The means of the fields for Access Point configuration 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 "**SSID**" the name of the Wi-Fi network to create is defined;
- In the field "**Secure Type**" the type of security protocol used by the Wi-Fi network is defined;
- If the field "**Enable DHCP**" is checked, the converter acts as DHCP Server for the Clients connected. If the option is enabled, in the fields "**DHCP First IP Address**" and "**DHCP SUBNET Mask**" the IP Addresses range used for DHCP is defined. In the field "**Lease Time (seconds)**" the required time for the renewing of the IP Address assigned to the Client is defined;
- In the field "**Max Client**" the maximum number of Wi-Fi Clients accepted is defined;
- In the field "**Channel**" the channel for Wi-Fi communication is defined.

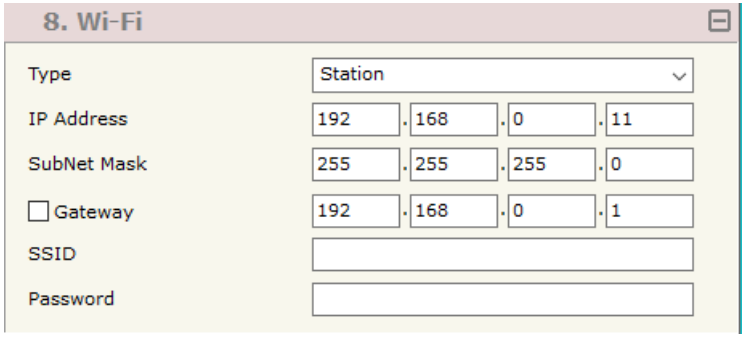


Figure 3j: "Set Communication → Wi-Fi" window

The means of the fields for Station configuration 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 "**SSID**" the name of the Wi-Fi network to connect is defined;
- In the field "**Password**" the password used to connect to the Wi-Fi network is defined.

GSM / GPRS / LTE:

This section is used to define the general parameters of GSM / GPRS / LTE protocols. The means of the fields are:

- In the field "**PIN**" the PIN for the SIM card (if ned) is defined;
- In the field "**APN**" the APN for the mobile operator used is defined;
- In the field "**Authentication Type**" the type of the authentication to the mobile network is defined;
- In the field "**Username**" the username for the authentication is defined;
- In the field "**Password**" the password for the authentication is defined;
- If the field "**Enable Second SIM (SIM 2)**" is checked, the second slot is enabled;
- In the field "**PIN 2**" the PIN for the SIM card 2 (if ned) is defined;
- In the field "**APN 2**" the APN for the mobile operator used is defined;
- In the field "**Authentication Type 2**" the type of the authentication to the mobile network is defined;
- In the field "**Username 2**" the username for the authentication is defined;
- In the field "**Password 2**" the password for the authentication is defined;
- In the field "**Main SIM**" the main SIM card used for the connection is defined.

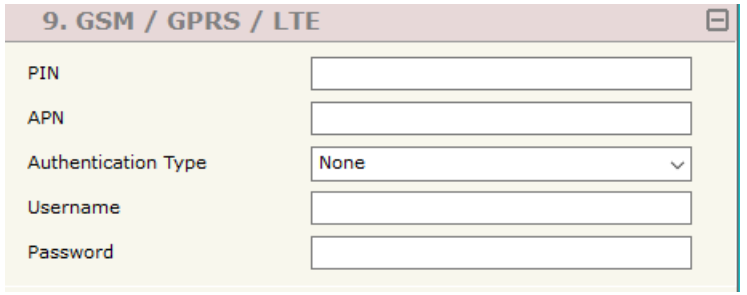


Figure 3k: "Set Communication → GSM / GPRS / LTE" window

MQTT SET TOPIC:

By Pressing the "**MQTT Set Topic**" button from the main window for SW67947 (Fig. 2) the window "Set MQTT Topics" appears (Fig. 4).
This section is used to define the MQTT topics where the converter will publish the data from KNX and the topic that the converter will subscribes for writing the data to KNX.

MQTT PUBLISH

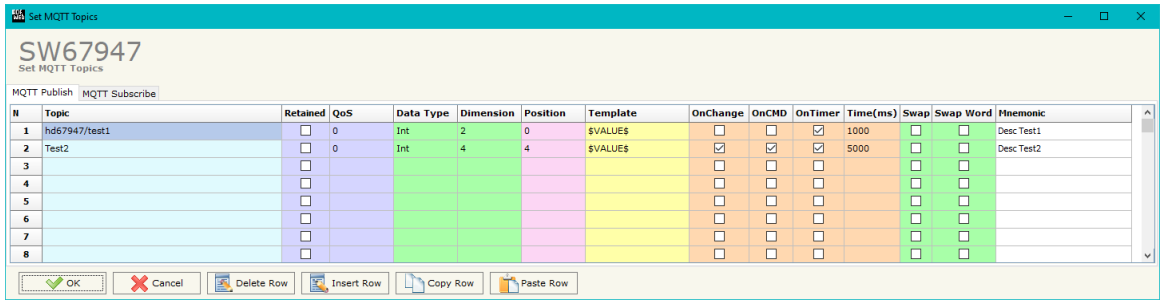


Figure 4a: "Set MQTT Topics → MQTT Publish" window

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 Modbus are changed;
- If the field "**On CMD**" is checked, the converter publishes the topic when a new response from Modbus is received;
- If the field "**On Timer**" is checked, the converter publishes the topic cyclically with the delay defined in the field "**Time (ms)**";
- If the field "**Swap**" is checked, the data from the MQTT registers are swapped;
- If the field "**Swap Word**" is checked, the MQTT words are swapped;
- In the field "**Mnemonic**" a description of the topic is defined.

MQTT SUBSCRIBE

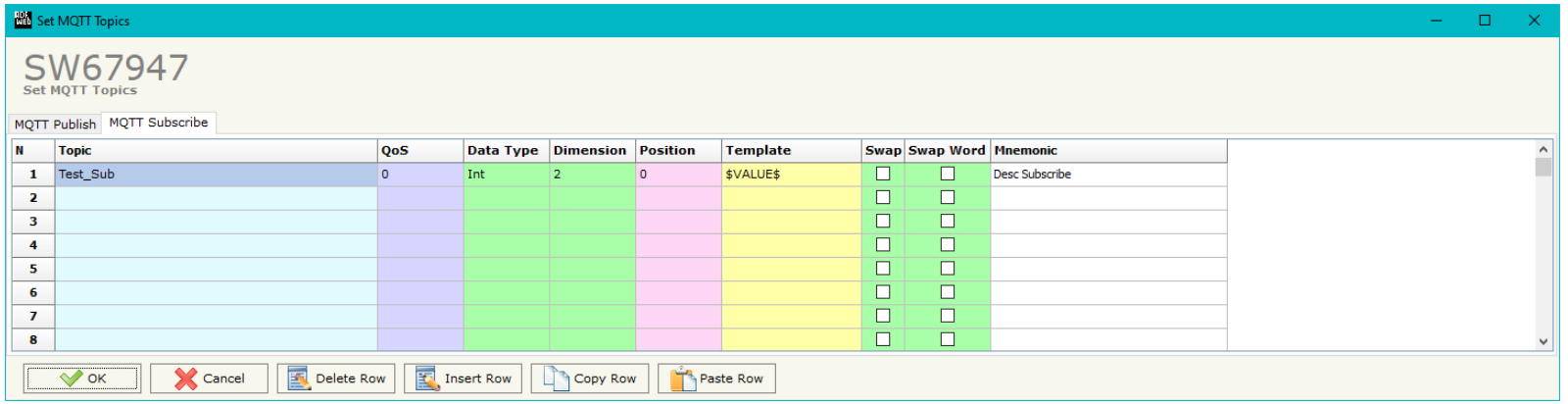


Figure 4b: "Set MQTT Topics → MQTT Subscribe" window

The means of the fields are:

- In the field "**Topic**" the MQTT topic is defined;
- 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;
- If the field "**Swap**" is checked, the data from the MQTT registers are swapped;
- If the field "**Swap Word**" is checked, the MQTT words are swapped;
- In the field "**Mnemonic**" a description of the topic is defined.

KNX ACCESS:

By pressing the "**KNX Access**" button from the main window for SW67947 (Fig. 2) the "KNX Access" window appears (Fig. 5).

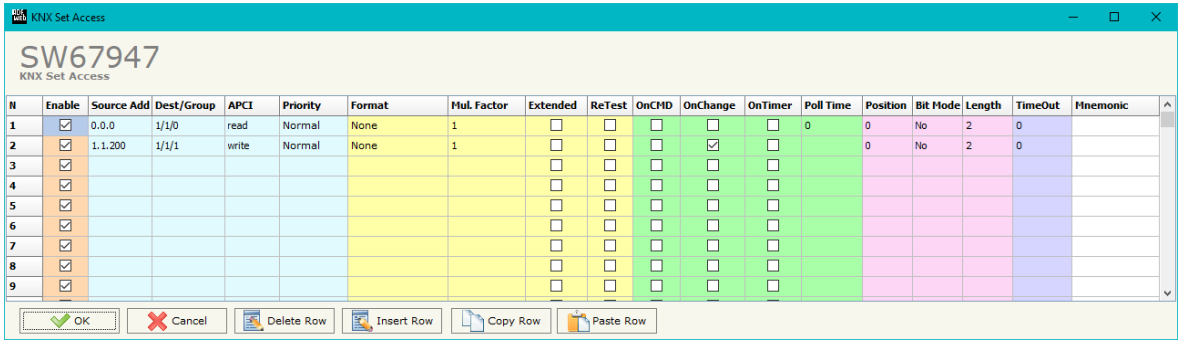


Figure 5: "KNX Set Access"

The means of the fields are:

- If the field "**Enable**" is checked, the KNX message is enabled;
- In the field "**Source Address**" the Source Address to assign to the KNX message is defined;
- In the field "**Dest/Group** the Group address (2 level structure, 3 level structure or free address structure) or the device address is defined. In case of Group address, the levels must be separated by '/', in case of Device address, the parts of the address must be separated by '.';
- In the field "**APCI**" the APCI of the KNX message is defined. You can choose between the following:
  - Read: it is used to send a reading request to a KNX device;
  - Write: it is used to send a writing request to a KNX device;
  - Specific value (edited manually).
- In the field "**Priority**" the Priority of the KNX message is defined. You can choose between the following:
  - System (Highest);
  - Urgent;
  - Normal;
  - Low (Lowest).
- In the field "**Format**" the data format of the KNX message is defined;
- In the field "**Mul. Factor**" a Multiply Factor for the data is defined;
- If the field "**Extended**" is checked, the extended format of the KNX message is used;
- If the field "**ReTest**" is checked, the KNX message is re-sent in case of not correct response;
- If the field "**OnCMD**" is checked, the KNX request is sent when a MQTT message is received;
- If the field "**On Change**" is checked, the gateway sends the KNX command when the data on MQTT change the value;
- If the field "**On Timer**" is checked, the gateway sends the KNX command cyclically;
- In the field "**Poll Time**" the delay in ms between two KNX commands is defined (if "On Timer" is checked);

- In the field "**Position**" insert the address of the internal array where placing the information;
- In the field "**Bit Mode**" insert the start bit of the first byte of the field "Position" where start to insert the data read;
- In the field "**Lenght**" the dimension of the KNX message is defined;
- In the field "**Timeout**" the timeout in ms for KNX data point is defined. If the data point is not received for the time defined, the data on Modbus side are set to '0';
- In the field "**Mnemonic**" the description for the request is defined.

Note:
If the field "On change" is checked and the "Poll Time" is different from 0, the converter sends the KNX command cyclically and also when the data is changed.

Note:
If the field "OnCMD", "OnChange" and "OnTimer" are not checked, the converter only sniffs the bus in order to monitor the status of the KNX message.

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.

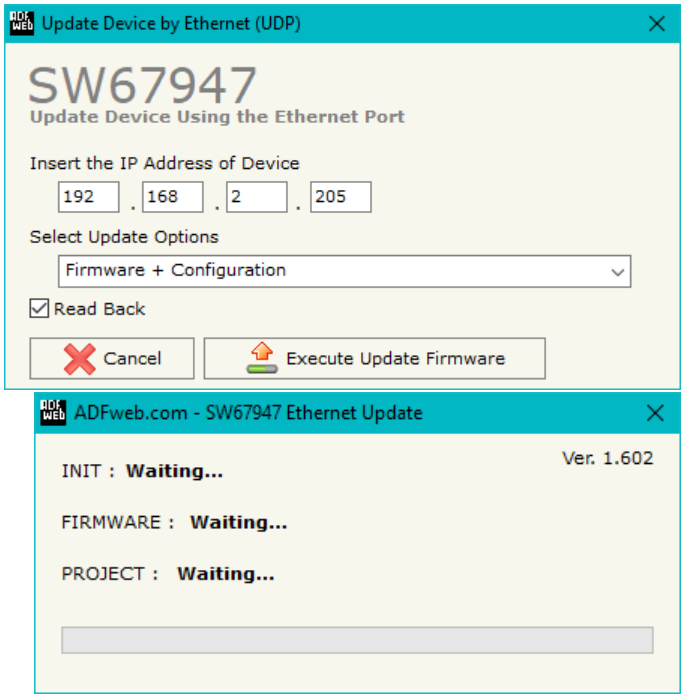


Figure 6: "Update device" windows

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.

Note:
When you receive the device, for the first time, you also have to update the Firmware in the HD67947 device.

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

- Check if the serial COM port selected is the correct one;
- Check if the serial cable is connected between the PC and the device;
- 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.

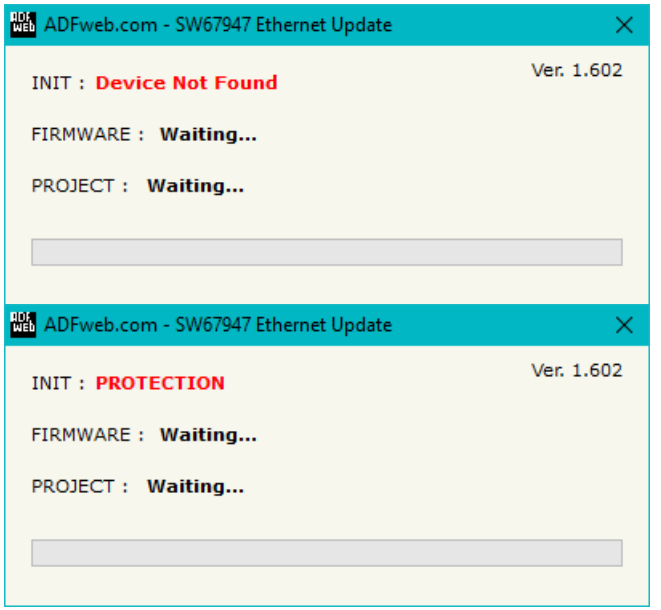


Figure 7: "Error" window

Warning:
In the case of HD67947 you have to use the software "SW67947": www.adfweb.com\download\filefold\SW67947.zip.

TEMPLATE STRING: DEFINITION OF MQTT PAYLOAD

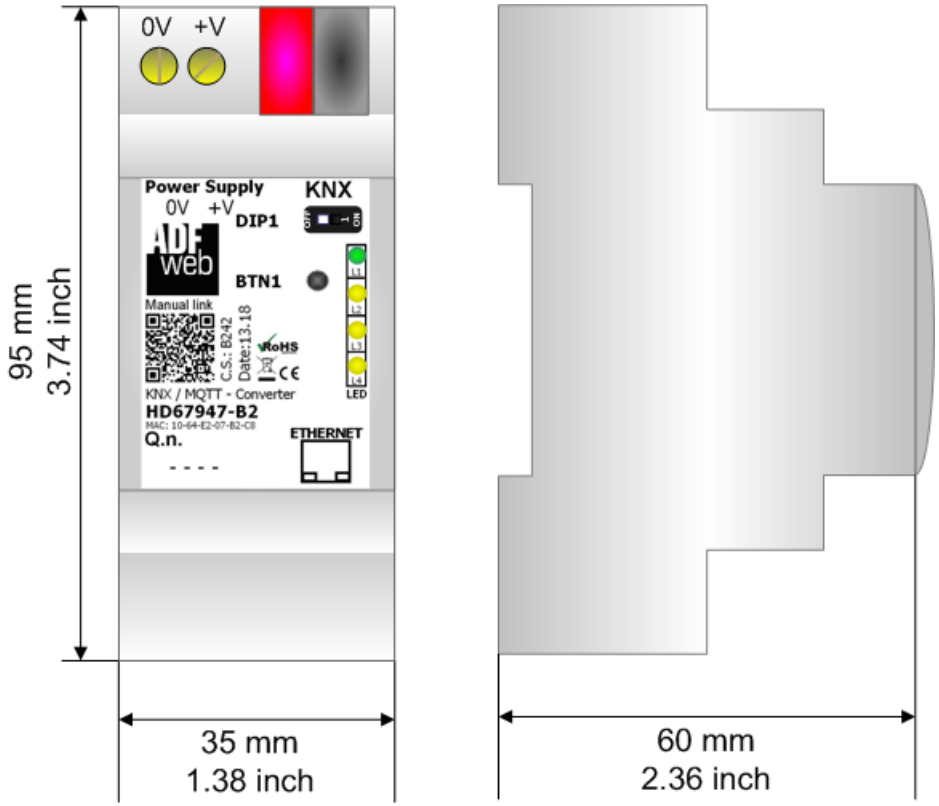
In the section "Set Communication" of the SW67947, it is possible to define a Template string for the MQTT messages. The template is necessary in order to define the structure of the payload of the MQTT message and the info contained.
It is possible to have a simple text format or a JSON format.

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

- VALUE: value of the KNX 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 8a: Mechanical dimensions scheme for HD67947-B2

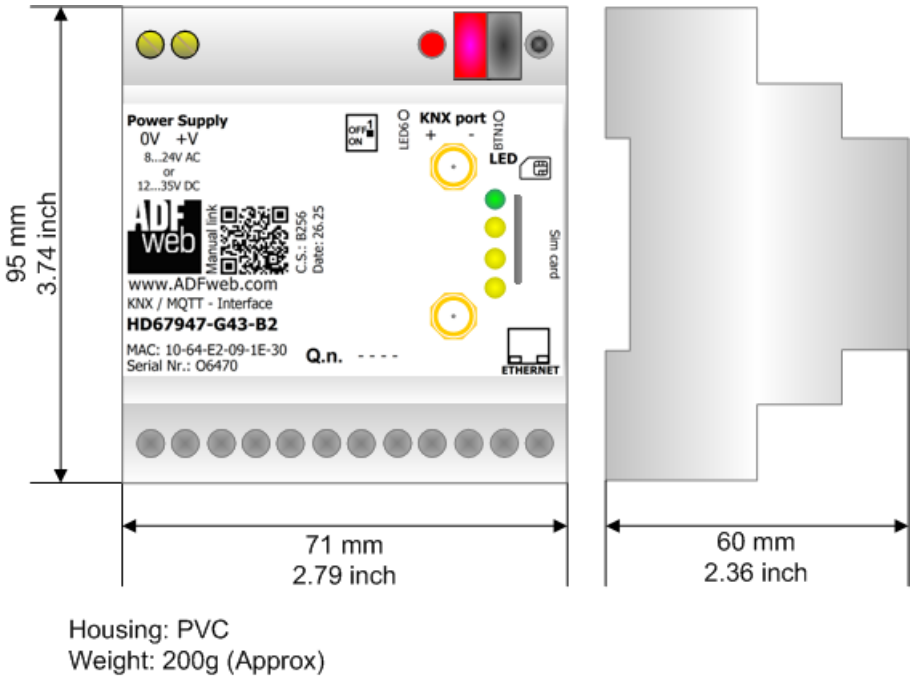


Figure 8b: Mechanical dimensions scheme for HD67947-G43-B2

ORDERING INFORMATIONS:

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

HD67947 - xxx - B 2

Connectors Type
2: Fixed Screw Terminal

Enclosure Type
B: Modulbox 2M, 35mm DIN Rail mounting

LTE Module
None: No available LTE module
G43: LTE module present with SIM card slot

Device Family
HD67947: KNX / MQTT - Converter

Order Code: **HD67947-B2** - KNX / MQTT - Converter
Order Code: **HD67947-G43-B2** - KNX / 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

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OTHER REGULATIONS AND STANDARDS:

WEEE INFORMATION



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

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

RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE

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

CE MARKING

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

WARRANTIES AND TECHNICAL SUPPORT:

For fast and easy technical support for your ADFweb.com SRL products, consult our internet support at www.adfweb.com.
Otherwise contact us at the address support@adfweb.com

RETURN POLICY:

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

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

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

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