

User Manual

Revision 2.100

English

PROFIBUS Master / Ethernet - Converter

(Order Code: HD67575-A1)

For Website information:

<http://www.adfweb.com/?Product=HD67575>

For Price information:

<http://www.adfweb.com/?Price=HD67575-A1>

Benefits and Main Features:

- ✚ PROFIBUS up to 6Mbps
- ✚ Temperature range: -40°C / +85°C (-40°F / +185°F)



User manual

For others PROFIBUS devices, see also the following links:

PROFIBUS Master

www.adfweb.com?Product=HD67570
www.adfweb.com?Product=HD67577
www.adfweb.com?Product=HD67579
www.adfweb.com?Product=HD67580
www.adfweb.com?Product=HD67593
www.adfweb.com?Product=HD67604

(DeviceNet Slave)
 (CAN)
 (Modbus TCP Slave)
 (Modbus Slave)
 (EtherNet/IP)
 (PROFINET)

PROFIBUS Slave

www.adfweb.com?Product=HD67045
www.adfweb.com?Product=HD67053
www.adfweb.com?Product=HD67252
www.adfweb.com?Product=HD67551
www.adfweb.com?Product=HD67552
www.adfweb.com?Product=HD67553
www.adfweb.com?Product=HD67555
www.adfweb.com?Product=HD67561
www.adfweb.com?Product=HD67562
www.adfweb.com?Product=HD67563
www.adfweb.com?Product=HD67564
www.adfweb.com?Product=HD67565
www.adfweb.com?Product=HD67574
www.adfweb.com?Product=HD67576

(Serial)
 (M-Bus Master)
 (NMEA 2000)
 (CANopen)
 (CAN)
 (J1939)
 (DeviceNet Master)
 (Modbus Master)
 (Modbus Slave)
 (Ethernet Server)
 (Modbus TCP Client)
 (Modbus TCP Server)
 (DeviceNet Slave)
 (Ethernet Server)

Do you need to choose a device? Do you want help?

www.adfweb.com?Cmd=helpme

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UPDATED DOCUMENTATION:

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

- Updated;
- Related to the product you own.

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

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

REVISION LIST:

Revision	Date	Author	Chapter	Description
2.011	09/01/2013	Nt	All	Added new chapters
2.012	08/04/2013	Fl	All	Revision
2.100	24/06/2024	Ln	All	Revision

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:

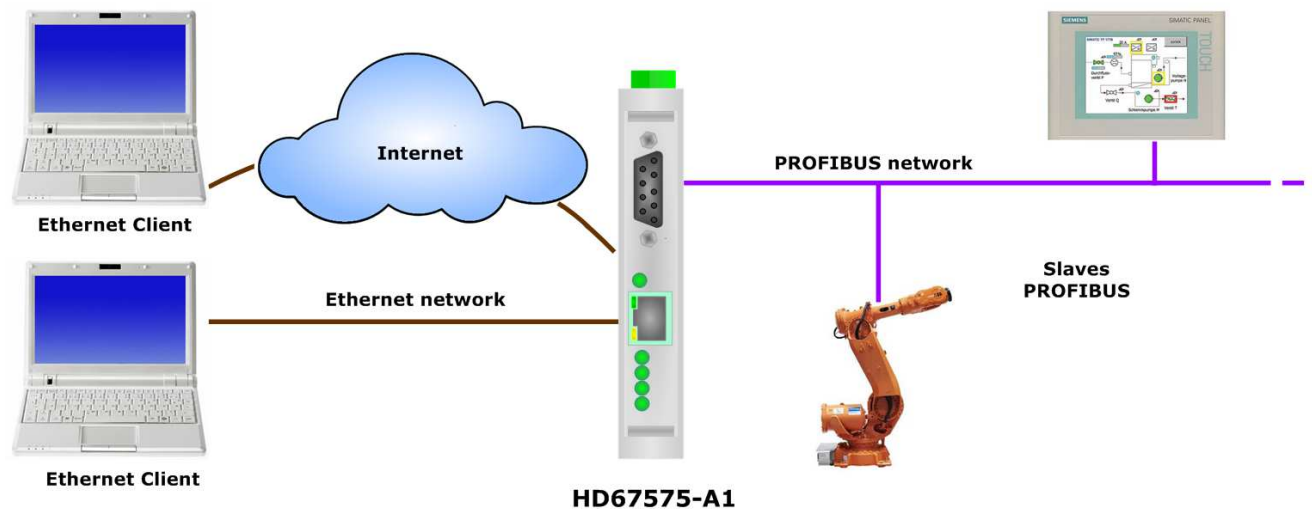


This symbol indicates that non-observance of the safety instructions is danger for people to serious injury or death and / or the possibility of damage.

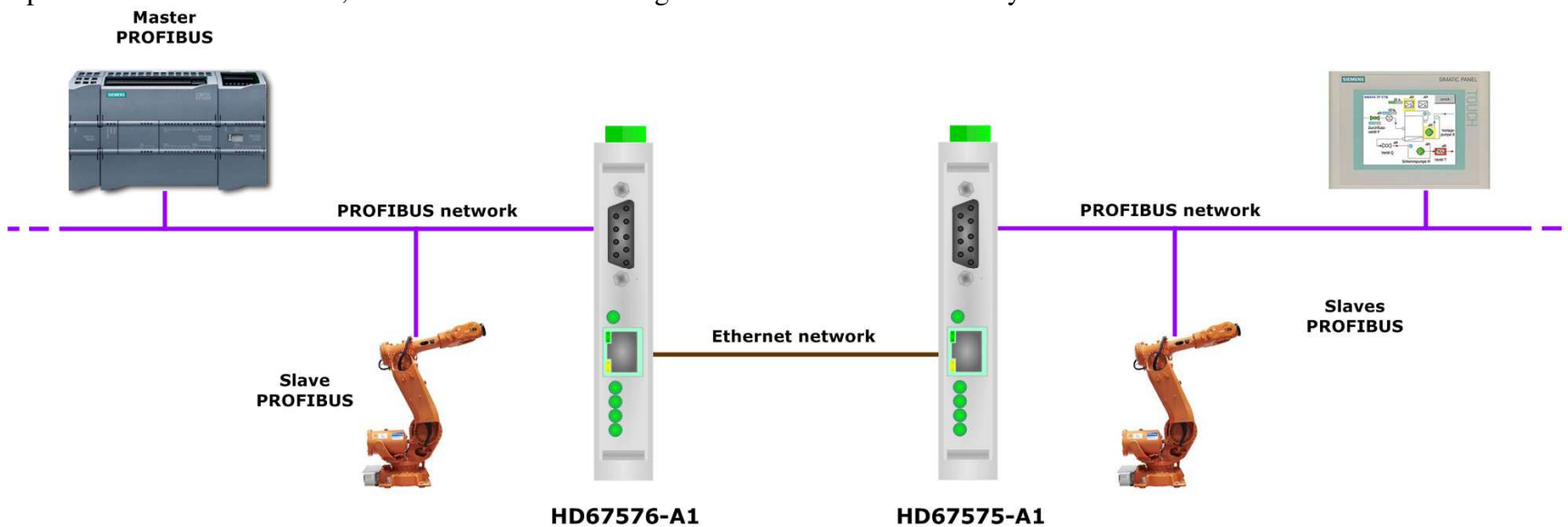
CE CONFORMITY

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

EXAMPLE OF CONNECTION:



Used in pair with the HD67576-A1, allows to make a tunneling over Ethernet. In both cases you can also connect them to Internet.



CONNECTION SCHEME:

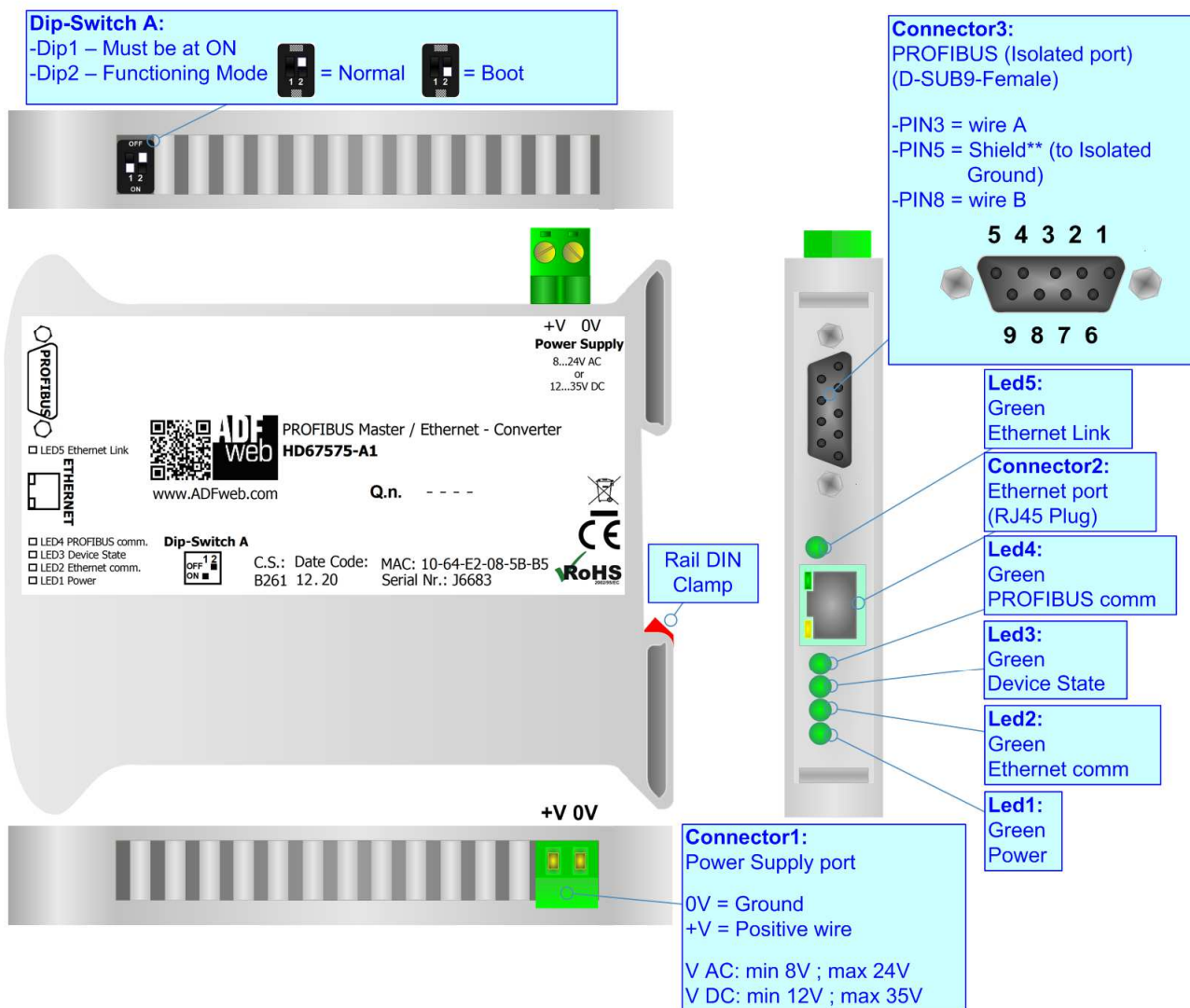


Figure 1: Connection scheme for HD67575-A1

CHARACTERISTICS:

The configurable "PROFIBUS Master / Ethernet" converter allows the following characteristics:

- TCP/IP and UDP protocol at Ethernet side;
- Triple isolation between Ethernet /PROFIBUS, Ethernet /Power Supply, PROFIBUS/Power Supply.
- Mountable on 35mm Rail DIN;
- Power Supply 8...24V AC or 12...35V DC;
- Temperature range -40°C to +85°C.



CONFIGURATION:

You need Compositor SW67575 software on your PC in order to perform the following:

- Define the parameter of the PROFIBUS;
- Define the parameter of the Ethernet;
- Define the PROFIBUS network.

POWER SUPPLY:

The device can be powered between a wide range of tensions. For more details see the two tables below.

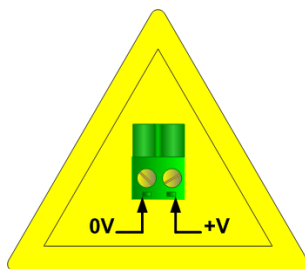
	VAC 		VDC 	
	Vmin	Vmax	Vmin	Vmax
HD67575-A1	8V	24V	12V	35V

Consumption at 24V DC:

Device	W/VA
HD67575-A1	4

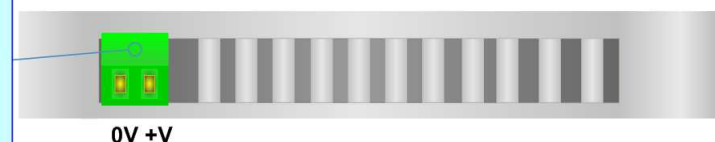


Caution: Not reverse the polarity power



HD67575-A1

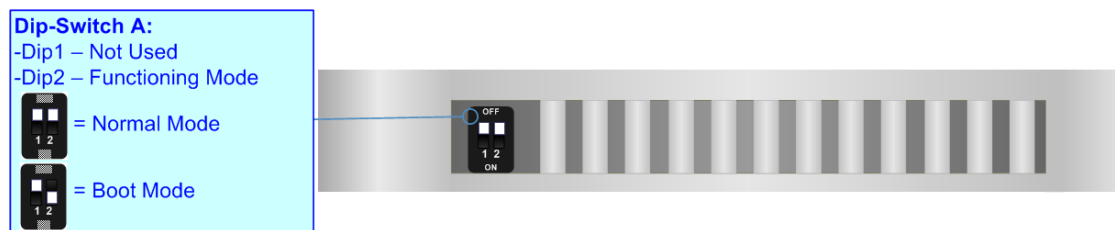
Connector1:
Power Supply port
0V = Ground
+V = Positive wire
V AC: min 8V ; max 24V
V DC: min 12V ; max 35V



FUNCTION MODES:

The device has got two functions mode depending of the position of the Dip2 of 'Dip-Switch A':

- ➡ The first, with Dip2 in Off position (factory setting), is used for the normal working of the device.
- ➡ The second, with Dip2 in On position, is used for upload the Project/Firmware.

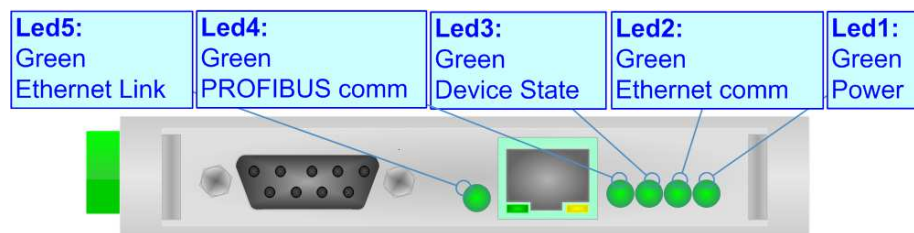
**Warning:**

Dip1 of 'Dip-Switch A' must be at ON position for working even if the Ethernet cable isn't inserted.

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: Power (green)	ON: Powered OFF: Not powered	ON: Powered OFF: Not powered
2: Ethernet comm (green)	Blinks quickly when receive Ethernet commands	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
3: Device State (green)	Blinks slowly (~1Hz)	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
4: PROFIBUS comm (green)	Blinks quickly when there is PROFIBUS communication	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
5: Ethernet Link (green)	ON: Ethernet cable connected OFF: Ethernet cable disconnected	ON: Ethernet cable connected OFF: Ethernet cable disconnected

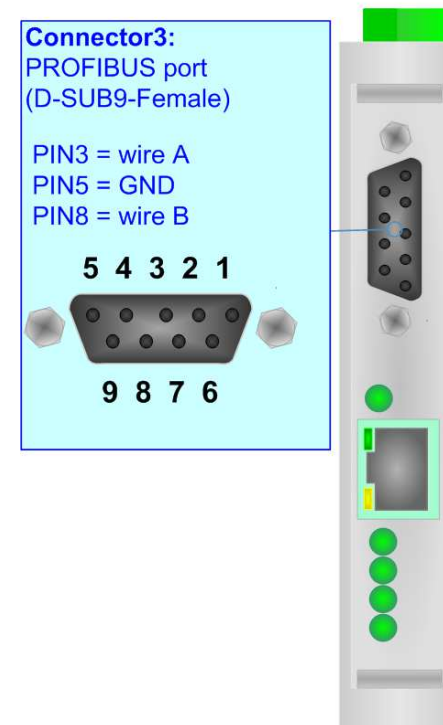


PROFIBUS:

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

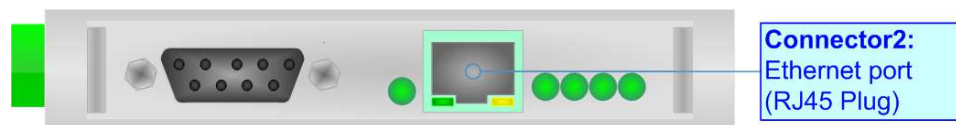
Here some codes of cables:

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



ETHERNET:

The Ethernet connection must be made using Connector3 and/or Connector4 of HD67575-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 a Hub/Switch the use of a straight cable is recommended. To connect the device to a PC/PLC/other the use of a cross cable is recommended.



USE OF COMPOSITOR SW67575:

To configure the Converter, use the available software that runs with Windows called SW67575. It is downloadable from 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 SW67575, the window below appears (Fig. 2).



Note:

It is necessary to have installed .Net Framework 4.

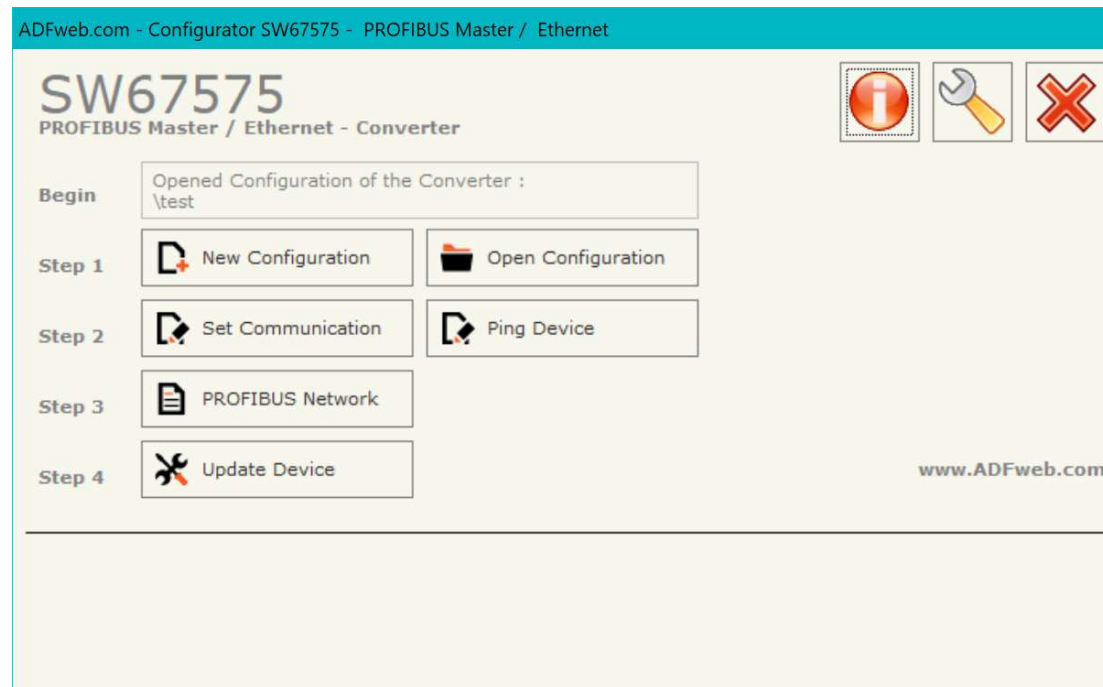
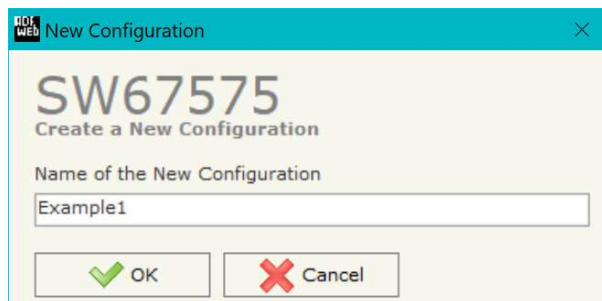


Figure 2: Main window for SW67575

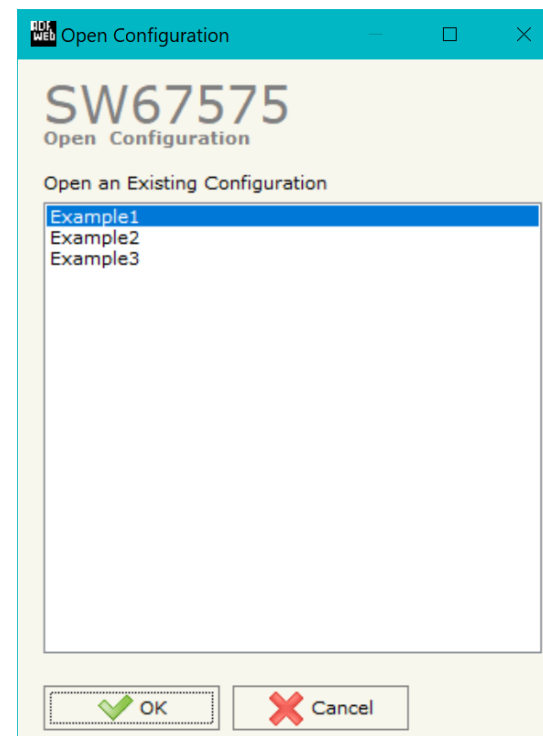
NEW CONFIGURATION / OPEN CONFIGURATION:

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




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

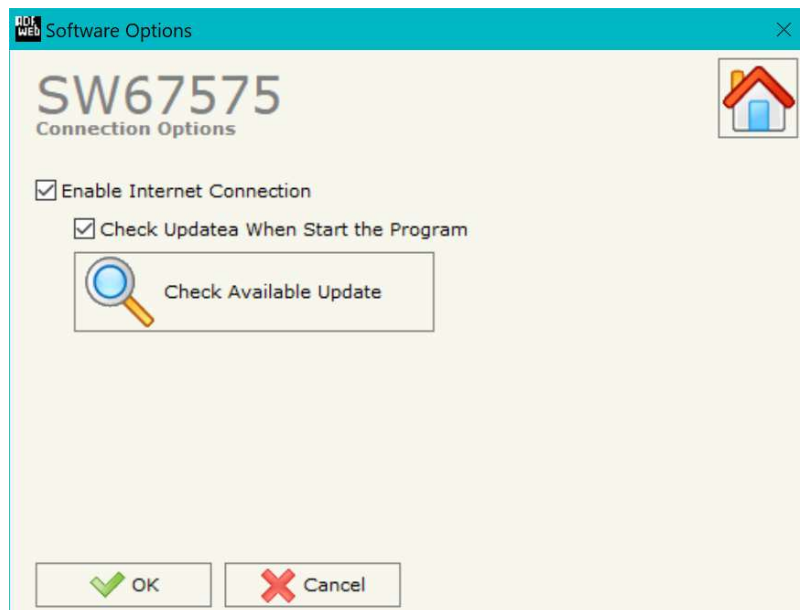
- To clone the configurations of a Programmable “PROFIBUS Master / Ethernet - Converter” in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to 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 SW67575 check automatically if there are updatings when it is launched.

SET COMMUNICATION:

This section defines the fundamental communication parameter of two buses, PROFIBUS and Ethernet.

By pressing the **"Set Communication"** button from the main window for SW67575 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The window is divided in two sections, one for the PROFIBUS and the other for the Ethernet.

The means of the fields for "PROFIBUS" are:

- In the field **"ID Dev."** the address of the PROFIBUS side is defined;
- In the field **"Baudrate"** the baudrate for the PROFIBUS side is defined;
- If the field **"Send Sync"** is checked, the converter will send Sync signal at every cycle;
- If the field **"Send Freeze"** is checked, the converter will send Freeze signal at every cycle.

The means of the fields for "Ethernet" are:

- In the field **"IP ADDRESS"** insert the IP address;
- In the field **"SUBNET Mask"** insert the SubNet Mask;
- If the **"GATEWAY"** field is checked it is possible to insert, in the field under, the IP Address for going out to the net;
- In the field **"Port"** insert the number of the port;
- In the field **"COMPANION BOARD IP ADDRESS"** insert the IP address of the Ethernet Client device that communicates with the HD67575-A1;
- In the field **"COMPANION Port"** insert the number of the port of the Ethernet Client device that communicates with the HD67575-A1.

**Warning:**

Fields **"COMPANION BOARD IP ADDRESS"** and **"COMPANION Port"** are used only if the HD67575 device is connected to the HD67576-A1.

Figure 3: "Set Communication" window

PROFIBUS NETWORK:

By pressing the "**PROFIBUS Network**" button from the main window for SW67575 (Fig. 2) the window "PROFIBUS Network" (Fig. 4) appears.

In this window is possible to:

- Modify the PROFIBUS Master Options ("**Master PROFIBUS Options**");
- Add a PROFIBUS Slave in the Network ("**Add Slave PROFIBUS**");
- Modify a PROFIBUS Slave in the Network ("**Modify Slave PROFIBUS**");
- Remove a PROFIBUS Slave from the Network ("**Remove Slave PROFIBUS**").

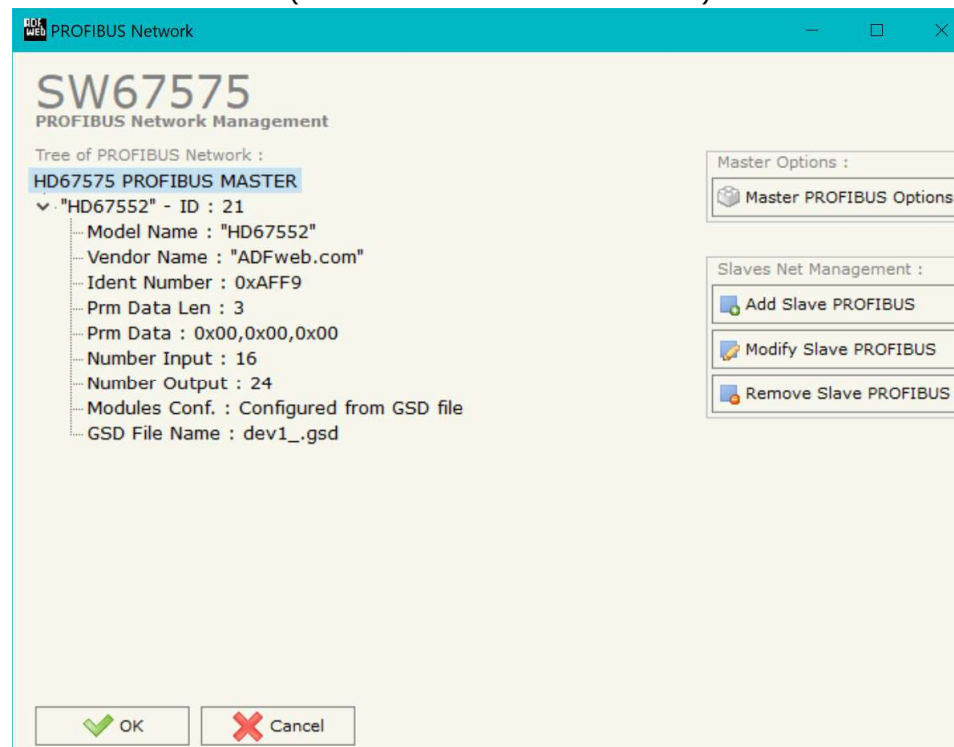


Figure 4: "PROFIBUS Network" window

MASTER PROFIBUS OPTIONS:

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

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



Figure 5: "PROFIBUS Master Options" window

**Note:**

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

**Warning:**

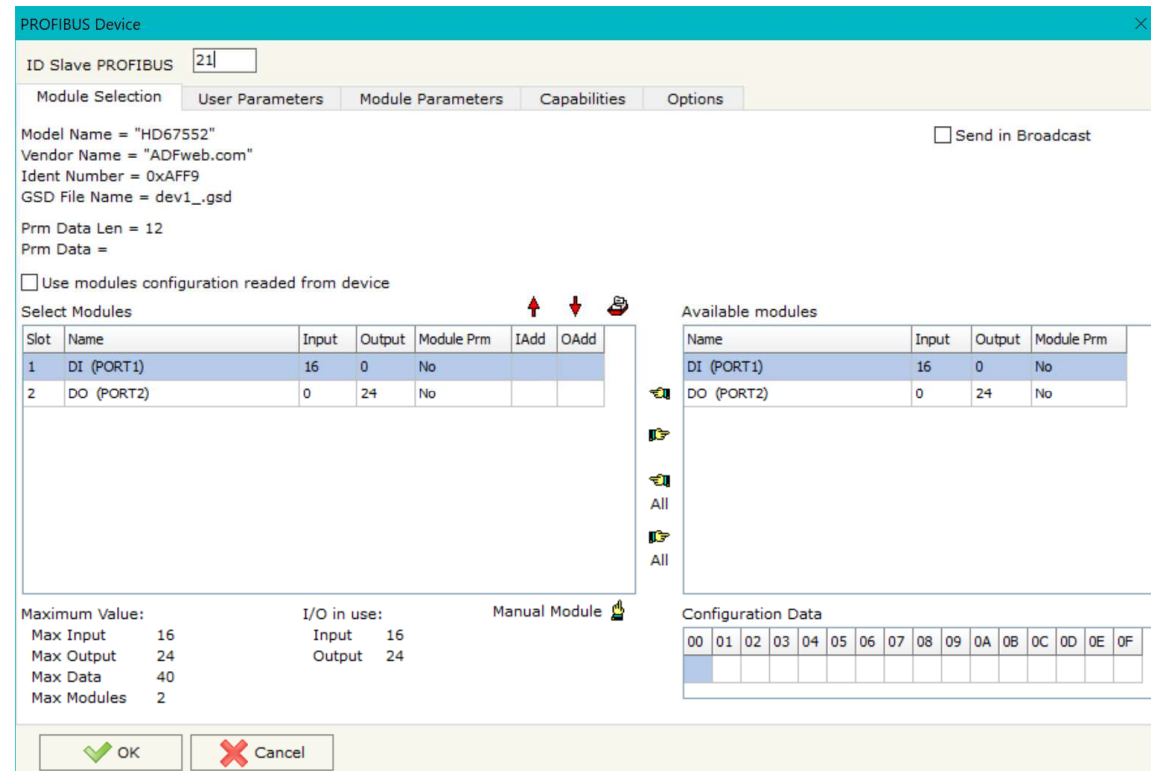
The WatchDog time must be between 200 and 650250 milliseconds.

PROFIBUS DEVICE:

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

In this window is possible to:

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



PROFIBUS Device

ID Slave PROFIBUS: 21

Module Selection | User Parameters | Module Parameters | Capabilities | Options

Model Name = "HD67552"
Vendor Name = "ADFweb.com"
Ident Number = 0xAFF9
GSD File Name = dev1_.gsd

☐ Send in Broadcast

Prm Data Len = 12
Prm Data =

☐ Use modules configuration readed from device

Select Modules

Slot	Name	Input	Output	Module Pm	IAdd	OAdd
1	DI (PORT1)	16	0	No		
2	DO (PORT2)	0	24	No		

Available modules

Name	Input	Output	Module Pm
DI (PORT1)	16	0	No
DO (PORT2)	0	24	No

Maximum Value:

Max Input	16
Max Output	24
Max Data	40
Max Modules	2

I/O in use:

Input	16
Output	24

Manual Module

Configuration Data

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

OK Cancel

Figure 6: "PROFIBUS Device" window

MODULE SELECTION:

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

In this section is possible to:

- Check the list of the Modules selected ("Select Modules") (Fig. 7, point (1)) and the list of Modules Available in GSD file ("Available Modules") (Fig. 7, point (7));
- Add a Module from the list of GSD file (Fig. 7, point (6));
- Remove a Module from selected list (Fig. 7, point (5));
- Add all Modules present in the GSD file (Fig. 7, point (4));
- Remove all Modules from selected list (Fig. 7, point (3));
- Insert a Module not present in the GSD file ("**Manual Module**") (Fig. 7 point (2)). For more info see the section "Manual Module" below;
- Enable the read of configuration directly from the PROFIBUS Slave ("**Use module configuration readed from device**") (Fig 7, point (8)). If this option is enable the configuration of the modules is discarded and the device read the correct configuration directly to the PROFIBUS slave.

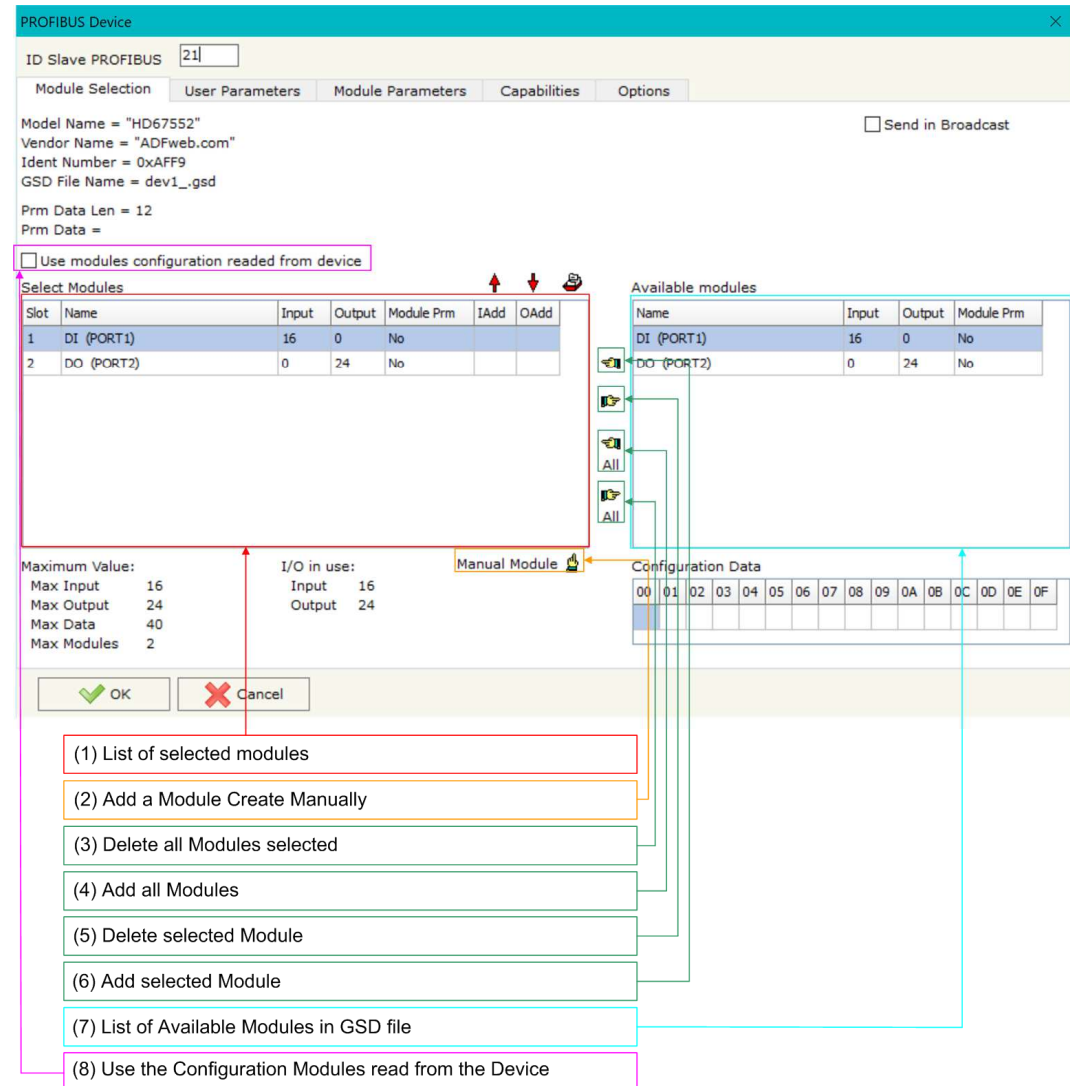


Figure 7: "PROFIBUS Device - Module Selection" window

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

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

The means of the fields are:

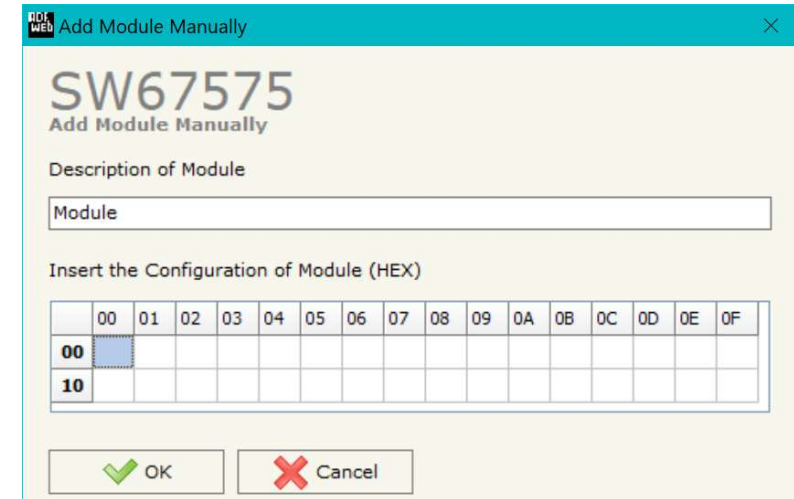
- In the field **Description of Module** a name of the Module is defined;
- In the field **Insert the Configuration of Module (HEX)** the configuration of the module is defined. The configuration must be write in hexadecimal mode (without prefix "0x" o "\$").

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



Note:

The Values inserted in the table must between 00 and FF



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

Figure 8: "Add/Modify Module Manually" window

USER PARAMETERS:

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

In this section there are:

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

The screenshot shows the 'PROFIBUS Device' window with the 'User Parameters' tab selected. The 'ID Slave PROFIBUS' is set to 21. The window contains several sections: a table for 'User Parameters', a 'Parameters in RAW (Hex)' section, a 'Modify Value' section, and a 'New Value' section. Numbered callouts point to the following elements:

- (1) List of the available parameters: Points to the 'User Parameters' table.
- (2) Representation of the parameters in RAW (hexadecimal): Points to the 'Parameters in RAW (Hex)' section.
- (3) Manual Parameters inserted in RAW: Points to the 'Use Parameters Inserted Manually' checkbox and the 'Modify User Parameters Manually' button.
- (4) List of admitted values for the parameter: Points to the 'Value' column in the 'Modify Value' table.
- (5) Section to confirm the new value or load the Default: Points to the 'New Value' section, including the 'Apply' and 'Default' buttons.

Figure 9: "PROFIBUS Device – User Parameters" window

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

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

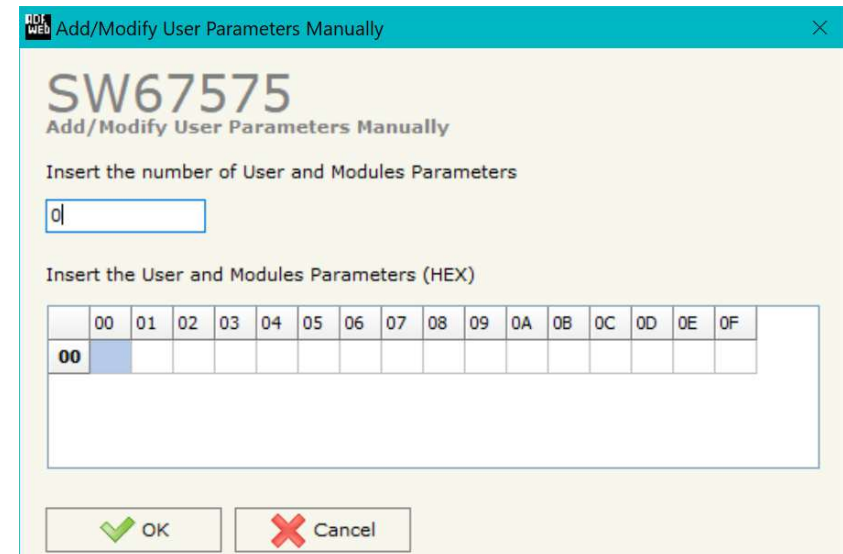
The means of the fields are:

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



Note:

The Values inserted in the table must between 00 and FF



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

Figure 10: "Add/Modify User Parameters Manually" window

MODULE PARAMETERS:

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

In this section there are:

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

The screenshot shows the "PROFIBUS Device" window with the "Module Parameters" tab selected. The window contains several sections: "Available modules", "Parameters of module", "Parameters in RAW (Hex)", and a "Modify Value" section on the right. Numbered callouts point to the following elements:

- (1) List of the available modules: Points to the "Available modules" table.
- (2) List of the available parameters for the module selected: Points to the "Parameters of module" table.
- (3) Representation of the parameters of module in RAW (hexadecimal): Points to the "Parameters in RAW (Hex)" table.
- (4) List of admitted values for the parameter: Points to the "Value" column in the "Modify Value" table.
- (5) Section to confirm the new value or load the Default: Points to the "New Value" input field and the "Apply" and "Default" buttons.

Slot	Name	Input	Output	Module Pm
1	DI (PORT1)	16	0	No
2	DO (PORT2)	0	24	No

Byte	Type	Name	Value	Module Pm

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

Value	Value Description

Figure 11: "PROFIBUS Device – Module Parameters" window

CAPABILITIES:

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

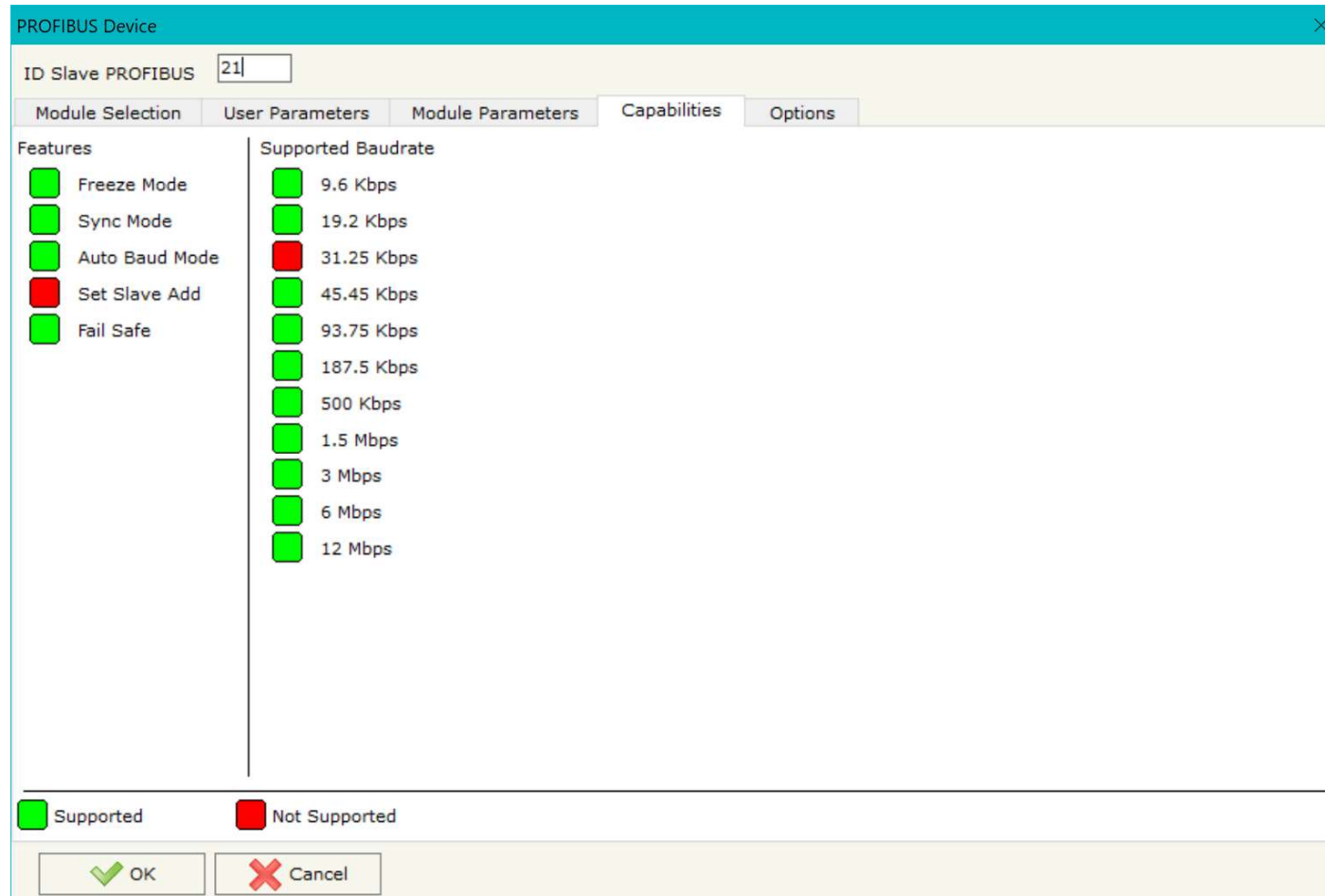


Figure 12: “PROFIBUS Device – Capabilities” window

OPTIONS:

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

The means of the fields are:

- In the field "**Enable Sync**" the PROFIBUS Sync command is enable. This option is enable only if the "Sync Mode" is supported by the device (see Capabilities section to check it);
- In the field "**Enable Freeze**" the PROFIBUS Freeze command is enable. This option is enable only if the "Freeze Mode" is supported by the device (see Capabilities section to check it);
- In the field "**Reset data if Ethernet doesn't write data with slave in ... milliseconds**" is possible to select to cancel the data send to the slave PROFIBUS if the Converter don't receive a Ethernet frame within the time expressed in the field.

PROFIBUS Device

ID Slave PROFIBUS 21

Module Selection User Parameters Module Parameters Capabilities Options

☐ Enable Sync

☐ Enable Freeze

☒ Reset data if Ethernet master doesn't write data with slave in 1000 milliseconds

OK Cancel

Figure 13: "PROFIBUS Device – Options" window

UPDATE DEVICE:

By pressing the “**Update Device**” button, it is possible to load the created Configuration into the device; and also the Firmware, if necessary. This by using the Ethernet port.

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

- Turn OFF the Device;
- Put Dip1 of 'Dip-Switch A' in ON position;
- Turn ON the device
- Connect the Ethernet cable;
- Insert the IP “**192.168.2.205**”;
- Select which operations you want to do;
- Press the “**Execute update firmware**” button to start the upload;
- When all the operations are “OK” turn OFF the Device;
- Put Dip1 of 'Dip-Switch A' in OFF position;
- Turn ON the device.

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

- Turn ON the Device with the Ethernet cable inserted;
- Insert the actual IP of the Converter;
- Select which operations you want to do;
- Press the “**Execute update firmware**” button to start the upload;
- When all the operations are “OK” the device automatically goes at Normal Mode.

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

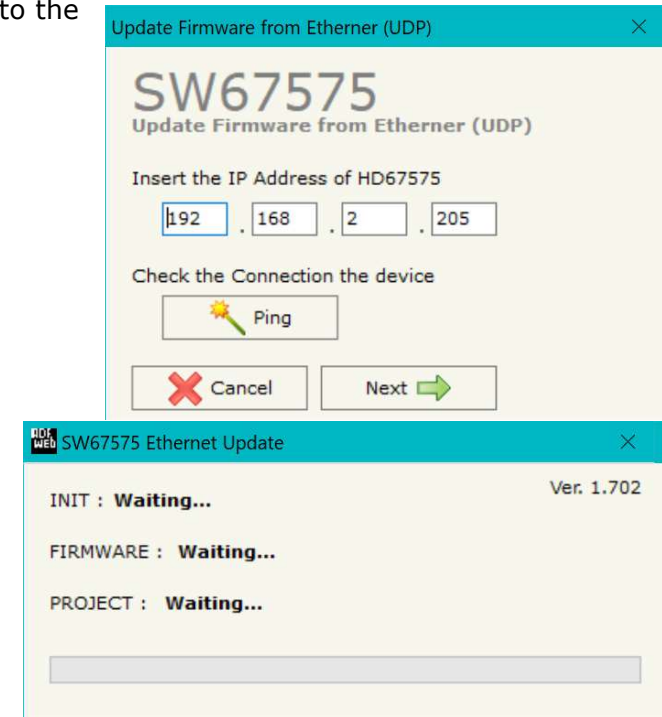


Figure 14: "Update device" windows


Note:

When you receive the device, for the first time, you also have to update the Firmware in the HD67575 device.


Warning:

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

- Try to repeat the operations for the updating;
- Try with another PC;
- Try to restart the PC;
- Check the LAN settings;
- If you are using the program inside a Virtual Machine, try to use in the main Operating System;
- If you are using Windows Seven, Vista, 8, 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.

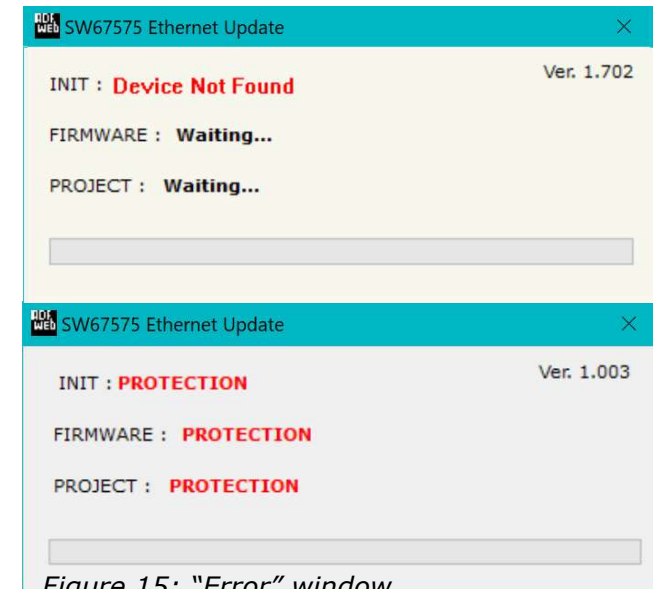


Figure 15: "Error" window


Warning:

In the case of HD67575 you have to use the software "SW67575": www.adfweb.com/download/filefold/SW67575.zip.

ETHERNET PROTOCOL:

This protocol has got a single function for write and/or read frames. This routine can use both the UDP protocol and the TCP; is not necessary to select the protocol used by the Converter, it uses both.



Note:

We provide a free software tool that can be used together with the HD67575-A1. Is possible to download it from here: www.adfweb.com/download/filefold/SW67575-Tool.zip. The manual of this software can be found here: www.adfweb.com/download/filefold/MNSW67575-Tool_ENG.pdf.

STANDARD MODE:

The request include the following byte:

Byte Number	Description
1	Address PROFIBUS Slave
2	Starting Address Write
3	Number of Byte to Write (n)
$4 \div (4+n-1)$	Data Write

n=Number of Byte to Write

If the "Number of Byte to Write (n)" has got the value 0x00 there are no data to write.

The response includes the following byte:

Byte Number	Description	Abbreviation
1	Address PROFIBUS Master	/
2	Address PROFIBUS Slave	/
3	Writing state	/
4	Slave informations	/
5	Data length (read)	DLR
$6 \div (DLR + 5)$	Data read	/
DLR + 6	Configuration length (programmed)	CLP
$(DLR + 7) \div (DLR + CLP + 6)$	Configuration programmed	/
DLR + CLP + 7	Fixed at 0	/
DLR + CLP + 8	Fixed at 0	/

The "Writing state" (Byte 3) can have these values:

- 0x00: Writing not required;
- 0x01: No error;
- 0x02: Slave does not exist, or does not respond in time or is not connected to line;
- 0x03: Writing not possible because the start byte is too big;
- 0x04: Writing cannot be made because the length is too high;
- 0x05: The data sent are insufficient for writing.

The "Slave informations" (Byte 4) gives informations about the slave interrogated. Every bit has a meaning:

- Bit0: Configuration corresponds;
- Bit1: Parameters OK;
- Bit2: Configuration OK;
- Bit3: Data OK.

Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
------	------	------	------	------	------	------	------

If all is correct, you have to read 0x0F.

Example1: Request to get data from address PROFIBUS 21, without writing nothing.

Request: 15 00 00

[illegible]

Example2: Request to get data from address PROFIBUS 20, without writing nothing.

Request: 14 00 00

[illegible]

Example3: Request to get data from address PROFIBUS 21 and writing of 5 bytes. In this case the Byte3 gives "No Error" response for writing.

Request: 14 01 05 01 02 03 04 05

[illegible]

Example4: Request to get data from address PROFIBUS 21 and writing of 5 bytes (but only four bytes are written in the request). In this case the Byte3 gives an error response for writing.

Request: 14 01 05 01 02 03 04

[illegible]

EXTENDED MODE:

The Extended Protocol is enabled by adding a +0x80 to Byte Number 1.

The request include the following byte:

Byte Number	Description
1	Address PROFIBUS Slave
2	Starting Address Write
3	Number of Byte to Write (n)
$4 \div (4+n-1)$	Data Write

n=Number of Byte to Write

If the "Number of Byte to Write (n)" has got the value 0x00 there are no data to write.

The response includes the following byte:

Byte Number	Description	Abbreviation
1	Address PROFIBUS Master	/
2	Address PROFIBUS Slave	/
3	Writing state	/
4	Slave informations	/
5	Data length (read)	DLR
$6 \div (DLR + 5)$	Data read	/
DLR + 6	Configuration length (programmed)	CLP
$(DLR + 7) \div (DLR + CLP + 6)$	Configuration programmed	/
DLR + CLP + 7	Data length (write)	DLW
$(DLR + CLP + 8) \div (DLR + CLP + DLW + 7)$	Data write	/
DLR + CLP + DLW + 8	Configuration length (of device)	CLD
$(DLR + CLP + DLW + 9) \div (DLR + CLP + DLW + CLD + 8)$	Configuration of device	/
DLR + CLP + DLW + CLD + 9	Fixed at 0	/

The "Writing state" (Byte 3) can have these values:

- 0x00: Writing not required;
- 0x01: No error;
- 0x02: Slave does not exist, or does not respond in time or is not connected to line;
- 0x03: Writing not possible because the start byte is too big;
- 0x04: Writing cannot be made because the length is too high;
- 0x05: The data sent are insufficient for writing.

The "Slave informations" (Byte 4) gives informations about the slave interrogated. Every bit has a meaning:

- Bit0: Configuration corresponds;
- Bit1: Parameters OK;
- Bit2: Configuration OK;
- Bit3: Data OK.

Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
------	------	------	------	------	------	------	------

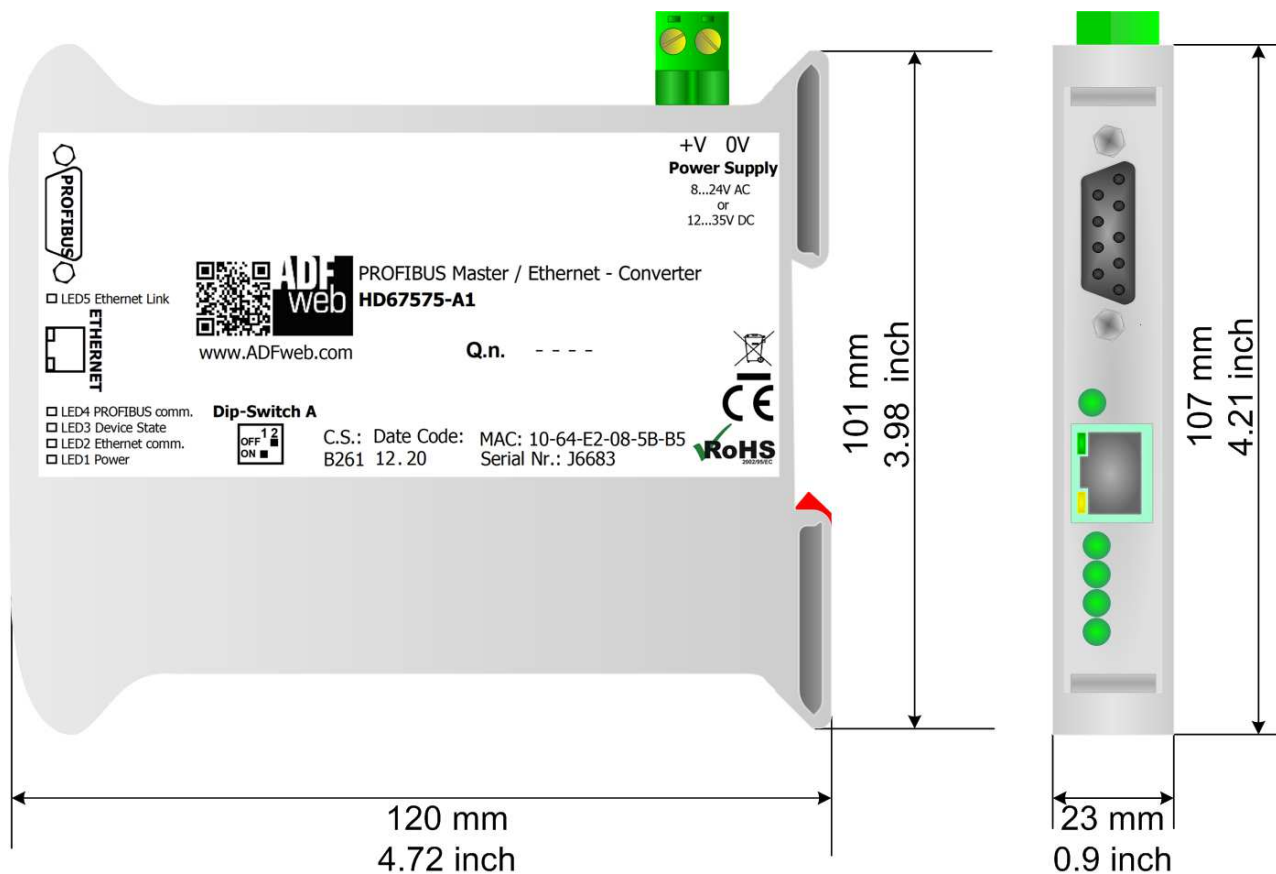
If all is correct, you have to read 0x0F.

Example5: Request to get data from address PROFIBUS 21, without writing nothing, Extended Mode.

Request: 95 00 00

[illegible]

MECHANICAL DIMENSIONS:



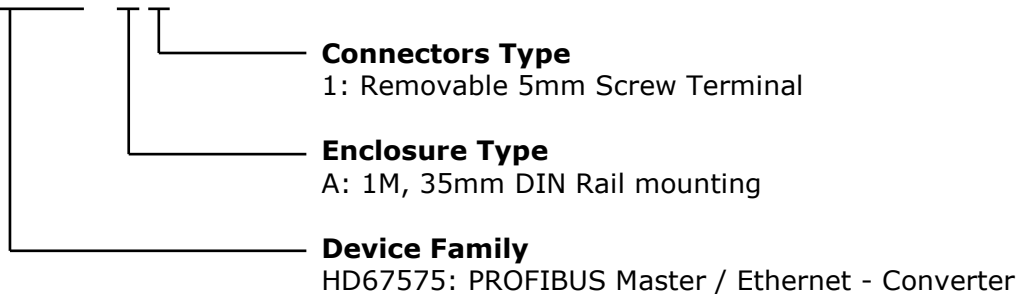
Housing: PVC
Weight: 200g (Approx)

Figure 16: Mechanical dimensions scheme for HD67575-A1

ORDER CODE:

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

HD67575 - A 1



Order Code: **HD67575-A1** - PROFIBUS Master / Ethernet - 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 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:

- 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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