User Manual

Revision 1.000
English

Modbus TCP Master / HTTP/REST Server - Converter

(Order Code: HD67G10-B2, HD67G10-G43-B2, HD67G10-G43-E-B2, HD67G10-G43-VPN-B2, HD67G10-G43-E-VPN-B2)

For Website information:
www.adfweb.com?Product=HD67G10-B2
www.adfweb.com?Product=HD67G10-G43-B2
www.adfweb.com?Product=HD67G10-G43-E-B2
www.adfweb.com?Product=HD67G10-G43-VPN-B2
www.adfweb.com?Product=HD67G10-G43-E-VPN-B2

For Price information:
www.adfweb.com?Price=HD67G10-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 HTTP/REST products, see also the following links:

Converter HTTP/REST Server to

www.adfweb.com?Product=HD67G04	**(Serial)**
www.adfweb.com?Product=HD67G06	**(Modbus Master)**
www.adfweb.com?Product=HD67G08	**(Modbus Slave)**
www.adfweb.com?Product=HD67G12	**(Modbus TCP Slave)**
www.adfweb.com?Product=HD67G14	**(BACnet Master)**
www.adfweb.com?Product=HD67G16	**(BACnet Slave)**
www.adfweb.com?Product=HD67G21	**(CAN)**
www.adfweb.com?Product=HD67G23	**(CANopen)**
www.adfweb.com?Product=HD67G25	**(DALI)**
www.adfweb.com?Product=HD67G27	**(DeviceNet Master)**
www.adfweb.com?Product=HD67G29	**(DeviceNet Slave)**
www.adfweb.com?Product=HD67G31	**(DMX)**
www.adfweb.com?Product=HD67G33	**(EtherNet/IP Master)**
www.adfweb.com?Product=HD67G35	**(EtherNet/IP Slave)**
www.adfweb.com?Product=HD67G37	**(J1939)**
www.adfweb.com?Product=HD67G39	**(KNX)**
www.adfweb.com?Product=HD67G41	**(NMEA0183)**
www.adfweb.com?Product=HD67G43	**(NMEA2000)**
www.adfweb.com?Product=HD67G45	**(PROFIBUS Master)**
www.adfweb.com?Product=HD67G47	**(PROFIBUS Slave)**
www.adfweb.com?Product=HD67G49	**(PROFINET Master)**
www.adfweb.com?Product=HD67G51	**(PROFINET Slave)**
www.adfweb.com?Product=HD67G53	**(SNMP Manager)**
www.adfweb.com?Product=HD67G55	**(SNMP Agent)**
www.adfweb.com?Product=HD67G57	**(OPC UA Client)**
www.adfweb.com?Product=HD67G59	**(OPC UA Server)**
www.adfweb.com?Product=HD67G61	**(Ethernet)**
www.adfweb.com?Product=HD67G63	**(IEC 61850 Client)**
www.adfweb.com?Product=HD67G65	**(IEC 61850 Server)**
www.adfweb.com?Product=HD67G67	**(MQTT)**
www.adfweb.com?Product=HD67G69	**(MQTT Broker)**

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

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	24/03/2025	Ln	All	First release version

WARNING:

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ADFweb.com is not responsible for any error this manual may contain.

TRADEMARKS:

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SECURITY ALERT:

GENERAL INFORMATION

To ensure safe operation, the device must be operated according to the instructions in the manual. When using the device, legal and safety regulation are required for each individual application. The same applies also when using accessories.

INTENDED USE

Machines and systems must be designed so the faulty conditions do not lead to a dangerous situation for the operator (i.e. independent limit switches, mechanical interlocks, etc.).

QUALIFIED PERSONNEL

The device can be used only by qualified personnel, strictly in accordance with the specifications.
Qualified personnel are persons who are familiar with the installation, assembly, commissioning and operation of this equipment and who have appropriate qualifications for their job.

RESIDUAL RISKS

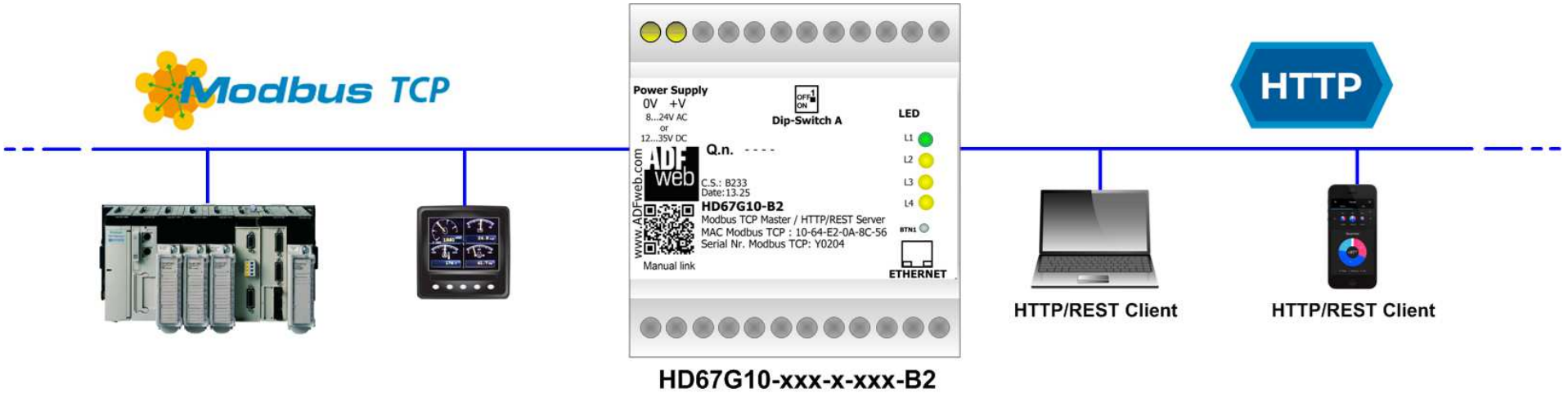
The device is state-of-the-art and is safe. The instruments can represent a potential hazard if they are inappropriately installed and operated by untrained personnel. These instructions refer to residual risks with the following symbol:

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

CE CONFORMITY

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

EXAMPLE OF CONNECTION:



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

CONNECTION SCHEME:

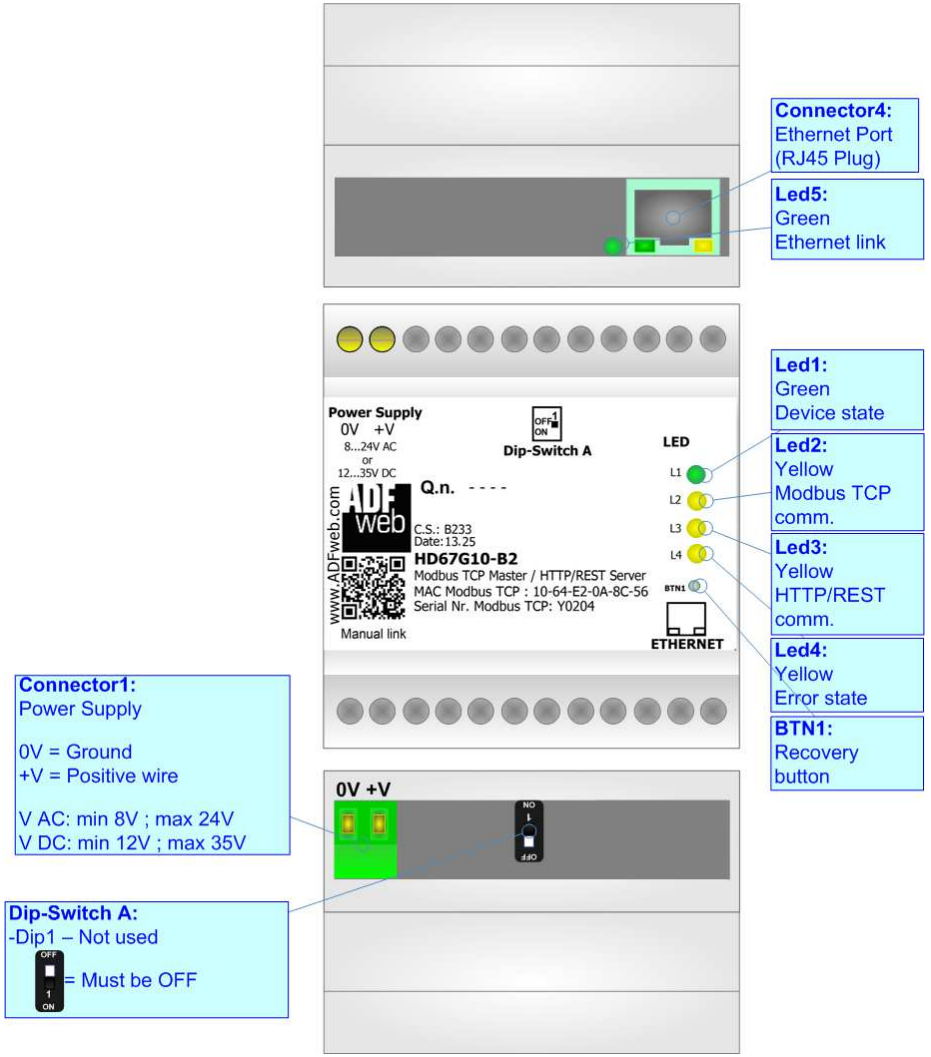


Figure 1a: Connection scheme for HD67G10-B2

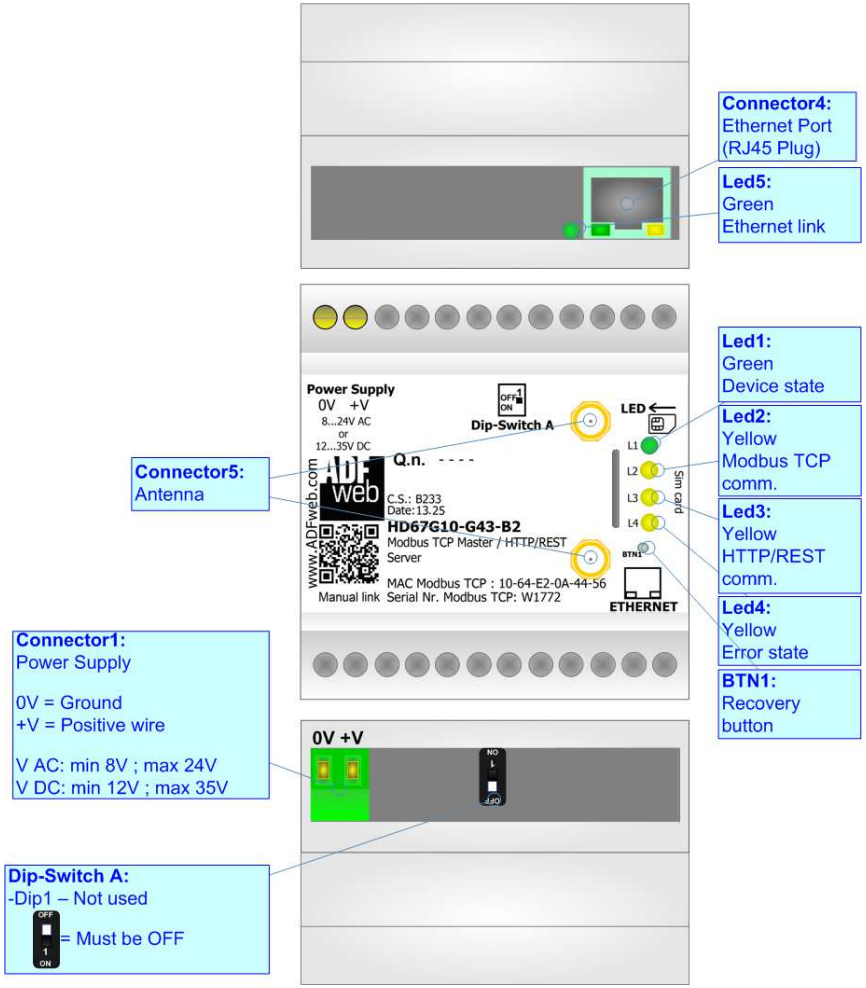


Figure 1b: Connection scheme for HD67G10-G43-x-xxx-B2

CHARACTERISTICS:

The HD67G10-xxx-x-xxx-B2 is a Modbus TCP Master / HTTP/REST Server Converter.

It allows the following characteristics:

- Electrical isolation between Ethernet and Power Supply;
- Mountable on 35mm Rail DIN;
- Wide power supply input range: 12…35V DC and 8…24V AC;
- Wide temperature range: -40°C / +85°C [-40°F / +185°F].

CONFIGURATION:

You need Compositor SW67G10 software on your PC in order to perform the following:

- Define the parameter of HTTP/REST;
- Define the parameter of Modbus TCP line;
- Define the list of accessible endpoints from HTTP/REST side;
- Define the list of Modbus TCP requests in read and write;
- Update the device.

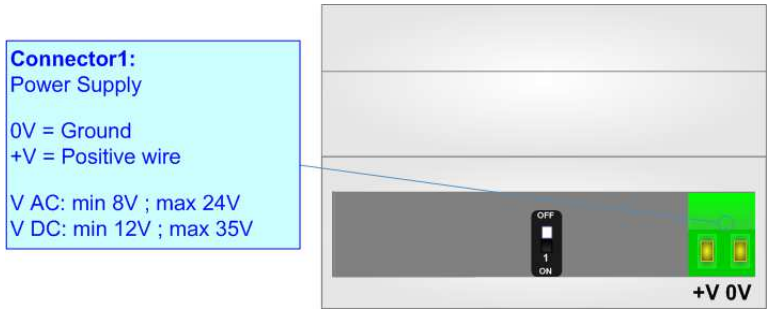
POWER SUPPLY:

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

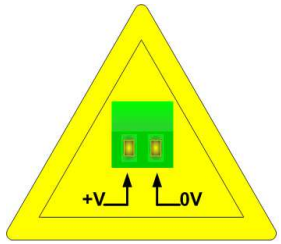
VAC ~		VDC ⎓	
Vmin	**Vmax**	**Vmin**	**Vmax**
8V	**24V**	**12V**	**35V**

Consumption at 24V DC:

Device	Consumption [W/VA]
HD67G10-xxx-x-xxx-B2	5



Caution: Not reverse the polarity power

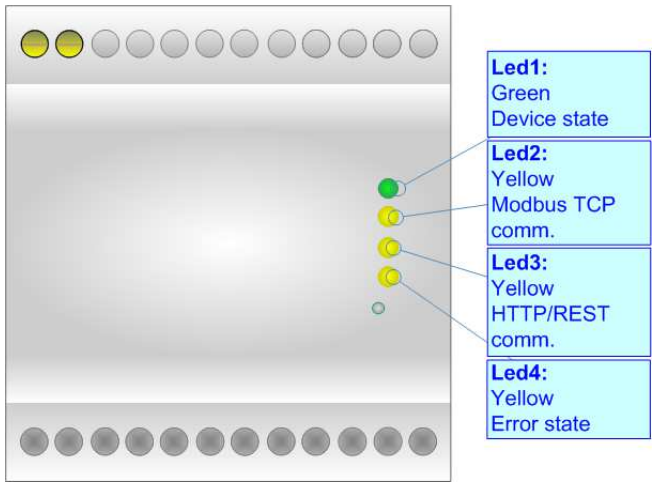


HD67G10-xxx-x-xxx-B2

LEDS:

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

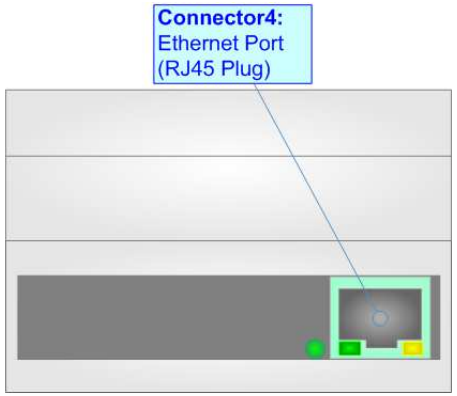
LED	Normal Mode	Recovery Mode
1: Device State (green)	Blinks slowly (~1Hz)	Blinks quickly
2: Modbus TCP comm. (yellow)	Blinks when Modbus TCP communication is running	Blinks quickly
3: HTTP/REST comm. (yellow)	Blinks when a HTTP/REST request is received	Blinks quickly
4: Error State (yellow)	**ON:** an error occurs **OFF:** no errors	Blinks quickly



ETHERNET:

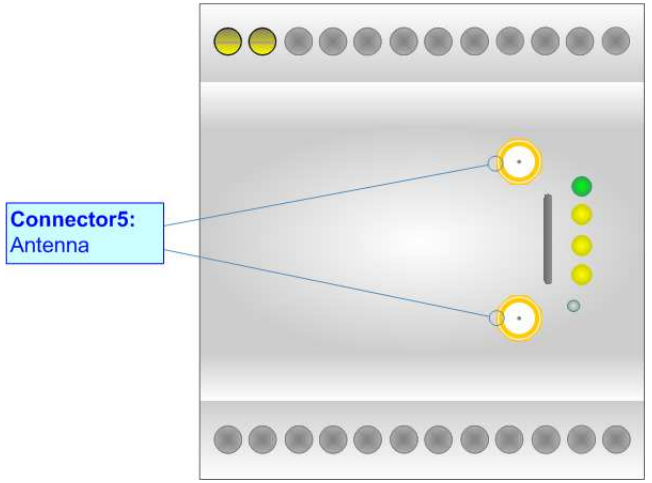
The Ethernet port is used for programming the device, for HTTP/REST communication and for Modbus TCP communication.
The Ethernet connection must be made using Connector2 of HD67G10-xxx-x-xxx-B2 with at least a Category 5E cable. The maximum length of the cable should not exceed 100m. The cable has to 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.

The interface has two different MAC Addresses, one for HTTP/REST and one for Modbus TCP side.



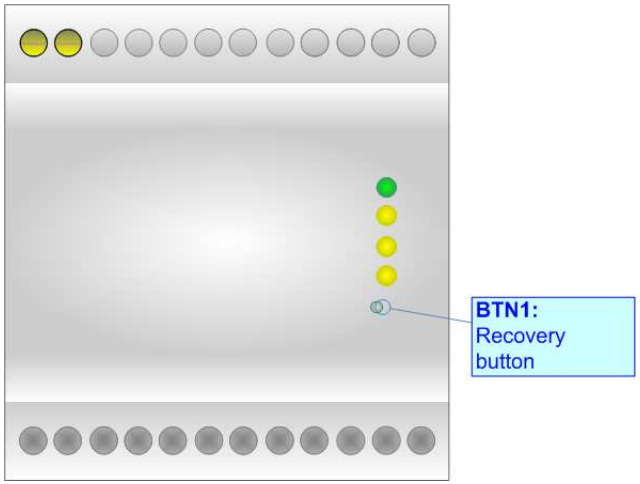
MOBILE:

The HD67G10-G43-x-xxx-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.



RECOVERY BUTTON:

In order to recover the device in case of wrong firmware updating or any error that compromises correct functioning of the device, it is necessary to press the BTN1. After pressing, the device will be switched in Recovery Mode and it will be possible to update again the firmware or reset the device using the default IP address 192.168.2.206 via webserver.



USE OF ADFWEB DISCOVERY TOOL SOFTWARE:

To discover the device into the network and see its IP Address, use the available software that runs with Windows called "ADFweb Discovery Tool". It is downloadable from here: www.adfweb.com/download/filefold/ADFweb_Discovery_Tool.zip.
The software works with MSWindows (XP, Vista, Seven, 8, 10, 11; 32/64bit).

USE OF COMPOSITOR SW67G10:

To configure the Converter, use the available software that runs with Windows called SW67G10. 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, 11; 32/64bit).

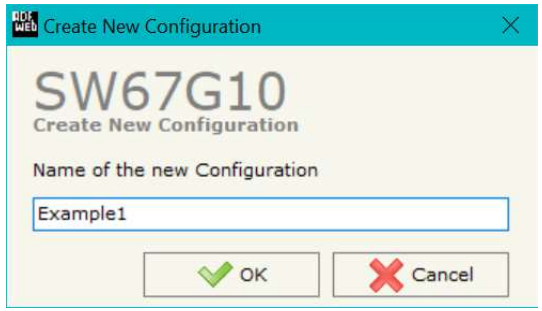
When launching the SW67G10, the window below appears (Fig. 2).

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

Figure 2: Main window for SW67G10

NEW CONFIGURATION / OPEN CONFIGURATION:

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



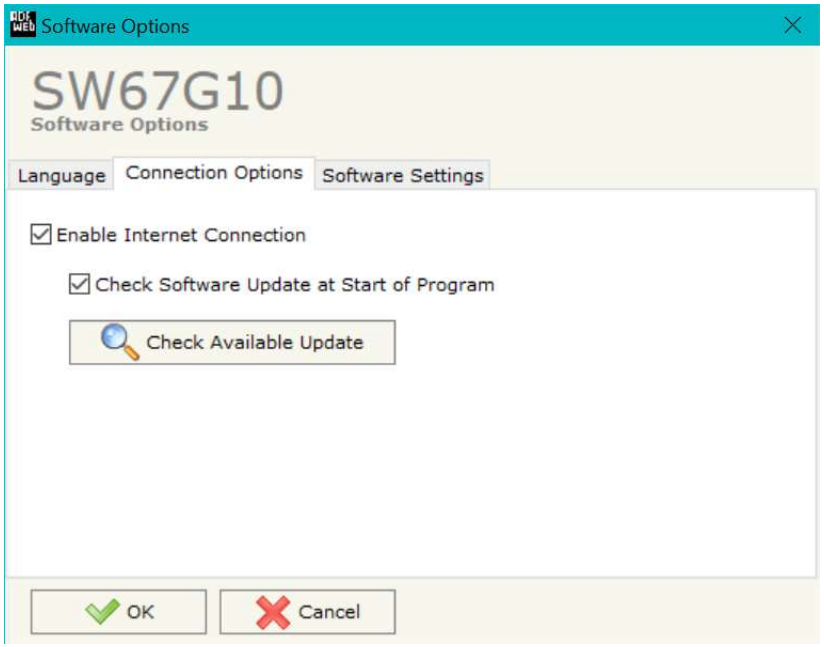
A device's configuration can also be imported or exported:

- To clone the configurations of a Programmable "Modbus TCP Master / HTTP/REST Server - 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**".

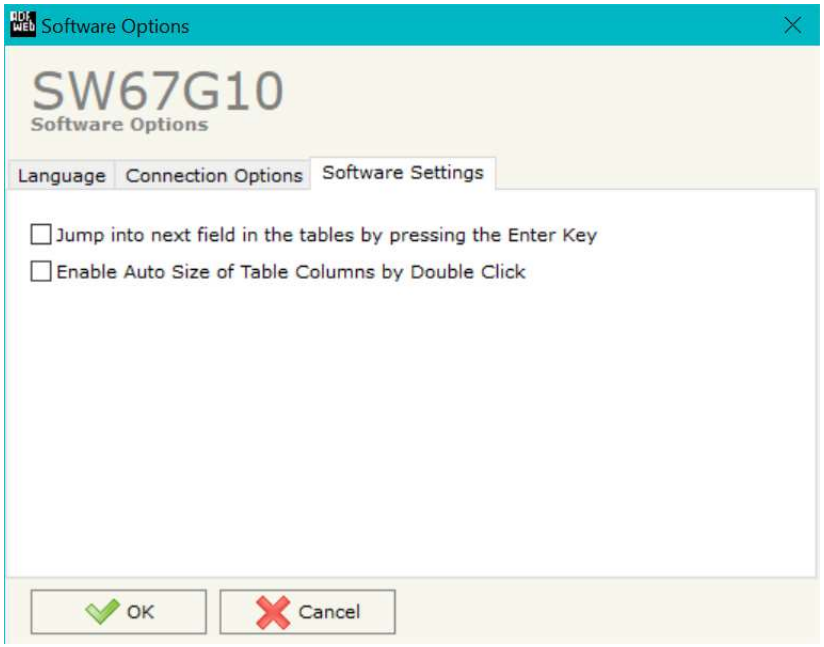
SOFTWARE OPTIONS:

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 SW67G10 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 SW67G10 (Fig. 2) the window "Set Communication" appears (Fig. 3).
This window is divided in two sections, one for configuring the HTTP/REST network and the other for the Modbus TCP network.

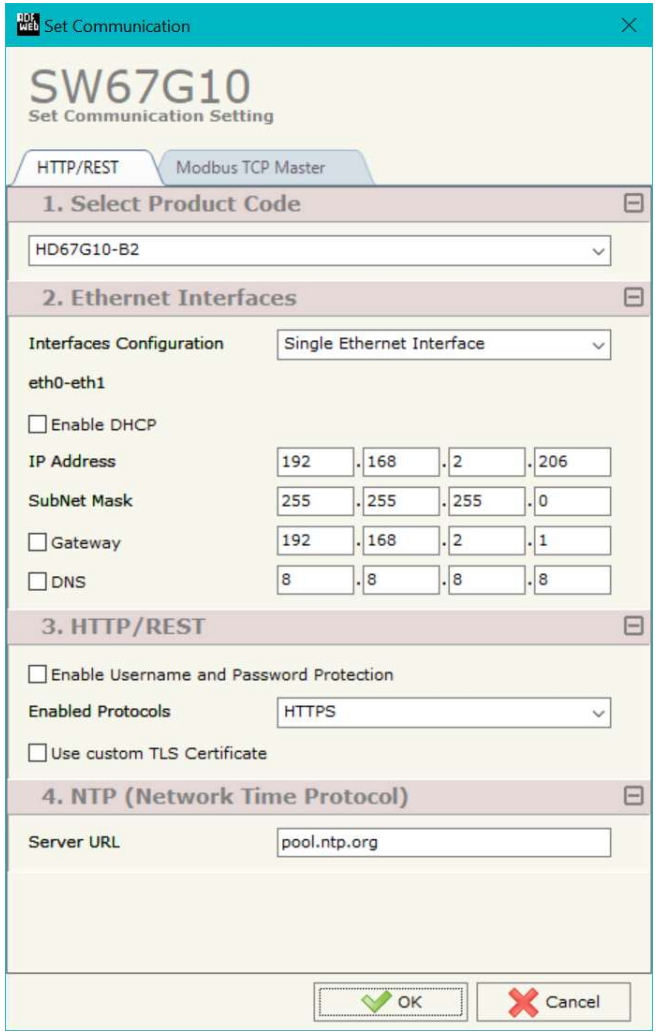


Figure 3a: "Set Communication → HTTP/REST" window

HTTP/REST section

HTTP → SELECT PRODUCT CODE:

This section is used to select the product in use. It is possible to have:

- HD67G10-B2;
- HD67G10-G43-B2;
- HD67G10-G43-E-B2;
- HD67G10-G43-VPN-B2;
- HD67G10-G43-E-VPN-B2.

HTTP → ETHERNET INTERFACES:

This section is used to define the general parameters of Ethernet. The means of the fields are:

- In the field "**Interfaces Configuration**", it is possible to define the hardware settings of the Ethernet interfaces. For the hardware version with a single Ethernet port, it is mandatory to set "Single Ethernet Interface";
- In the field "**Enable DHCP**", it is possible to enable the DHCP Client to obtain automatically the IP Address from a DHCP Server in the network;
    - If "Enable DHCP" option is active, it is possible to configure the "**Default IP Address**" and "**Default SubNet Mask**" to set a static IP Address if a DHCP Server is not present;
    - If "Enable DHCP" option is active, it is possible to configure the "**Host Name**" for the Ethernet interface of the converter;

- In the field "**IP Address**", the IP address of the converter is defined;
- In the field "**SubNet Mask**" the Subnet Mask of the converter is defined;
- In the field "**Gateway**" the default gateway of the network is defined. This feature can be enabled or disabled pressing the Check Box field;
- In the field "**DNS**" the IP Address of the DNS server is defined. This feature can be enabled or disabled pressing the Check Box field.

HTTP → HTTP/REST:

This section is used to define the general parameters of the HTTP/REST. The means of the fields are:

- If the field "**Enable Username and Password Protection**" is checked, the HTTP/REST Clients can access to the converter using basic authentication with username and password;
- In the field "**Enabled Protocols**", it is possible to select if using HTTPS only or both HTTPS and HTTP;
- If the field "**Use custom TLS Certificate**" is checked, it is possible to upload a custom certificate inside the converter. If the option is enabled, the following fields will appear:
  - In the field "**TLS Certificate**" it is possible to select a certificate;
  - In the field "**TLS Key**" it is possible to select the private key.

HTTP → NTP (NETWORK TIME PROTOCOL):

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

- In the field "**Server URL**" the URL or the IP Address of the NTP Server is defined.

Modbus TCP Master section

MODBUS TCP MASTER → ETHERNET CONNECTION:

This section is used to define the general parameters of Ethernet. 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.

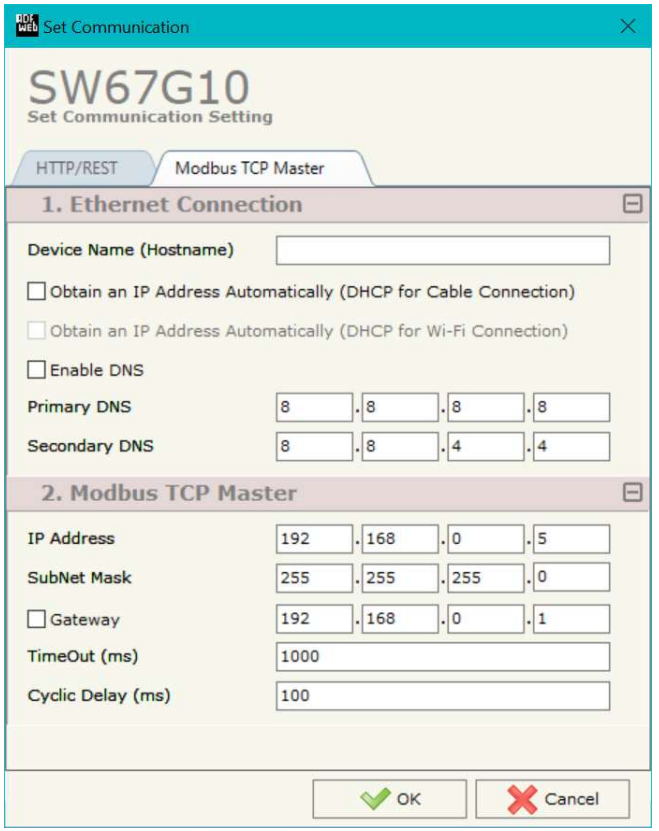


Figure 3b: "Set Communication → Modbus TCP Slave" window

MODBUS TCP MASTER → MODBUS TCP MASTER:

This section is used to define the general parameters of Modbus TCP side. The means of the fields are:

- In the field "**IP Address**" the IP address of Modbus TCP side of the converter is defined;
- In the field "**SubNet Mask**" the Subnet Mask of Modbus TCP side of the converter is defined;
- In the field "**Gateway**" the default gateway of the network is defined. This feature can be enabled or disabled pressing the Check Box field. This feature is used for going out of the net;
- In the "**TimeOut (ms)**" define the maximum time that the device attends for the answer from the slave interrogated;
- In the field "**Cyclic Delay (ms)**" the minimum delay between two requests is defined.

SET HTTP/REST:

By Pressing the "**Set HTTP/REST**" button from the main window for SW67G10 (Fig. 2) the window "Set HTTP/REST Access" appears (Fig. 4).
This section is used to define the list of the HTTP endpoints accessible by the Clients using GET and POST requests. GET is used to read the data coming from Modbus TCP and POST is used to write the data to Modbus TCP.

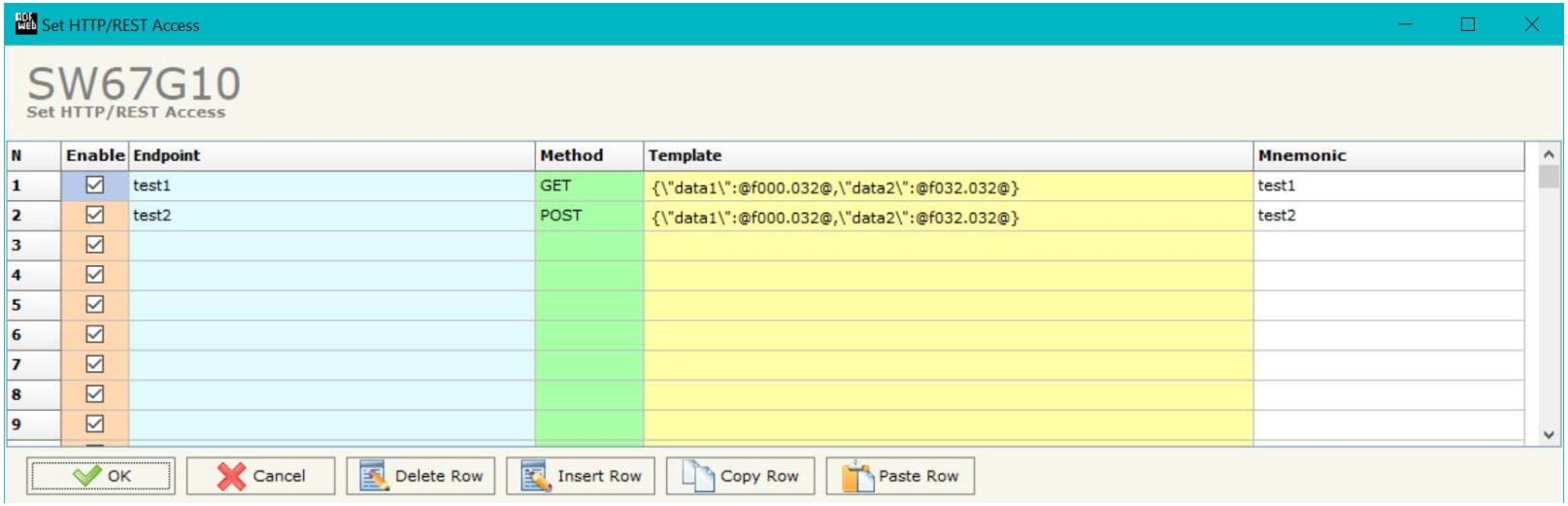


Figure 4: "Set HTTP/REST Access" window

The means of the fields are:

- If the field "**Enable**" is checked, the endpoint is enabled;
- In the field "**Endpoint**" the name of the endpoint is enabled;
- In the field "**Method**" the type of HTTP/REST request to use is defined;
- In the field "**Template**" the structure of the payload and the variables to be linked is defined. See page 26 for more info;
- In the field "**Mnemonic**" the description for the endpoint is defined.

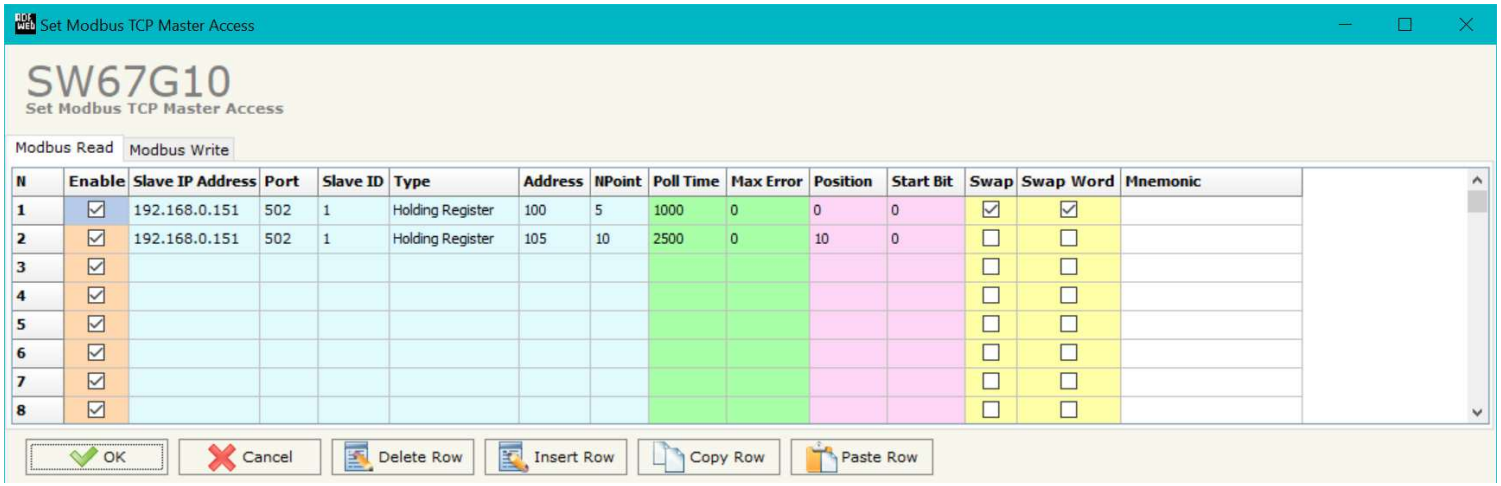
Note:
The endpoint name is composed by a fixed row part called "/api/httpConverter/" plus the custom part defined in the "Endpoint" field.

MODBUS SET ACCESS:

By pressing the "**Modbus Set Access**" button from the main window for SW67G10 (Fig. 2) the window "Set Modbus TCP Master Access" appears.

This window is divided in two parts, the "Modbus Read" (Fig. 5a) and the "Modbus Write " (Fig. 5b).
The first part "Modbus Read" is used to read the data from the Modbus TCP slaves and make them available to be read by the HTTP/REST Clients.
The second part "Modbus Write " is used to write the data that arrives from the HTTP/REST Clients into the Modbus TCP slaves.

MODBUS READ



N	Enable	Slave IP Address	Port	Slave ID	Type	Address	NPoint	Poll Time	Max Error	Position	Start Bit	Swap	Swap Word	Mnemonic
1	☑	192.168.0.151	502	1	Holding Register	100	5	1000	0	0	0	☑	☑	
2	☑	192.168.0.151	502	1	Holding Register	105	10	2500	0	10	0	☐	☐	
3	☑											☐	☐	
4	☑											☐	☐	
5	☑											☐	☐	
6	☑											☐	☐	
7	☑											☐	☐	
8	☑											☐	☐	

Figure 5a: "Modbus Set Access→Modbus Read" window

The means of the fields are:

- If the field "**Enable**" is checked, the Modbus variable is enabled;
- In the field "**Slave IP Address**" the IP address of the Modbus TCP device to read is defined;
- In the field "**Port**" the TCP port to use is defined;
- In the field "**Slave ID**" the address of the Modbus TCP device to read is defined;
- In the field "**Type**" the data type of the register to read is defined. It is possible to choose between the following:
  - Coil Status;
  - Input Status
  - Holding Register;
  - Input Register.
- In the field "**Address**" the starting address of the register to be read is defined;
- In the field "**NPoint**" the number of consecutive registers to be read is defined;
- In the field "**Poll Time**" the delay time to make the request is defined;

- In the field "**Max Error**" the number of consecutive errors that the converter waits before suspending the request until the next reboot is defined. If is set to '0' this function is disabled;
- In the field "**Position**" the address of the internal memory array array where placing the information is defined;
- In the field "**Start Bit**" the starting bit of the first byte of the field "Position" is defined. Valid only for the "Coil Status" and "Input Status";
- If the field "**Swap**" is checked, the data from the Modbus registers are swapped;
- If the field "**Swap Word**" is checked, the words of the data read are swapped between them;
- In the field "**Mnemonic**" the description for the request is defined.

MODBUS WRITE

The means of the fields are:

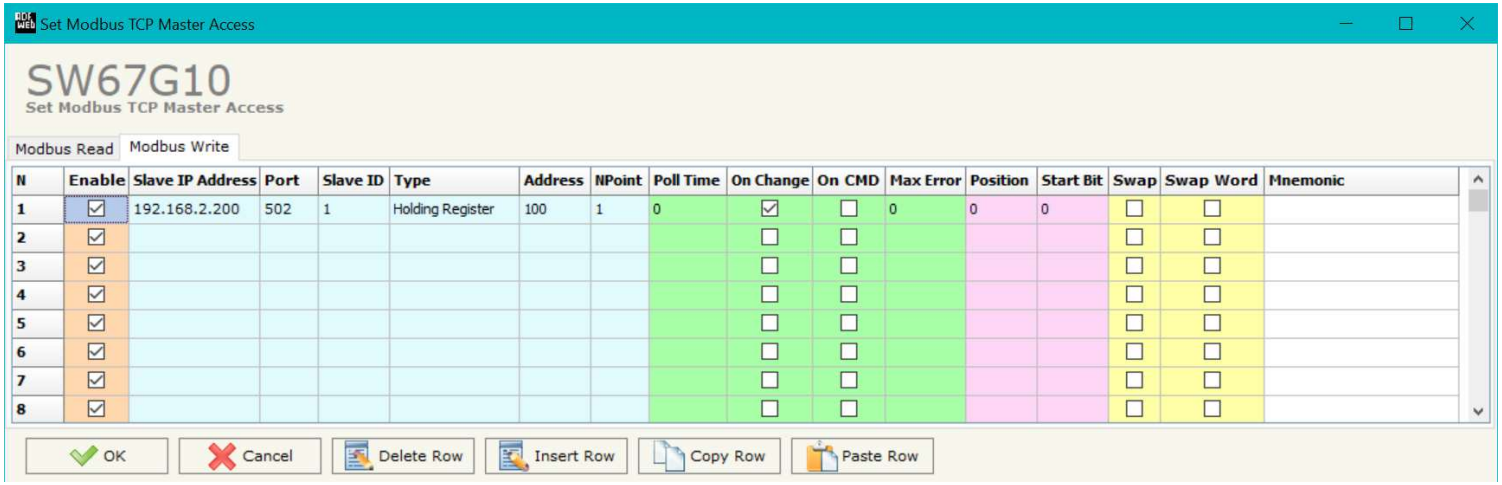


Figure 5b: "Modbus Set Access→Modbus Write" window

- If the field "**Enable**" is checked, the Modbus variable is enabled;
- In the field "**Slave IP Address**" the IP address of the Modbus TCP device to write is defined;
- In the field "**Port**" the TCP port to use is defined;
- In the field "**Slave ID**" the address of the Modbus TCP device that you have to write is defined;
- In the field "**Type**" the data type of the register to write is defined. It is possible to choose between the following:
  - Coil Status;
  - Holding Register.
- In the field "**Address**" the start address of the register to be written is defined;

- In the field "**NPoint**" the number of consecutive registers to be written is defined;
- In the field "**Poll Time**" the delay time to make the request is defined;
- If the field "**On Change**" is checked, the converter sends the writing request when the data from HTTP/REST side change value;
- If the field "**On CMD**" is checked, the converter sends the writing request when the data from HTTP/REST is received;
- In the field "**Max Error**" the number of consecutive errors that the converter waits before suspending the request until the next reboot is defined. If is set to '0' this function is disabled;
- In the field "**Position**" the address of the internal memory array where taking the information is defined;
- In the field "**Start Bit**" the starting bit of the first byte of the field "Position" is defined. Valid only for the "Coil Status" and "Input Status";
- If the field "**Swap**" is checked, the data written the Modbus registers are swapped;
- If the field "**Swap Word**" is checked, the words of the data written are swapped between them;
- In the field "**Mnemonic**" the description for the request is defined.

Note:
If you want that the converter sends the data only "On change", the "Poll Time" must be at 0.

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

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 ON the device
- Connect the Ethernet cable;
- Insert the IP Address of the converter (if not known, it is possible to use "ADFweb Discovery Tool" to find it);
- Press the "**Execute update firmware**" button to start the upload;
- When all the operations are "OK" turn OFF the Device;
- Close the updating windows and wait for restarting.

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

Figure 6: "Update device" windows

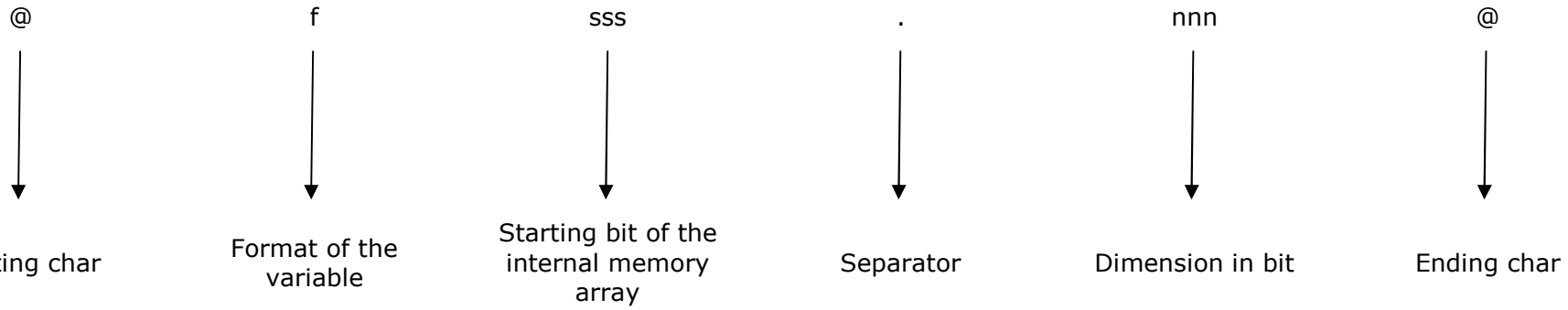
Warning:
If the update fails, try these points before seeking assistance:

- 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, 11 you have to launch the "Command Prompt" with Administrator Rights;
- Pay attention at Firewall lock.

Warning:
In the case of HD67G10 you have to use the software "SW67G10": www.adfweb.com\download\filefold\SW67G10.zip.

TEMPLATE STRING: DEFINITION OF HTTP/REST PAYLOAD

It is possible to define which is the Modbus data to map inside the HTTP/REST endpoints using specific keywords.
In order to link the data into the HTTP/REST endpoint, you can use these keywords:



Below the type of format allowed:

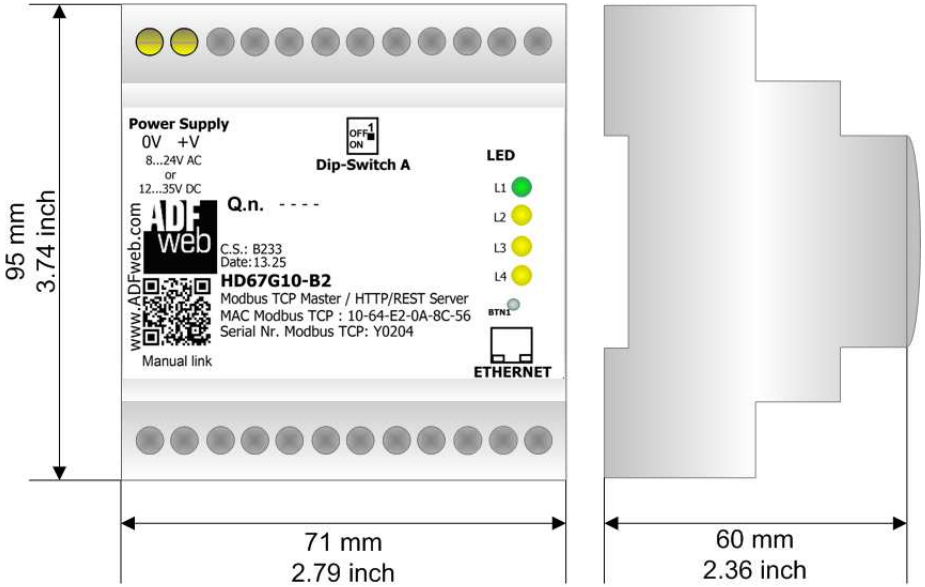
FORMAT	IDENTIFIER
Unsigned Integer	u
Signed Integer	i
Float	f
Binary	b
String	s
Hexadecimal	x
Base64	l

Example:

We have two variables mapped respectively into Position 0 and 4. The first one is an signed integer value of 16 bit, the second one is a floating point. In order to compose a JSON, the template can be filled in this way:

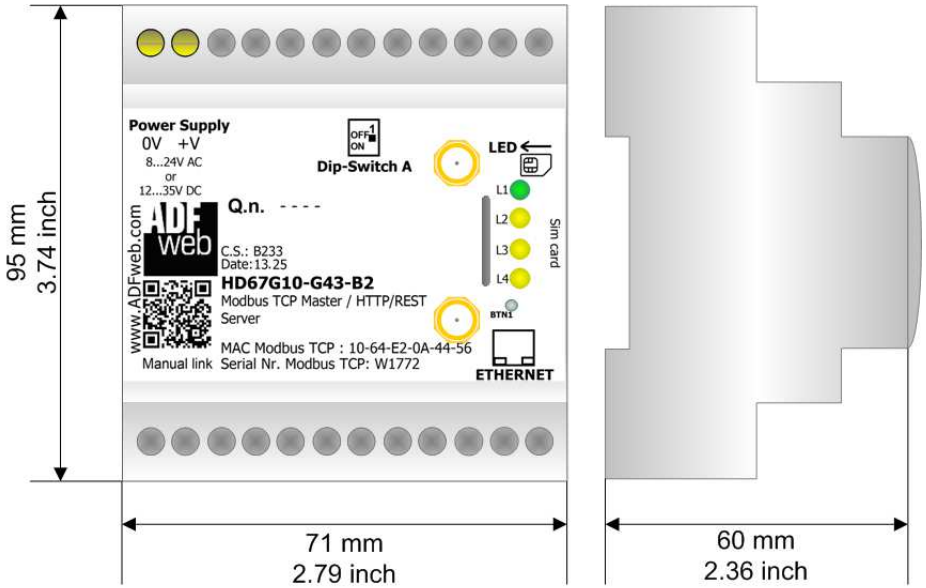
```
{
	“var1”: @i0.16@,
	“var2”: @f32.32@
}
```

MECHANICAL DIMENSIONS:



Housing: PVC
Weight: 200g (Approx)

Figure 7a: Mechanical dimensions scheme for HD67G10-B2



Housing: PVC
Weight: 200g (Approx)

Figure 7b: Mechanical dimensions scheme for HD67G10-G43-x-xxx-B2

ORDERING INFORMATIONS:

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

HD67G10 – xxx – x - xxx – B 2

Connectors Type
2: Fixed Screw Terminal

Enclosure Type
B: Modulbox 4M, 35mm DIN Rail mounting

Services
None: No available services
VPN: VPN service available

E-SIM
None: No available services
E: E-SIM available inside for LTE connectivity from ADFweb.com's platform

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

Device Family
HD67G10: Modbus TCP Master / HTTP/REST Server - Converter

Order Code:	**HD67G10-B2**	**-**	Modbus TCP Master / HTTP/REST Server – Converter
Order Code:	**HD67G10-G43-B2**	**-**	Modbus TCP Master / HTTP/REST Server – Converter (LAN + SIM LTE)
Order Code:	**HD67G10-G43-E-B2**	**-**	Modbus TCP Master / HTTP/REST Server – Converter (LAN + SIM LTE+E-SIM)
Order Code:	**HD67G10-G43-VPN-B2**	**-**	Modbus TCP Master / HTTP/REST Server – Converter (LAN + SIM LTE, VPN)
Order Code:	**HD67G10-G43-E-VPN-B2**	**-**	Modbus TCP Master / HTTP/REST Server – Converter (LAN + SIM LTE+E-SIM, VPN)

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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