User Manual

Revision 1.101
English

PROFINET / J1939 - Converter

(Order Code: HD67610-A1, HD67610-SCB, HD67610-SCK)

For Website information:
www.adfweb.com?Product=HD67610

For Price information:
www.adfweb.com?Price=HD67610-A1
www.adfweb.com?Price=HD67610-SCB
www.adfweb.com?Price=HD67610-SCK

Benefits and Main Features:

- Electrical isolation
- Two PROFINET ports
- Temperature range: -40°C/+85°C (-40°F/+185°F)
- Up to IP69K rating

User manual

For other PROFINET products see also the following link:

Converter PROFINET to	
www.adfweb.com?Product=HD67078	**(M-bus)**
www.adfweb.com?Product=HD67090	**(M-bus Wireless)**
www.adfweb.com?Product=HD67178	**(SNMP Manager)**
www.adfweb.com?Product=HD67600	**(NMEA 2000)**
www.adfweb.com?Product=HD67601	**(Serial)**
www.adfweb.com?Product=HD67602	**(Modbus Master)**
www.adfweb.com?Product=HD67603	**(Modbus Slave)**
www.adfweb.com?Product=HD67604	**(PROFIBUS Master)**
www.adfweb.com?Product=HD67605	**(PROFIBUS Slave)**
www.adfweb.com?Product=HD67606	**(CAN)**
www.adfweb.com?Product=HD67607	**(CANopen)**
www.adfweb.com?Product=HD67608	**(DeviceNet Master)**
www.adfweb.com?Product=HD67609	**(DeviceNet Slave)**
www.adfweb.com?Product=HD67612	**(Modbus TCP Slave)**
www.adfweb.com?Product=HD67613	**(SNMP Agent)**
www.adfweb.com?Product=HD67614	**(DMX)**
www.adfweb.com?Product=HD67615	**(NMEA 0183)**
www.adfweb.com?Product=HD67633	**(S7comm)**
www.adfweb.com?Product=HD67659	**(Ethernet)**
www.adfweb.com?Product=HD67660	**(EtherNet/IP Slave)**
www.adfweb.com?Product=HD67661	**(EtherNet/IP Master)**
www.adfweb.com?Product=HD67679	**(BACnet Slave)**
www.adfweb.com?Product=HD67719	**(BACnet Master)**
www.adfweb.com?Product=HD67752	**(IEC 61850 Server)**
www.adfweb.com?Product=HD67778	**(IEC 61850 Client)**
www.adfweb.com?Product=HD67818	**(KNX)**
www.adfweb.com?Product=HD67848	**(DALI)**
www.adfweb.com?Product=HD67876	**(IO-Link Master)**
www.adfweb.com?Product=HD67912	**(HART)**
www.adfweb.com?Product=HD67952	**(MQTT)**
www.adfweb.com?Product=HD67984	**(IO-Link Slave)**
www.adfweb.com?Product=HD67B22	**(OPC UA Client)**
www.adfweb.com?Product=HD67B46	**(OPC UA Server)**
www.adfweb.com?Product=HD67C77	**(EnOcean)**
www.adfweb.com?Product=HD67D33	**(LoRaWAN)**
www.adfweb.com?Product=HD67E23	**(EtherCAT Slave)**
www.adfweb.com?Product=HD67E73	**(EtherCAT Master)**
www.adfweb.com?Product=HD67F33	**(LoRaWAN Gateway)**

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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
1.002	17/05/2024	Ln	All	Revision
1.100	25/07/2025	Mdb	All	New design
1.101	25/09/2026	Ln	All	Added new hardware 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 are required for each individual application, legal and safety regulation. 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 instrument can represent a potential hazard if they are inappropriately installed and operated by personnel untrained. These instructions refer to residual risks with the following symbol:



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

CE CONFORMITY

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

CYBERSECURITY:

GENERAL CYBERSECURITY

The cybersecurity of the device depends not only on the security functions implemented in the product, but also on the network architecture, installation and operating environment.

The device is intended to be installed and operated in a protected industrial/OT network. Direct exposure of the device to the public Internet is not recommended.

To reduce cybersecurity risks:

- Install the device in a physically protected environment accessible only to authorized personnel.
- Restrict network access to trusted devices and authorized users.
- Use appropriate network segmentation between OT networks and other networks.
- Where connection to external networks or the Internet is required, use suitable external protection mechanisms such as firewalls, secure routers, VPNs or equivalent security devices.
- Keep the device firmware and the SW67610 configuration software updated.
- Follow the cybersecurity recommendations of the PLC, network equipment and other devices connected to the same network.

PRODUCT SECURITY FEATURES (FOR SCX VERSIONS)

The device provides security mechanisms intended to prevent unauthorized access and unauthorized modification of its configuration and firmware.

The main security features include:

- User authentication by username and password;
- Mandatory creation of user credentials before performing protected operations;
- User permissions for firmware update, configuration management and log management;
- Encrypted communication between the configuration software and the device using TLS;
- Protection against repeated unauthorized login attempts. After five consecutive failed login attempts, access is temporarily blocked;
- Firmware authenticity verification through digital signature;
- Firmware integrity verification through cryptographic hash;
- Event logging for security-relevant operations;
- Possibility to disable the Boot Mode functionality in order to prevent unauthorized access to recovery functions;
- Factory Reset functionality for restoring the device configuration.

INITIAL COMMISSIONING

The device is supplied without predefined user credentials.

Before performing any firmware or configuration update, the user is required to create a username and password.

The device does not allow protected operations until valid credentials have been configured.

For security reasons:

- Use sufficiently strong passwords.
- Do not share credentials with unauthorized personnel.
- Assign user permissions according to the minimum privileges required for the intended operation.
- Keep access credentials securely stored and available only to authorized personnel.

Once the credentials have been configured, authentication is required to access the protected device functions.

After five consecutive failed login attempts, access is temporarily blocked in order to reduce the risk of unauthorized access attempts.

NETWORK SECURITY

The device is designed for use inside a protected industrial control network and should not normally be directly accessible from the Internet.

Where optional IoT functionalities or any other connection to external networks are used, the system integrator or network administrator shall provide suitable external network protection.

Depending on the installation, appropriate protection measures can include:

- Firewall protection;
- Secure routers or gateways;
- VPN access;
- Network segmentation;
- Access control rules;
- Restriction of inbound and outbound network traffic.

The cybersecurity of the complete installation depends on the configuration and security of all devices and network components connected to the system.

FIRMWARE AND SECURITY UPDATES

ADFweb.com may release firmware updates to provide functional improvements, bug fixes and security updates.

Firmware updates are available through the ADFweb.com website and can be installed using the SW67610 software as described in the "UPDATE DEVICE" section of this manual.

Communication between the configuration software and the device is protected using TLS.

Firmware packages are digitally signed and their integrity is verified through a cryptographic hash before installation.

Users are recommended to periodically verify the availability of updated firmware and install security-relevant updates without unnecessary delay.

The product is supported for a minimum period of 5 years, during which identified vulnerabilities are managed and security-related updates are provided where necessary.

Information about the applicable support period, security updates and security advisories are available at:
www.adfweb.com/home/Security/Security.asp

VULNERABILITY REPORTING

Despite the security measures implemented during product design and development, cybersecurity vulnerabilities cannot be completely excluded.

Potential vulnerabilities affecting ADFweb.com products can be reported through the contact information and vulnerability reporting procedure available at: www.adfweb.com/home/Security/Security.asp

ADFweb.com evaluates reported vulnerabilities and, where necessary, provides appropriate remediation information, mitigation measures or security updates.

SECURE DECOMMISSIONING
Before permanently removing the device from service, transferring it to another installation or transferring it to another user, perform a Factory Reset.

The Factory Reset removes:

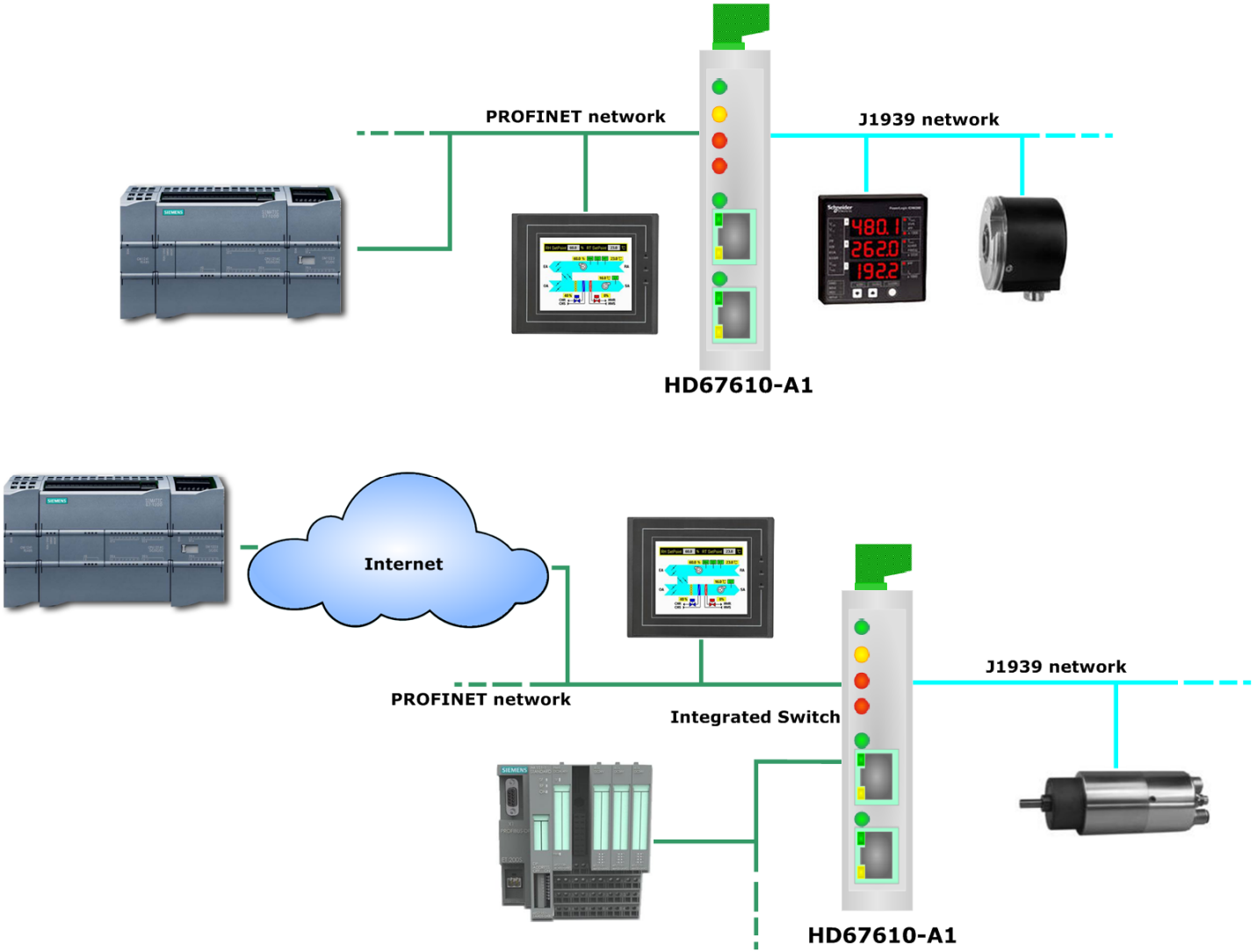
- Device configuration;
- Configured users;
- Passwords;
- Stored security-related user information.

The configured IP address is not removed by the Factory Reset and remains stored in the device.
After the Factory Reset, verify whether the retained IP address needs to be changed according to the requirements of the new installation.

SECURITY NOTE
Disabling the Boot Mode functionality increases protection against unauthorized use of the recovery functions.

However, if Boot Mode is disabled and the username and/or password are lost, it will no longer be possible to perform a Factory Reset and access to the device cannot be restored through the recovery procedure.

EXAMPLE OF CONNECTION:



CONNECTION SCHEME:

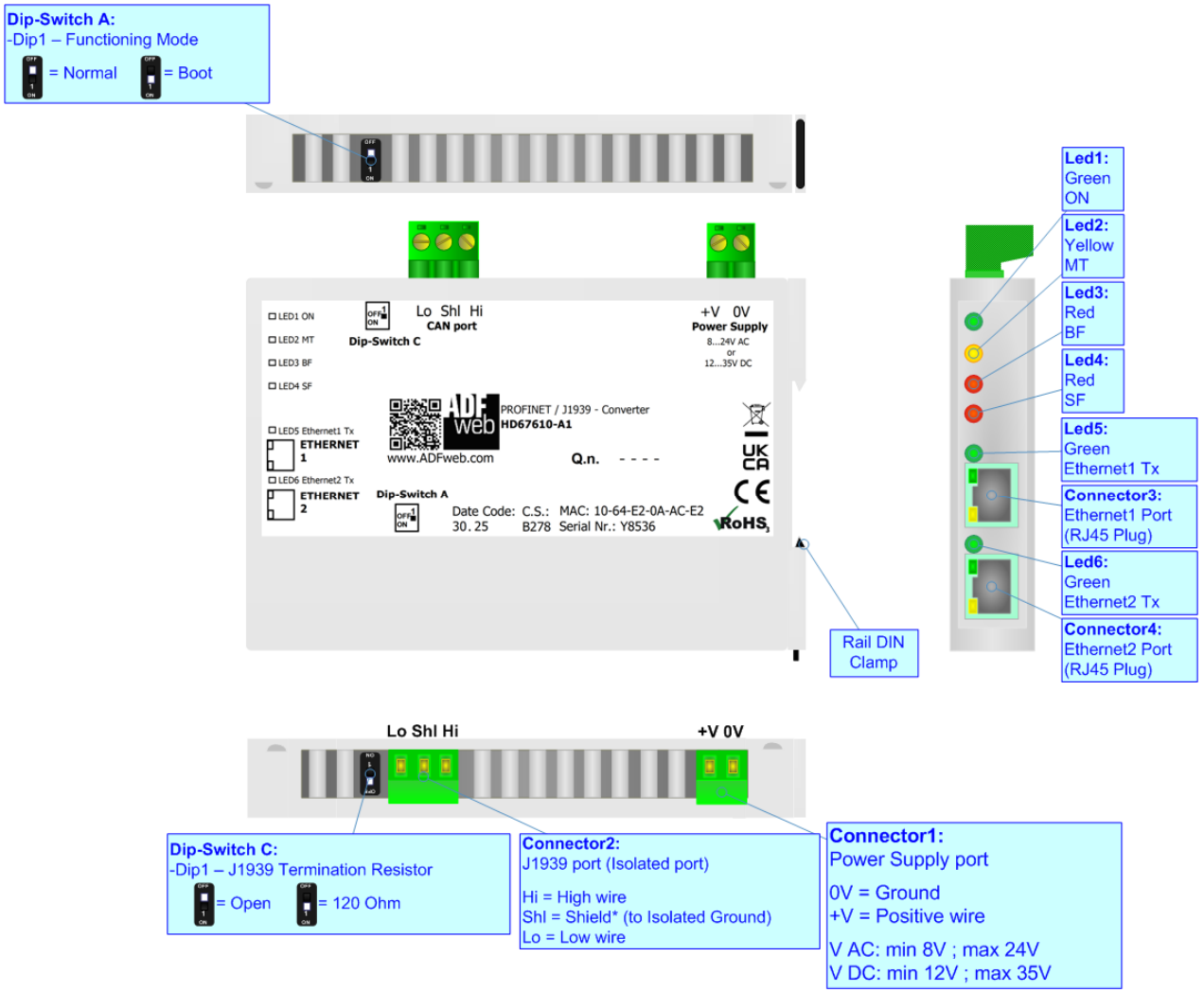


Figure 1a: Connection scheme for HD67610-A1

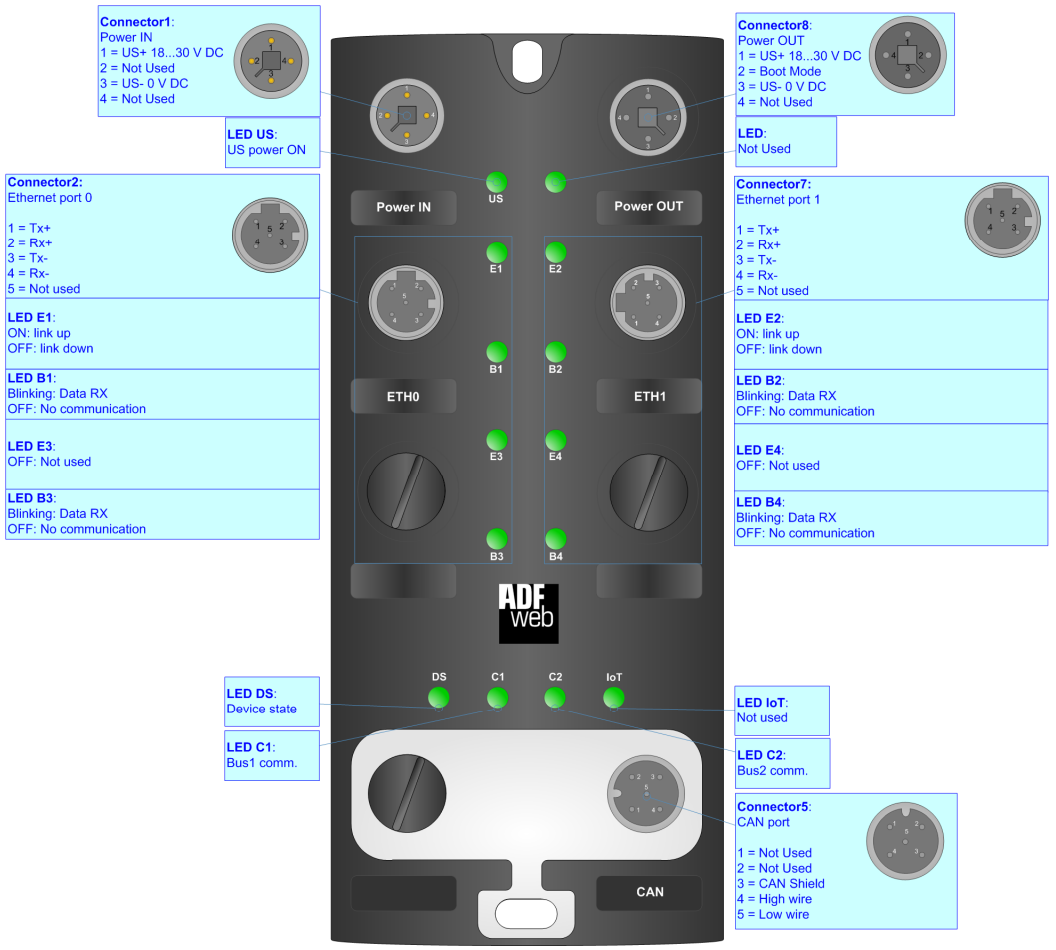


Figure 1b: Connection scheme for HD67610-SCB

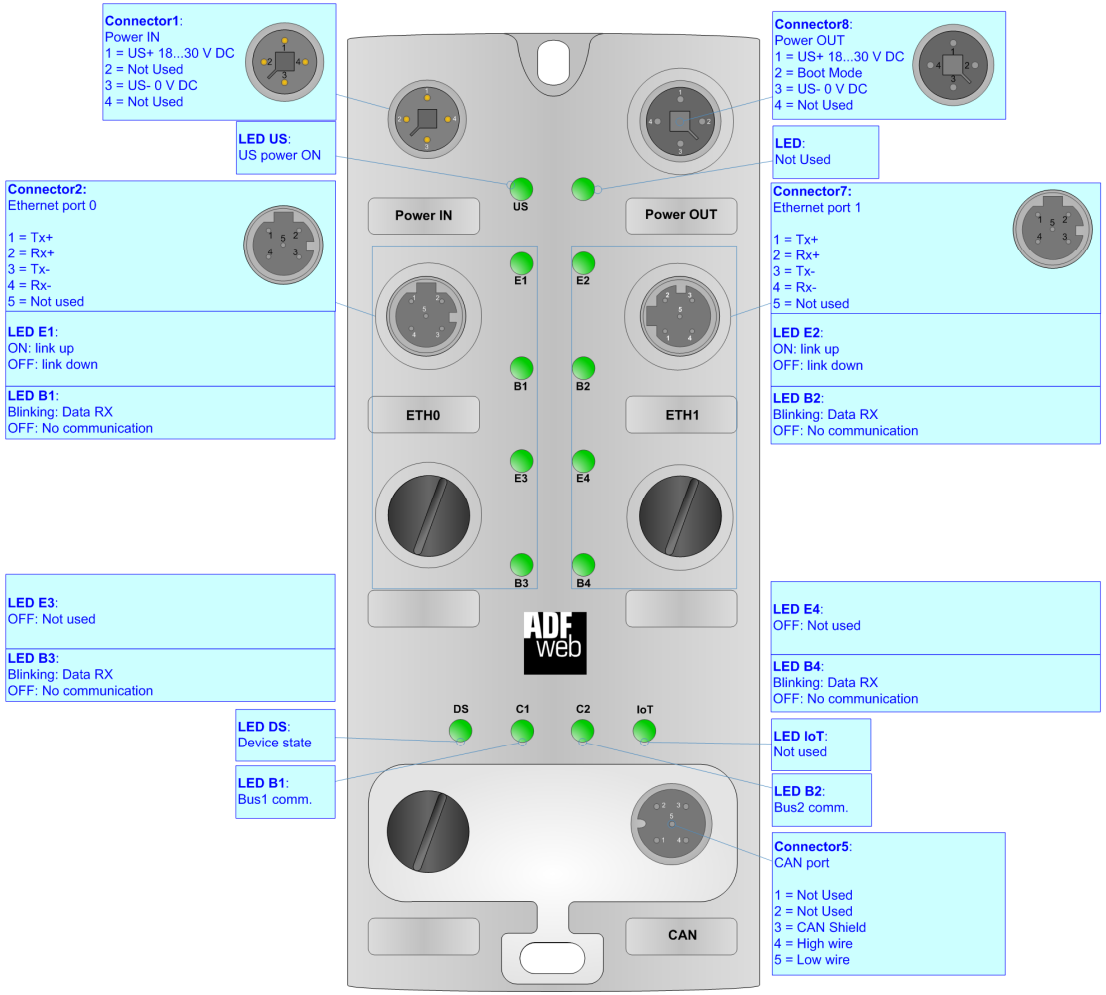


Figure 1c: Connection scheme for HD67610-SCK

CHARACTERISTICS:

The HD67610-A1 and HD67610-SCx is a PROFINET / J1939 Converter.

It has the following characteristics:

- Up to 1439 bytes in reading and 1439 bytes in writing;
- Triple isolation between CAN - Power Supply, CAN - Ethernet, Power Supply - Ethernet.
- Two-directional information between J1939 bus and PROFINET bus;
- HD67610-A1 version: mountable on 35mm Rail DIN;
- High resistance to water and dust: HD67610-SCB with IP67 rating, HD67610-SCK with IP69K rating;
- Wide power supply input range: 8…24V AC or 12…35V DC;
- Wide temperature range: -40°C / +85°C [-40°F / +185°F].

CONFIGURATION:

You need Compositor SW67610 software on your PC in order to perform the following:

- Define the parameter of PROFINET line;
- Define the parameter of CAN line;
- Define the J1939 frames that the Converter can accept;
- Define the J1939 frames that the Converter sends trough the J1939 line;
- Update the device.

POWER SUPPLY (for HD67610-A1):

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]
HD67610-A1	3.5

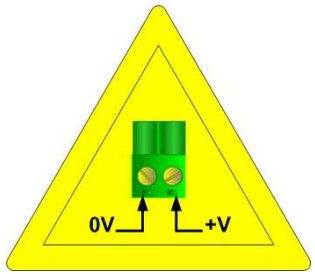
Caution: Not reverse the polarity power

Connector1:
Power Supply port

0V = Ground
+V = Positive wire

V AC: min 8V ; max 24V
V DC: min 12V ; max 35V





HD67610-A1

POWER SUPPLY (for HD67610-SCx):

The devices can be powered over a wide input voltage range.
The power supply connections are provided through M12 T-coded connectors using pins 1 and 3.

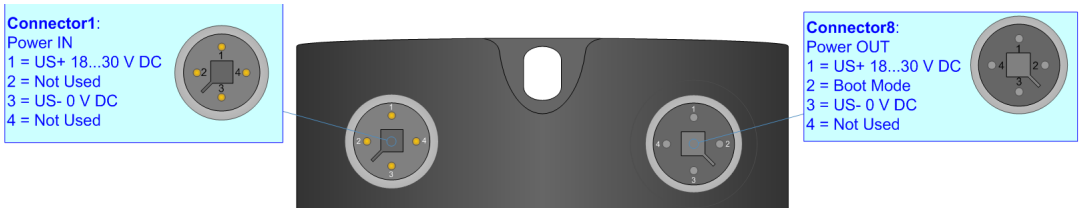
The devices support a daisy-chain power connection, allowing the power supply to be distributed from one device to another and shared among multiple devices.

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]
HD67610-SCx	3.5



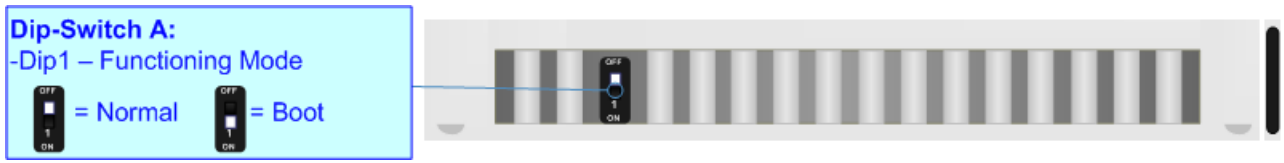
FUNCTION MODES (for HD67610-A1):

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

- The first, with Dip1 in OFF position (factory setting), is used for the normal working of the device.
- The second, with Dip1 in ON position, is used for upload the Project/Firmware.

For the operations to follow for the updating (see 'UPDATE DEVICE' section).

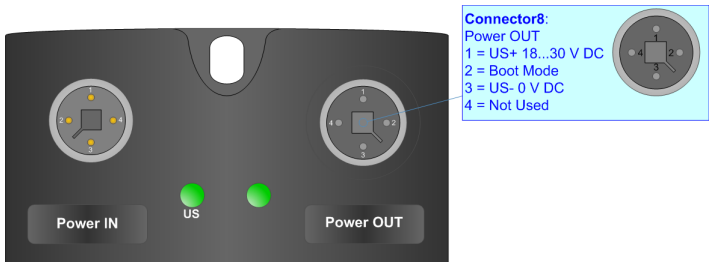
According to the functioning mode, the LEDs will have specifics functions (see 'LEDS' section).



FUNCTION MODES (for HD67610-SCx):

The device supports two operating modes, depending on the start-up procedure:

- RUN Mode: Normal operating mode. The device starts in RUN Mode under standard power-up conditions.
- BOOT Mode: to start the device in recovery mode, connect pin 2 of the Power OUT connector to pin 1 before powering ON the device. In this mode, it is possible to perform a Factory Reset or use the Search function to discover the IP address and MAC address of the device.

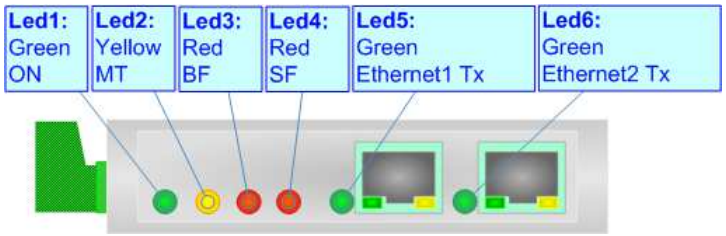


Note:
If no action is performed, the device automatically switches to RUN Mode after 25 seconds.

LEDS (for HD67610-A1):

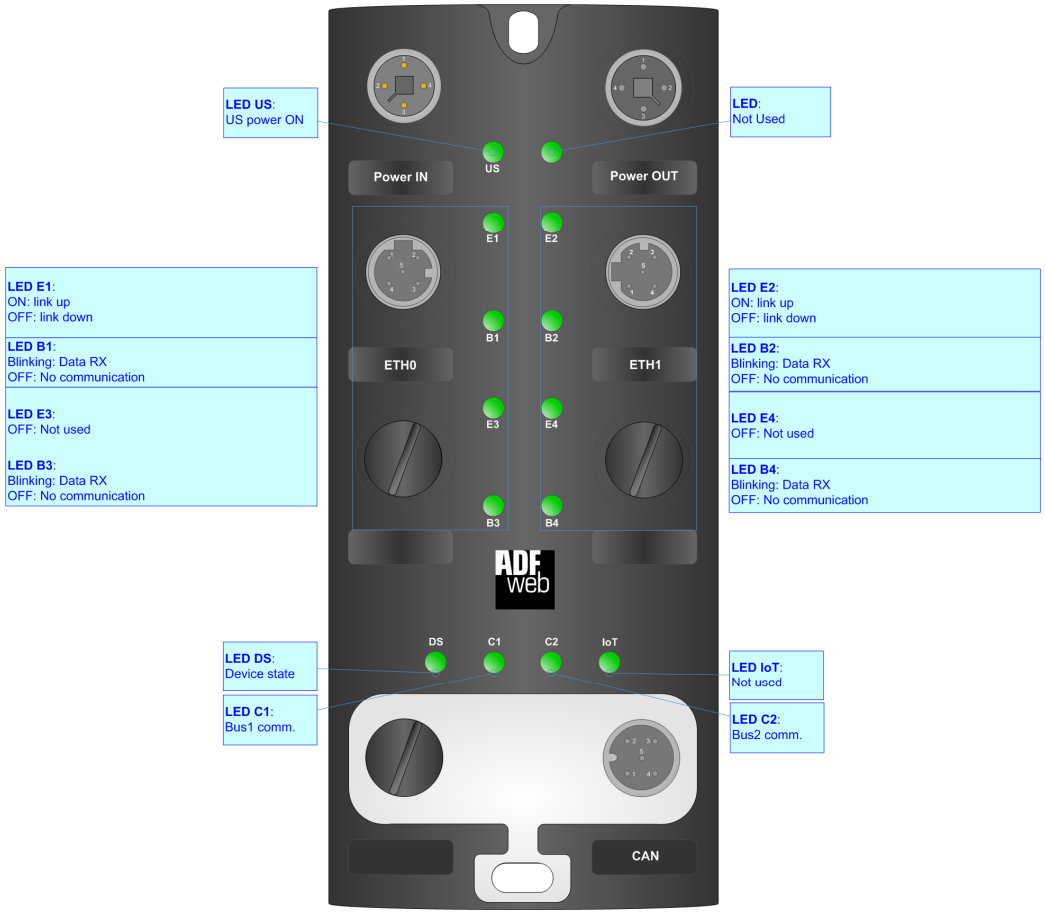
The device has got six LEDs that are used to give information of the functioning status.
The various meanings of the LEDs are described in the table below.

LED	Normal Mode	Boot Mode
1: ON [supply voltage] (green)	**ON:** Device powered **OFF:** Device not powered	**ON:** Device powered **OFF:** Device not powered
2: MT [maintenance display] (yellow)	**ON:** Maintenance Problem is present **OFF:** No maintenance are present	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
3: BF [bus fault] (red)	**ON:** The Ethernet connection is defective; the IP address exists several times in the network; the own NameOfStation exists several times in the network; no IP address has been set **Flashing:** At least one configured AR is no longer in the data exchange **OFF:** No errors are present	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
4: SF [group error] (red)	**ON:** At least one AR is not in the data exchange **OFF:** No errors are present	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
5: Ethernet1 Tx (green)	Blinks when is transmitting Ethernet frames	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
6: Ethernet2 Tx (green)	Blinks when is transmitting Ethernet frames	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress



LEDS (for HD67610-SCx):

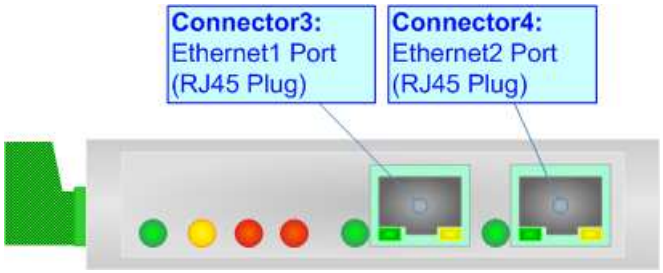
The device has got 14 LEDs that are used to give information of the functioning status.
The various meanings of the LEDs are described in the table below.



LED	Normal Mode	Boot Mode
US: Device State	**ON:** US power supply present **OFF:** US power supply not present	**ON:** US power supply present **OFF:** US power supply not present
E1-E2: Ethernet Link status	**ON:** link up **OFF:** link down	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
B1-B2: Ethernet RX	**Blinking:** Data RX **OFF:** No communication	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
DS: Device State	Blinks slowly (~1Hz)	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
C1: Bus1 comm.	**Flashing:** J1939 communication **OFF:** No J1939 communication	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
C2: Bus2 comm.	**Flashing:** PROFINET communication **OFF:** No PROFINET communication	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
IoT: IoT comm.	**Flashing:** IoT communication **OFF:** No IoT communication	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress

ETHERNET (for HD67610-A1):

The PROFINET connection must be made using Connector3 and/or Connector4 of HD67610-A1 with at least a Category 5E cable. The maximum length of the cable should not exceed 100m. The cable has to conform to the T568 norms relative to connections in cat.5 up to 100 Mbps. To connect the device to an Hub/Switch is recommended the use of a straight cable, to connect the device to a PC/PLC/other is recommended the use of a cross cable.



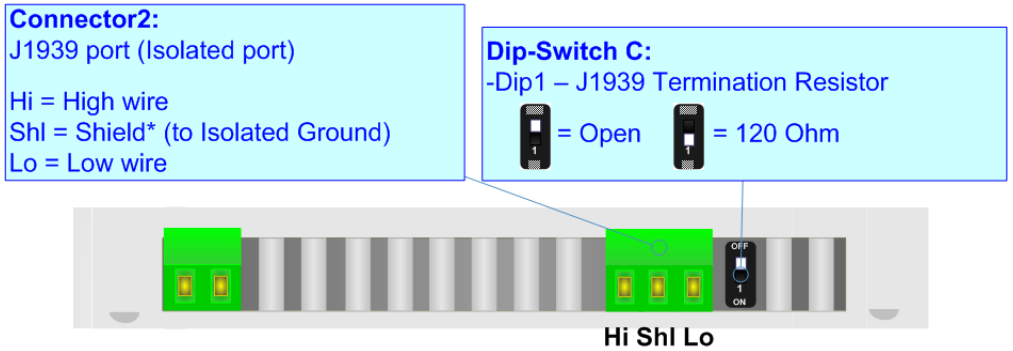
ETHERNET (for HD67610-SCX):

The Ethernet connection must be made using Connector2 or Connector 7 of HD67610-SCX 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 a Hub/Switch is recommended the use of a straight cable, to connect the device to a PC/PLC/other is recommended the use of a cross cable.
Ethernet ports use M12 D-coded connectors.



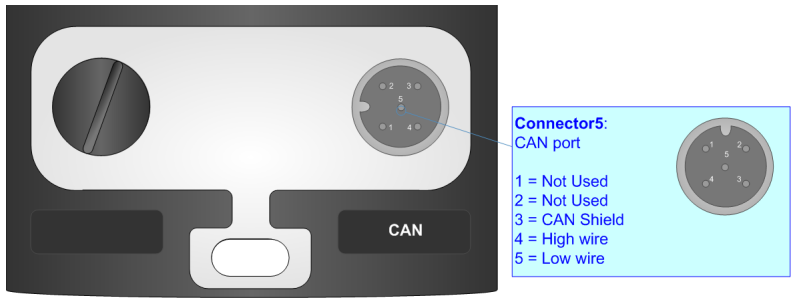
J1939 (for HD67610-A1):

For terminating the J1939 line with a 120Ω resistor it is necessary that the Dip1 of 'Dip-Switch C' is at ON position.



J1939 (for HD67610-SCX):

For terminating the J1939 line with a 120Ω resistor it is necessary to enable the option "Enable End-Line Resistor" on "Set Communication" of the SW67610.



Cable characteristics:

DC parameter:		Impedance	70 Ohm/m

AC parameters:		Impedance	120 Ohm/m
		Delay	5 ns/m

Length		**Baud Rate [bps]**	**Length MAX [m]**
		10 K	5000
		20 K	2500
		50 K	1000
		100 K	650
		125 K	500
		250 K	250
		500 K	100
		800 K	50
		1000 K	25

USE OF COMPOSITOR SW67610:

To configure the Converter, use the available software that runs with Windows called SW67610. It is downloadable on the site www.adfweb.com and its operation is described in this document. *(This manual is referenced to the last version of the software present on our web site)*. The software works with MSWindows (XP, Vista, Seven, 8, 10 or 11; 32/64bit).

When launching the SW67610, the window below appears (Fig. 2).

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



Figure 2: Main window for SW67610

NEW CONFIGURATION / OPEN CONFIGURATION:

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

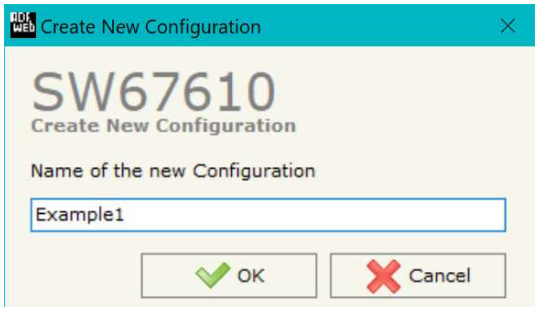


Figure 3: "New configuration" window

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

- To clone the configurations of a Programmable "PROFINET Slave / J1939 - 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**".

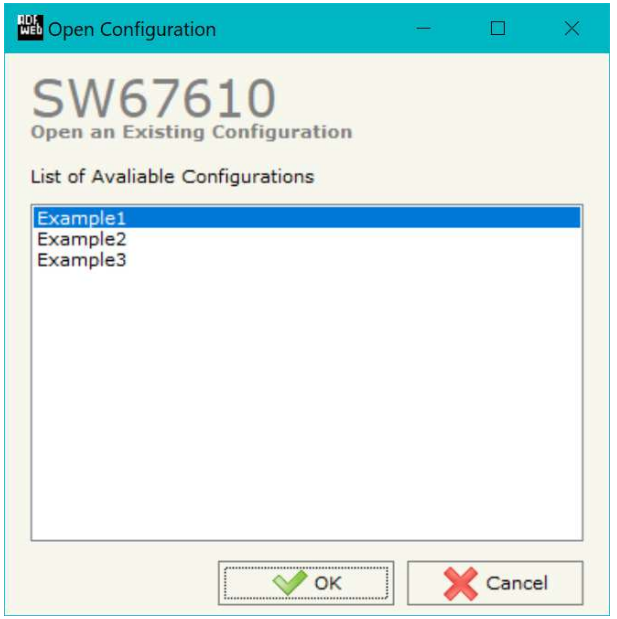


Figure 4: "Open configuration" window

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.



Figure 5: "Language" window

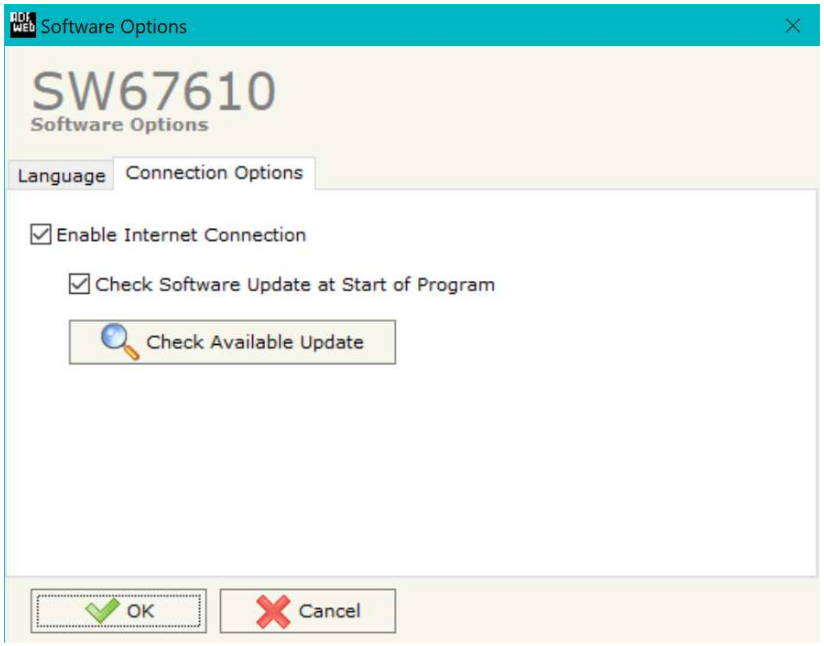


Figure 6: "Connection Options" window

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 SW67610 check automatically if there are updatings when it is launched.

SECURITY SETTINGS:

By pressing the "**Settings**" ( ) button there is the possibility to insert the security settings for our converter.

This section is composed by 3 different sections:

- Search Devices: used to discover the devices in Boot Mode and perform a Factory Reset;
- User Management: used to add, remove and edit the users that can access to the device;
- Dip-Switch Management: used to enable and disable the Boot Mode functionality.

Search Devices

In this section, it is possible to see the devices connected to the Ethernet network and discovered by the software. For the discovered devices, it is possible to make a Factory Reset by pressing "Factory Reset" button next to the required device.

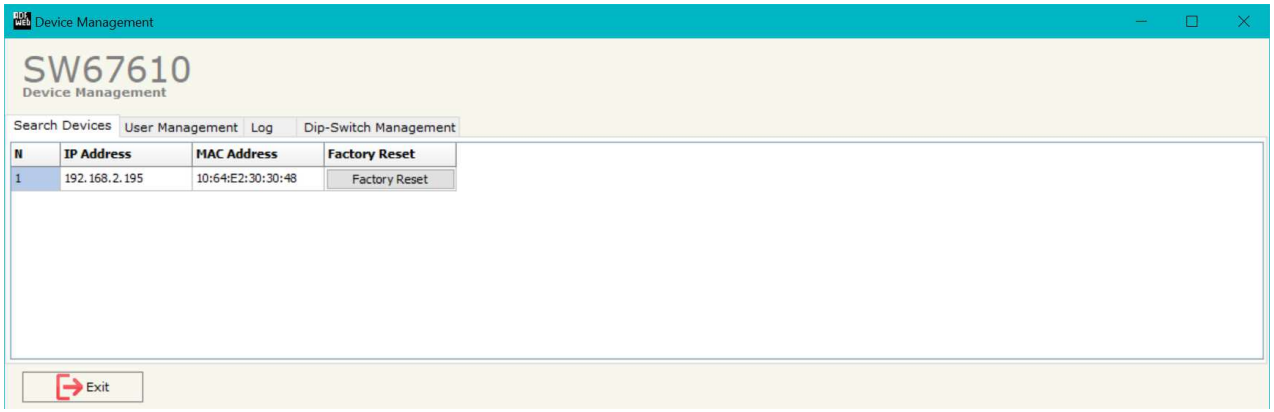


Figure 7a: "Search Devices" tab

Note:
In case of Factory Reset, all the settings of the device will be erased, except the IP Address. The device will keep the last IP Address discovered.

User Management

In this section, it is possible to manage the users configured on the device, including viewing existing users, modifying their settings, and adding new users.

To retrieve the currently configured users, press the "**Get Users**" button.
To apply and save the new user configuration, press the "**Write Table**" button.
To change the username and/or password of the user currently logged, press the "**Change User/Pwd**" button.

The fields in the table are described below:

- Username: username assigned to the user;
- Password: password assigned to the user;
- Firmware: permission to perform firmware updates;
- Config: permission to modify the device configuration;
- Log: permission to manage the device log.

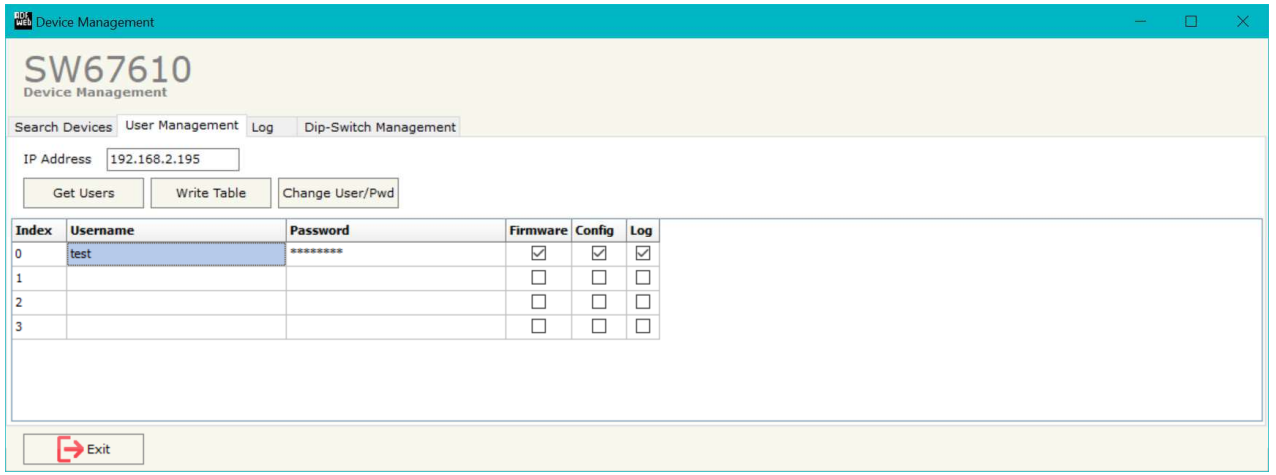


Figure 7b: "User Management" tab

Note:
Only the users with the required rights can access to that info.

Log

In this section, it is possible to read the log from the device pressing "**Get Log**" button and delete it pressing "**Delete Log**" button.

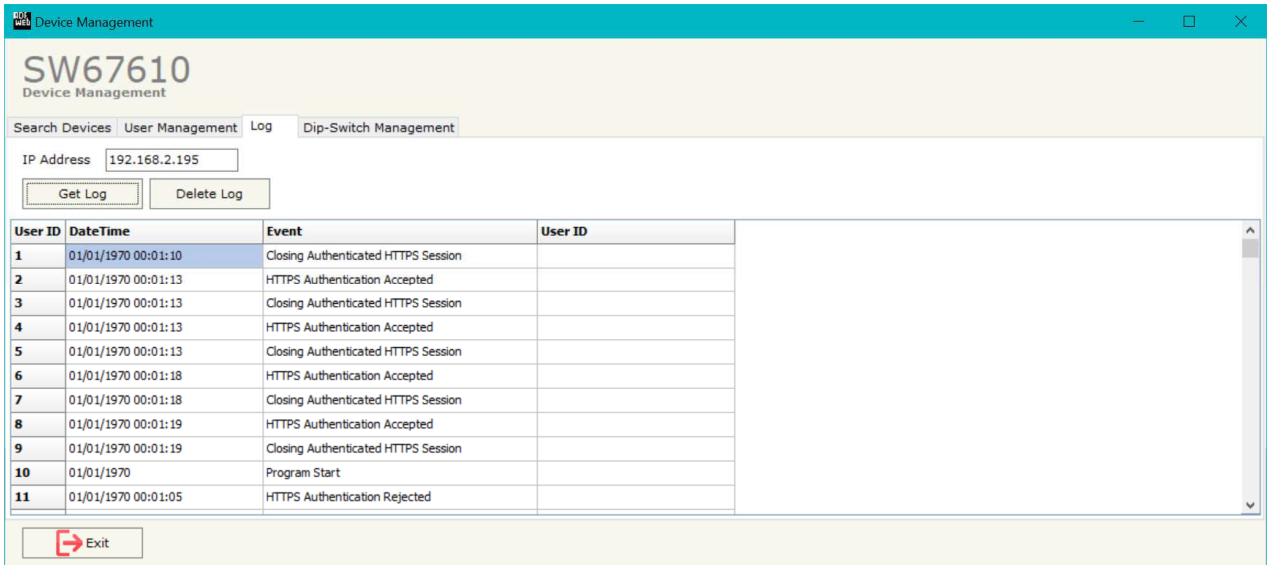


Figure 7c: "Log" tab

Note:
Only the users with the required rights can access to that info.

Dip-Switch Management

In this section, it is possible to manage the Boot Mode functionality. It is possible to read the actual status pressing "**Read DipSwitch**" button and write the new settings pressing "**Write DipSwitch**" button.

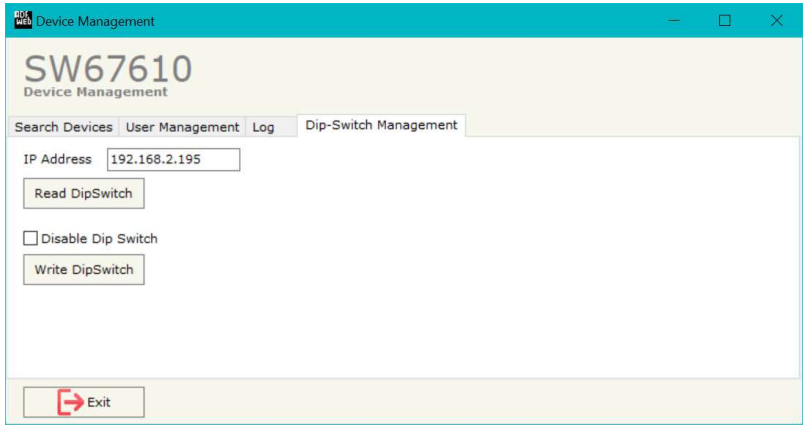


Figure 7d: "Dip-Switch Management" tab

Note:
Only the users with the required rights can access to that info.

Warning:
If the Boot Mode functionality is disabled, it will no longer be possible to perform a Factory Reset. Therefore, if the username and/or password are lost, access to the device cannot be restored.

SET COMMUNICATION:

This section defines the fundamental communication parameters of two buses, PROFINET and J1939.

By Pressing the "**Set Communication**" button from the main window for SW67610 (Fig. 2) the window "Set Communication" appears (Fig. 8).
The window is divided in two sections, one for the PROFINET and the other for the J1939.

In the section "Select Device" is possible to select the type of device to use from:

- HD67610 (with A1 module);
- HD67610-SCx (with Structured Cabling module).

The means of the fields for "PROFINET" are:

- In the fields "**IP ADDRESS**" insert the IP address that you want to give to the Converter;
- In the fields "**SUBNET Mask**" insert the SubNet Mask;
- In the fields "**GATEWAY**" insert the default gateway that you want to use. This feature can be enabled or disabled pressing the Check Box field. This feature is used for going out of the net;
- In the field "**Port**" the port used for PROFINET communication is defined. The port has a fixed value of 34964;
- In the field "**PROFINET Name of Station**" is possible to assign a name to the PROFINET node.

The means of the fields for the "J1939" section are:

- In the "**Baudrate**" field the J1939 baudrate is defined;
- In the field "**TimeOut Data (s)**" insert a time; when this time is elapsed and the data isn't reliable, in the PROFINET data array you read "0". It is possible to use this function only for the "Receive Frames";
- If the field "**Enable Peer to Peer**" is checked, the gateway accepts all the ID that have the PGN inserted in the "Receive Frames" section.
- In the field "**Device ID**" the ID of J1939 side of the converter is defined;
- If the field "**Enable Not standard Cancel Data**" is checked, the reset value for the Timeout error is defined. If not enabled, the standard 0xFF (255) value is used;
- If the field "**Enable J1939 when PROFINET OK**" is checked, the J1939 communication will start only when the PROFINET side is connected;

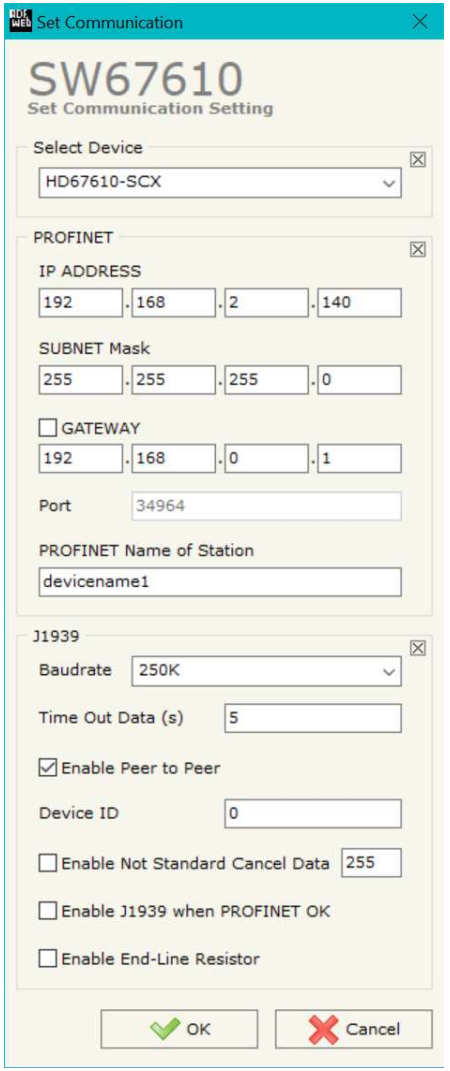


Figure 8: "Set Communication" window

- If the field "**Enable End-Line Resistor**" is enabled, the end-line resistor for the J1939 line is enabled (only for HD67610-SCx version).

Note:
The number of Input byte and Output byte of PROFINET is calculated automatically by the Compositor in relation of the J1939 frames defined.

RECEIVE FRAMES:

By pressing the "**Receive Frames**" button from the main window for SW67610 (Fig. 2) the "Receive J1939 Frames" window appears (Fig. 9). The J1939 frames inserted in this table contains the Output data of PROFINET. These frames are accepted by the gateway.

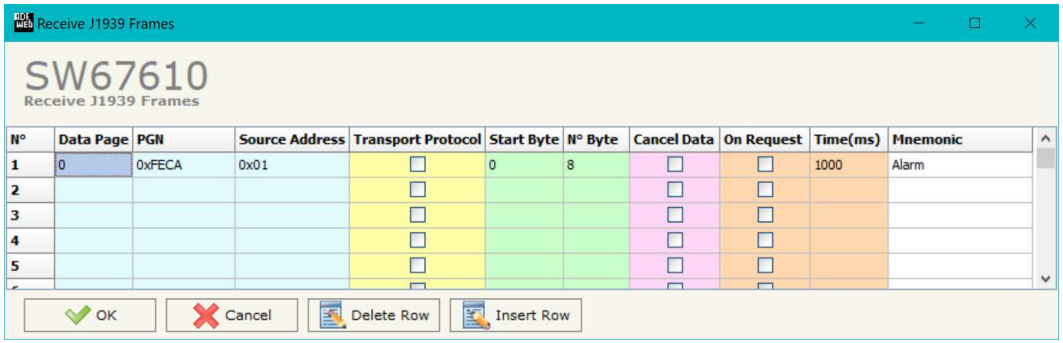


Figure 9: "Receive J1939 Frames" window

The data of the columns have the following meanings:

- In the field "**Data Page**" insert the Data Page, the value is 0 or 1 (usually is 0);
- In the field "**PGN**" insert the PGN of the data you would like to read from PROFINET to J1939 (it is an identifier);
- In the field "**Source Address**" insert the address of the device that sends the frame;
- If the field "**Transport Protocol**" is checked the frame use transport protocol functions;
- In the field "**Start Byte**" insert the byte which you would start read, this field is enable only when the field Transport Protocol is checked;
- In the field "**N° Byte**" insert the number of byte you would read, for example your start byte is 20 an N°byte is 10, you can read the byte from 20 to 30;
- If the field "**Cancel Data**" is checked, the data in the frame will be erased after the expiration of the "**TimeOut Data**" defined in "Set Communication" section;
- If the field "**On Request**" is checked, the converter will send the request for the selected PGN;
- In the field "**Time (ms)**" the delay between the J1939 requests is defined;
- In the field "**Mnemonic**" it is possible to insert a brief description.

SEND FRAMES:

By pressing the "**Send Frames**" button from the main window for SW67610 (Fig. 2) the "Transmit J1939 frames" window appears (Fig. 10). The J1939 frames inserted in this table contains the Input data of PROFINET. These frames are sent by the gateway.

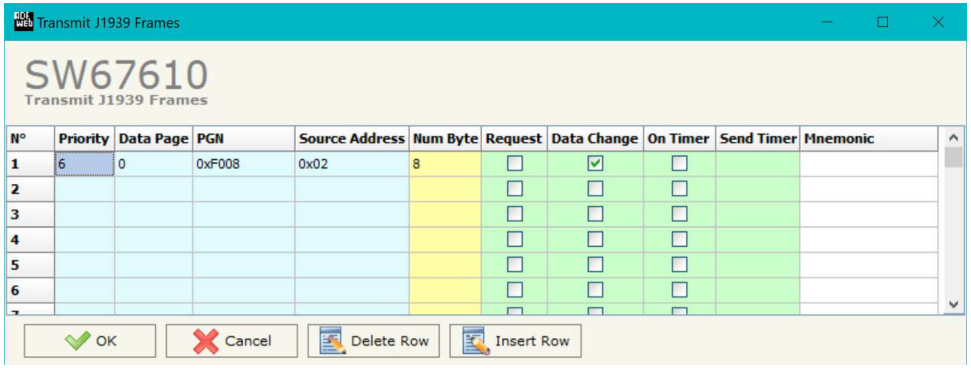


Figure 10: "Transmit J1939 Frames" window

The data of the columns have the following meanings:

- In the field "**Priority**" insert the priority of the Frame: in J1939 protocol it is a number among 0,1,2,3,4,5,6,7. The number "0" is the highest priority and "7" is the lowest;
- In the field "**Data Page**" insert the data page, the value is 0 or 1 (usually is 0);
- In the field "**PGN**" insert the PGN of the data you would like to write from PROFINET to J1939 (in J1939 protocol the PGN is an identifier);
- In the field "**Source Address**" insert the address of the device that sends the frame;
- In the field "**Num Byte**" the number of byte of the frame is defined, this field is enable only when the field Transport Protocol is checked;
- If the field "**Request**" is checked, the J1939 message is sent when a J1939 request is received;
- If the field "**Data Change**" is checked, the J1939 frame is sent when the data from PROFINET change;
- If the field "**On Timer**" is checked, the J1939 message is sent cyclically with the delay defined in the field "**Send Timer**";
- In the field "**Mnemonic**" it is possible to insert a brief description.

UPDATE DEVICE (for HD67610-A1):

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.

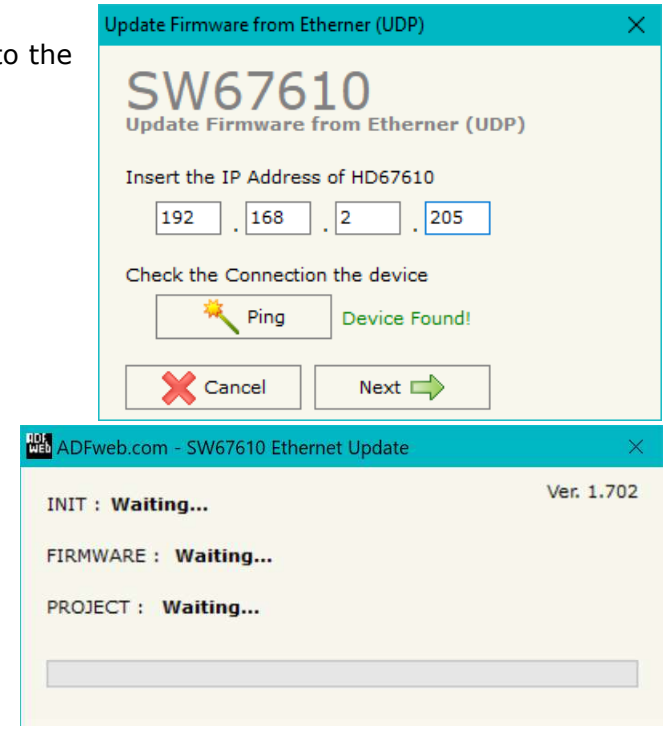


Figure 11: "Update device" windows

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 HD67610 device.

Warning:
If Fig. 12 appears when you try to do the Update try these points before seeking assistance:

- Try to repeat the operations for the updating;
- Try with another PC;
- Try to restart the PC;
- Check the LAN settings;
- If you are using the program inside a Virtual Machine, try to use in the main Operating System;
- If you are using Windows Seven, Vista, 8, 10 or 11 make sure that you have the administrator privileges;
- In case you have to program more than one device, using the "UDP Update", you have to cancel the ARP table every time you connect a new device on Ethernet. For do this you have to launch the "Command Prompt" and write the command "arp -d". Pay attention that with Windows Vista, Seven, 8, 10 or 11 you have to launch the "Command Prompt" with Administrator Rights;
- Pay attention at Firewall lock.

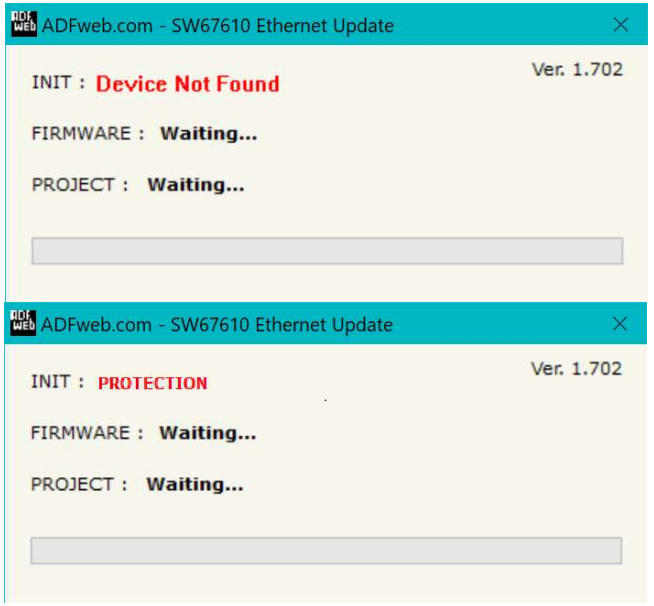


Figure 12: "Error" window

Warning:
In the case of HD67610 you have to use the software "SW67610": www.adfweb.com\download\filefold\SW67610.zip.

UPDATE DEVICE (for HD67610-SCX):

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, it is possible to use the "Search" function and follow these steps:

- Turn OFF the device;
- Connect Ethernet cable;
- Click on "Search" button;
- Turn ON the device;
- The IP Address and the MAC Address of the device will appear;
- Press "Select" button;
- Set the IP Address of your PC in the same range of the IP Address of the device;
- Press the "**Execute update firmware**" button to start the upload;
- Insert username and password;
- When all the operations are "OK", the update is complete and the window can be closed.



Figure 13a: "Update device" windows

If you know the actual IP address of the device, you have to use this procedure:

- Turn ON the device;
- Connect Ethernet cable;
- Insert the actual IP of the Converter;
- Select which operations you want to do;
- Press the "**Execute update firmware**" button to start the upload;
- Insert username and password;
- When all the operations are "OK, the update is complete and the window can be closed.

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

Note:
When you receive the device, for the first time, you need to set a new username and password.

Warning:
If Fig. 14 appears when you try to do the update, try these points before seeking assistance:

- Try to repeat the operations for the updating;
- Try with another PC;
- Try to restart the PC;
- Check the LAN settings;
- If you are using the program inside a Virtual Machine, try to use in the main Operating System;
- If you are using Windows Seven, Vista, 8, 10 or 11 make sure that you have the administrator privileges;
- Pay attention at Firewall lock.

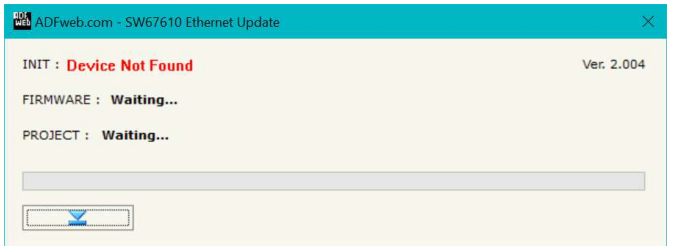


Figure 14: "Error" window

Warning:
In the case of HD67610-SCx you have to use the software "SW67610": www.adfweb.com\download\filefold\SW67610.zip.

MECHANICAL DIMENSIONS:

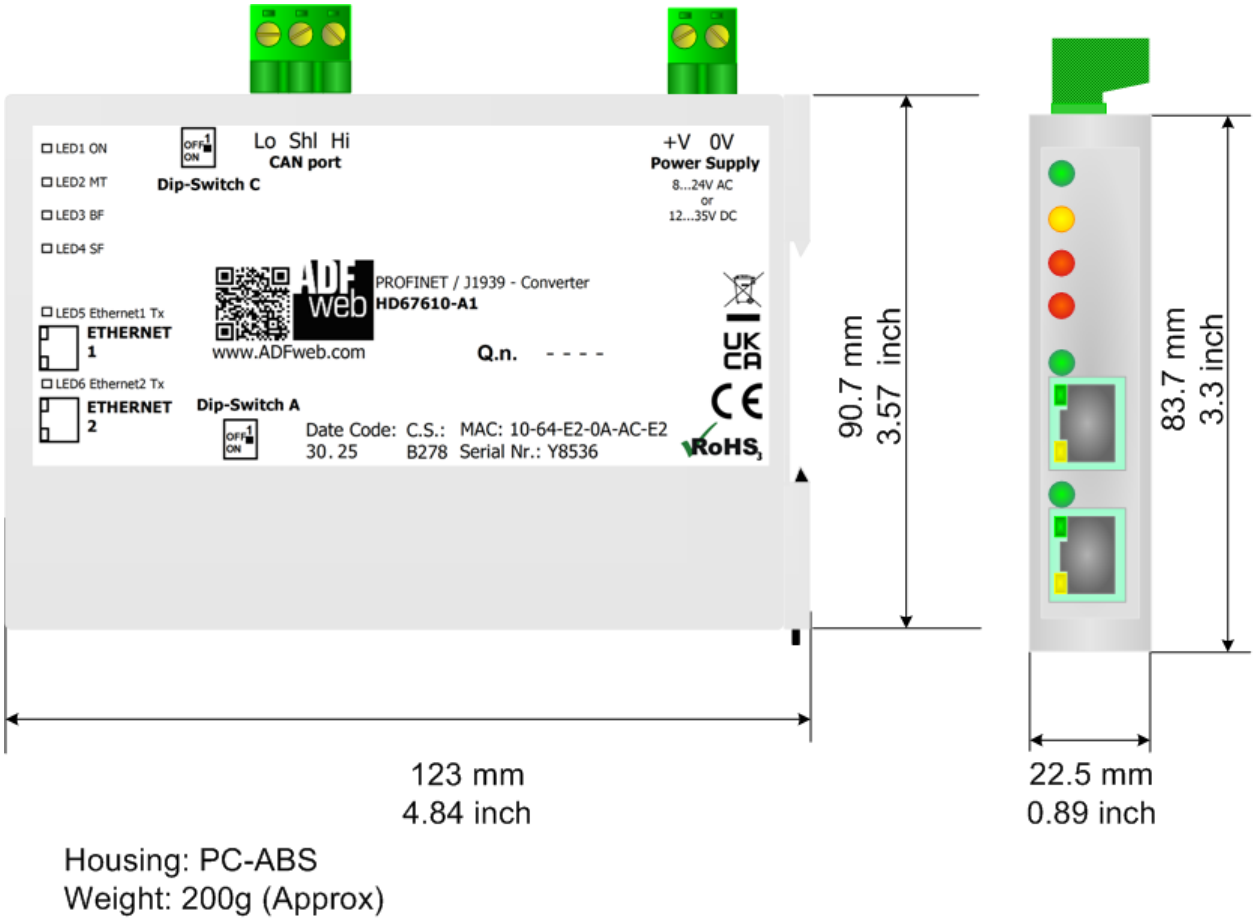


Figure 10a: Mechanical dimensions scheme for HD67610-A1



Figure 10b: Mechanical dimensions scheme for HD67610-SCx

ORDERING INFORMATIONS:

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

HD67610 – A 1

Connectors Type
1: Removable 5mm Screw Terminal
SC: Structured cable mounting

Enclosure Type
A: 1M, 35mm DIN Rail mounting
B: IP67 version
K: IP69K version

Device Family
HD67610: PROFINET / J1939 - Converter

Order Code:	**HD67610-A1**	**-**	PROFINET / J1939 – Converter
Order Code:	**HD67610-SCB**	**-**	PROFINET / J1939 – Converter (IP67)
Order Code:	**HD67610-SBK**	**-**	PROFINET / J1939 – Converter (IP69K)

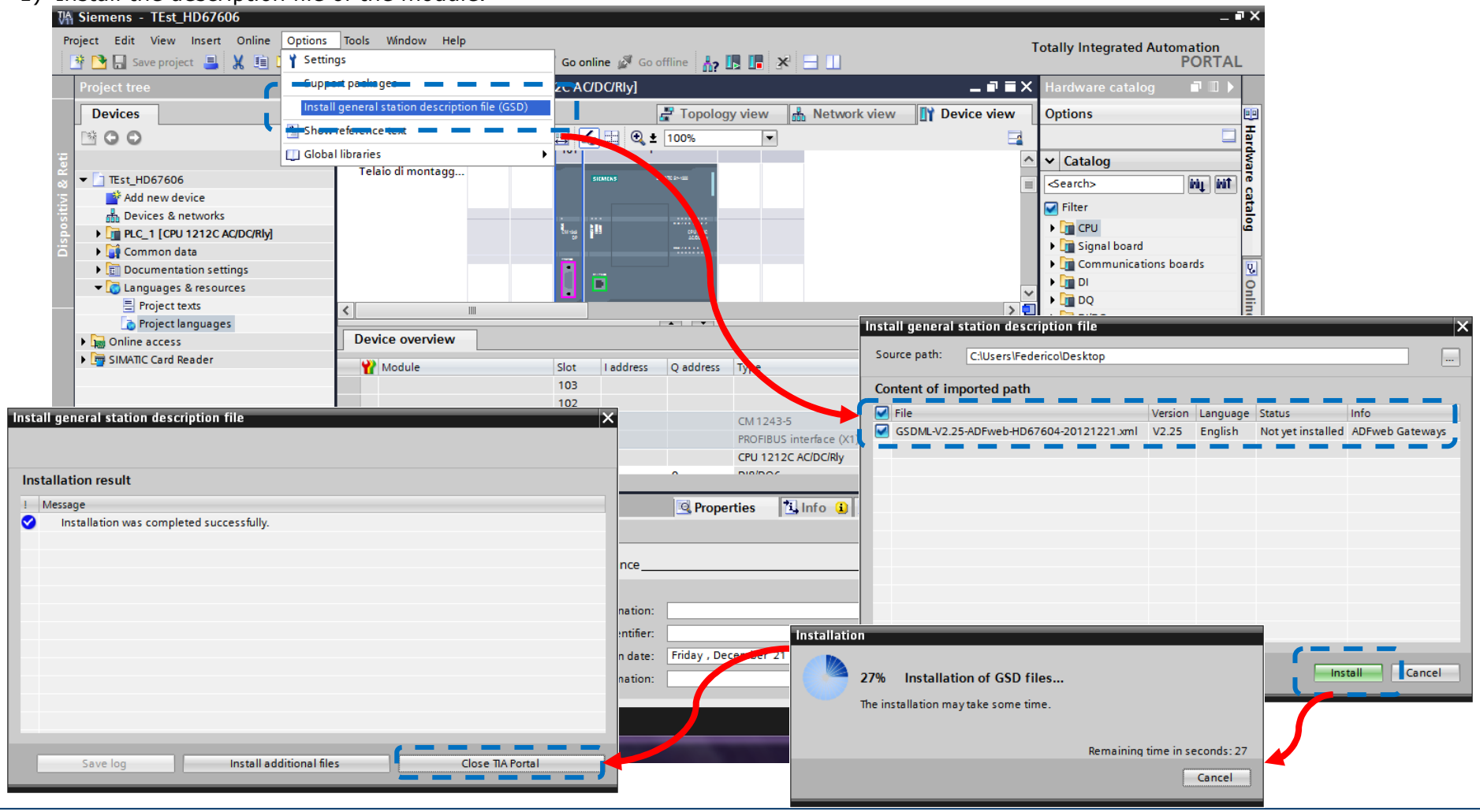
ACCESSORIES:

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

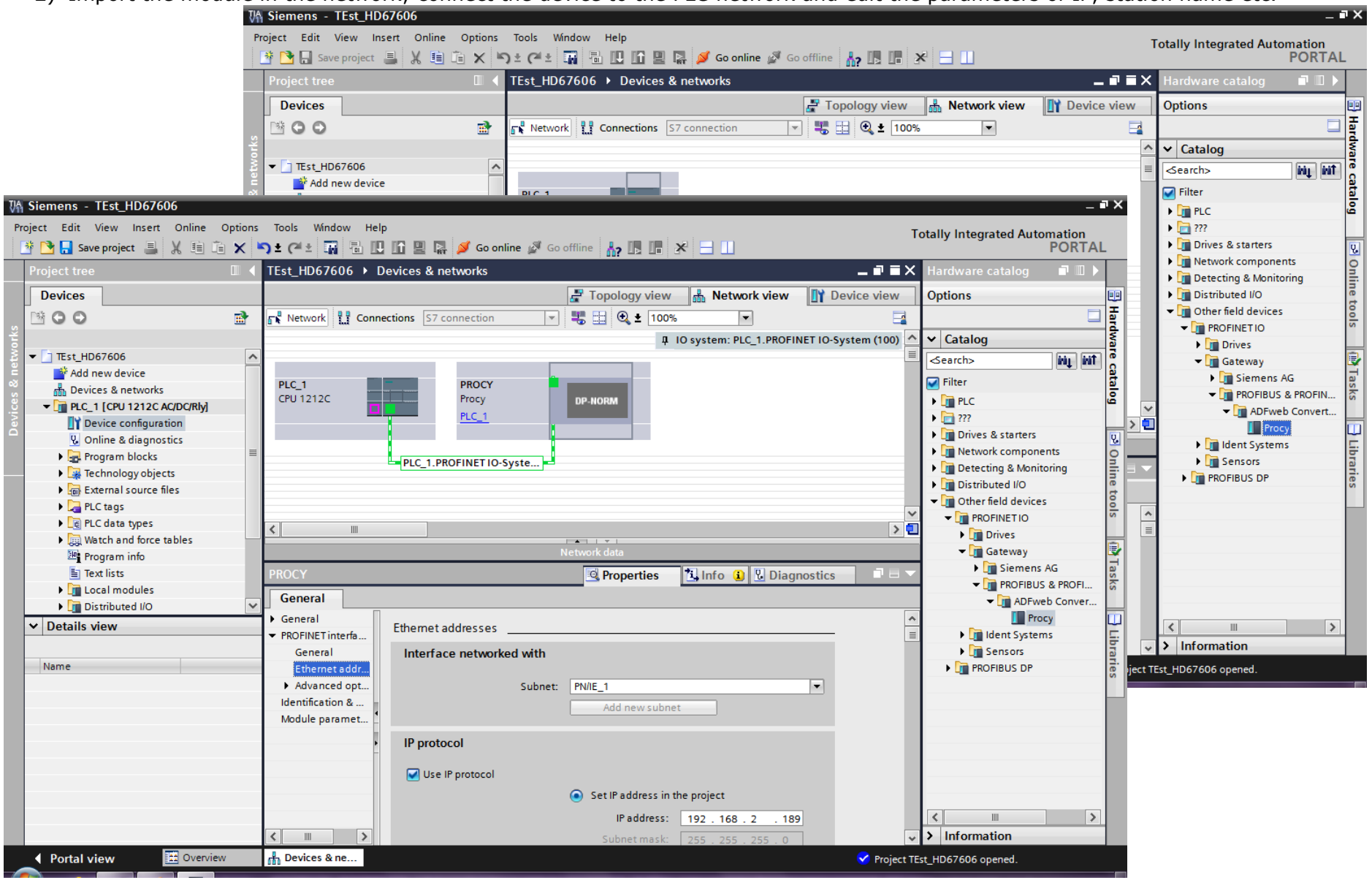
PLC CONFIGURATION:

The configuration and commissioning of the PROFINET Converter as described on the following pages was accomplished with the help of the TIA Portal V11-software of Siemens. In case of using a control system from another supplier please attend to the associated documentation. These are the steps to follow:

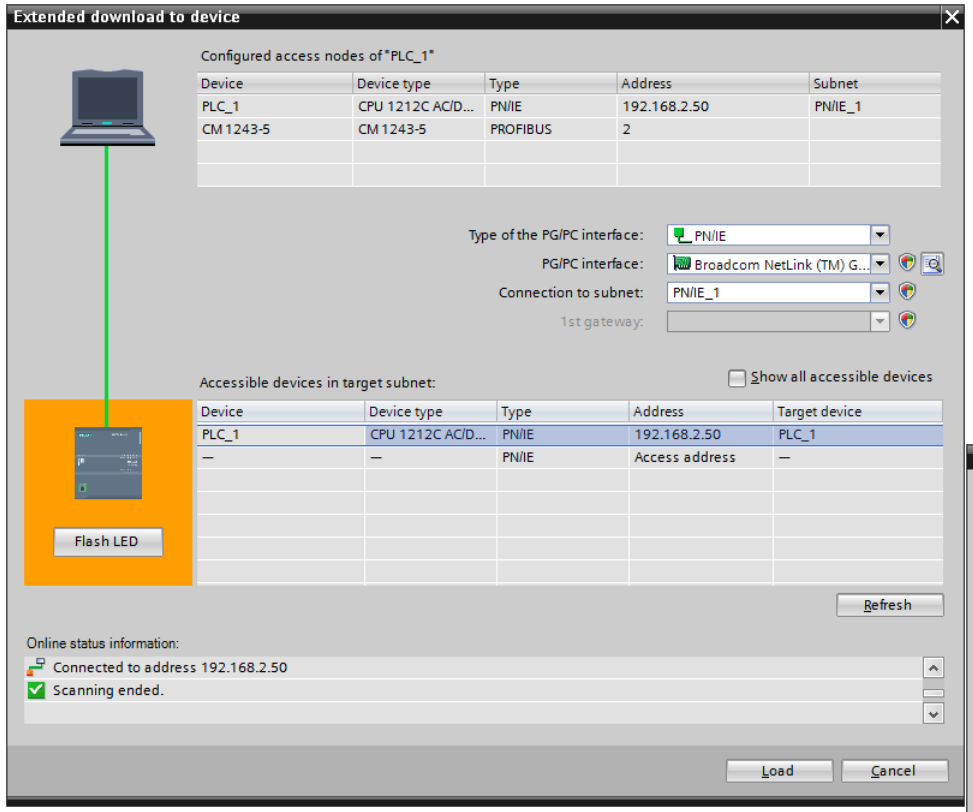
1) Install the description file of the module.

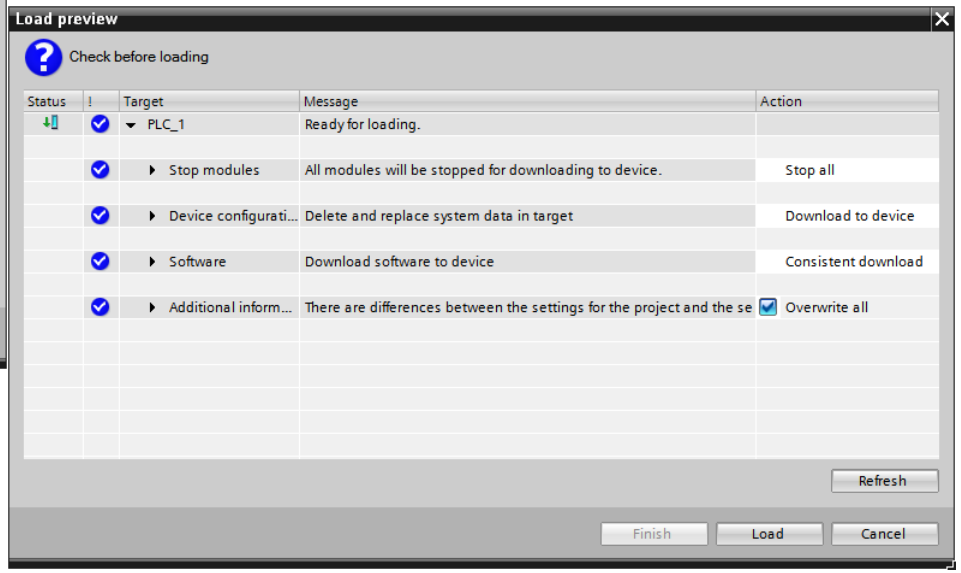


2) Import the module in the network; connect the device to the PLC network and edit the parameters of IP, station name etc.



3) Load the configuration into the PLC.





DISCLAIMER

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OTHER REGULATIONS AND STANDARDS

WEEE INFORMATION

Disposal of old electrical and electronic equipment (as in the European Union and other European countries with separate collection systems).
This symbol on the product or on its packaging indicates that this product may not be treated as household rubbish. Instead, it should be taken to an applicable collection point for the recycling of electrical and electronic equipment. If the product is disposed correctly, you will help prevent potential negative environmental factors and 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 2011/65/EU + 2015/863 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:

1) 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.
2) 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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