

Industrial Electronic Devices

User Manual

Revision 1.001 English

PROFINET / Modbus TCP Master - Converter

(Order Code: HD67611-A1)

For Website information: <u>www.adfweb.com?Product=HD67611</u>

For Price information: www.adfweb.com?Price=HD67611-A1

Benefits and Main Features:

- Very easy to configure
- Electrical isolation
- Two Ethernet ports (for Modbus TCP / PROFINET)
- Temperature range: -40°C/+85°C (-40°F/+185°F)



For other PROFINET products see also the following link:

Converter PROFINET to

www.adfweb.com?Product=HD67608 www.adfweb.com?Product=HD67609 www.adfweb.com?Product=HD67610 www.adfweb.com?Product=HD67600 www.adfweb.com?Product=HD67602 www.adfweb.com?Product=HD67603 www.adfweb.com?Product=HD67631 www.adfweb.com?Product=HD67604 www.adfweb.com?Product=HD67605 www.adfweb.com?Product=HD67605 www.adfweb.com?Product=HD67605 (DeviceNet Master) (DeviceNet Slave) (J1939) (NMEA2000) (Modbus Master RS232) (Modbus Master RS485) (Modbus Slave RS485) (Modbus Slave RS485) (PROFIBUS Master) (PROFIBUS Slave) (CAN)

Do you have your customer protocol? Then go to: www.adfweb.com?Product=HD67003

Do you need to choose a device? Do you want help? www.adfweb.com?Cmd=helpme



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UPDATED DOCUMENTATION:

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

- + Updated
- ✤ Related to the product you own

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

With this "Document Code" go to web page <u>www.adfweb.com/download/</u> 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	17/07/2013	FI	All	First Release
1.001	27/01/2015	Ff	All	New Software Interface

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 <u>support@adfweb.com</u> or give us a call if you need it.



EXAMPLE OF CONNECTION:

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HD67611-A1



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CONNECTION SCHEME:





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CHARACTERISTICS:

The HD67611-A1 is a PROFINET / Modbus TCP Master Converter.

It allows for the following characteristics:

- ✤ Up to 1440 bytes in reading and 1440 bytes in writing;
- Isolation between Modbus/PROFINET Power Supply;
- Two-directional information between Modbus TCP bus and PROFINET bus;
- Mountable on 35mm Rail DIN;
- ✤ 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 SW67611 software on your PC in order to perform the following:

- Define the parameters of PROFINET line;
- Define the parameters of Modbus line;
- Define the data to Read in Modbus and where to map these information in the PROFINET array;
- Define the data to Write in Modbus and where to take the information in the PROFINET array;
- Generate the XML file to be imported on the master PROFINET;
- Update the device.



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POWER SUPPLY:

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

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

Consumption at 24V DC:

Device	Consumption [W/VA]
HD67611-A1	3.5



Caution: Do not reverse the polarity power





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FUNCTION MODES:

The device has got two function modes depending on the position of the 'Dip2 of Dip-Switch A':

- ✤ The first, with 'Dip2 of Dip-Switch A' at "OFF" position, is used for the normal working of the device.
- ✤ The second, with 'Dip2 of Dip-Switch A' at "ON" position, is used for uploading the Project and/or Firmware.

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

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





<u>Warning:</u>

Dip1 of 'Dip-Switch A' must be at ON position to work even if the Ethernet cable is not inserted.



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LEDS:

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

LED	Normal Mode	Boot Mode
1: ON [supply voltage]	ON: Device powered	ON: Device powered
(green)	OFF: Device not powered	OFF: Device not powered
2: MT [maintenance display]	ON: Maintenance problem is present	Blinks quickly: Boot state
(yellow)	OFF: No maintenance problems are present	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	Blinks quickly: Boot state
	Flashing: At least one configured AR is no longer in the data exchange	Blinks very slowly (~0.5Hz): update in progress
	OFF: No errors are present	
	ON: At least one AR is not in the data exchange	Blinks quickly: Boot state
4: SF [group error] (red)	OFF: No errors are present	Blinks very slowly (~0.5Hz): update in progress
F. Ethomotil Ty (anon)	Plinke when Ethernet frames are transmitted	Blinks quickly: Boot state
5: Ethernet1 Tx (green)	Blinks when Ethernet frames are transmitted	Blinks very slowly (~0.5Hz): update in progress
(. Ethernet) Ty (arean)	Plinke when Ethernet frames are transmitted	Blinks quickly: Boot state
6: Ethernet2 Tx (green)	Blinks when Ethernet frames are transmitted	Blinks very slowly (~0.5Hz): update in progress





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PROFINET / MODBUS TCP:

The PROFINET and Modbus TCP connection must be made using Connector3 and/or Connector4 of HD67611-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.





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USE OF COMPOSITOR SW67611:

To configure the Converter, use the available software that runs with Windows called SW67611. It is downloadable on the site <u>www.adfweb.com</u> 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; 32/64bit).

When launching the SW67611, the window below appears (Fig. 2).



It is necessary to have installed .Net Framework 4.

RDF. Web	ADFweb.com - Comp	ositor SW67611 - PROFINE	ET / Modbus TCP Master				
SW67611 PROFINET / Modbus TCP Master - Converter							
Begin	Opened Configuration of the Example1	Converter :					
Step 1	New Configuration	Dpen Configuration					
Step 2	Set Communication						
Step 3	Set Access						
Step 4	PROFINET XML						
Step 5	💥 Update Device		www.ADFweb.com				

Figure 2: Main window for SW67611



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 "PROFINET Slave / Modbus TCP Master - 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".

HDF.	Open Configuration		×
SW67 Open an Exist	ing Configuration		
Example1 Example2 Example3			
Examples			
	∕ ок	V Can	
		Can	



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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.

S	oftware Options	
SW67611 Software Options		
✓ Enable Internet Connection		
✔ Check Software Update a	t Start of Program	
Check Available Upo	late	
🗸 ОК 🕅 🗶 Саг	Icel	

Software Options
SW67611 Software Options
Language Connection Options
Selected Language :
Deutsch
English
Page 1 / 1
Cancel

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 SW67611 check automatically if there are updatings when it is launched.



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SET COMMUNICATION:

This section define the fundamental communication parameters of two buses, PROFINET and Modbus.

By Pressing the "**Set Communication**" button from the main window for SW67611 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The window is divided in two sections, one for the PROFINET and the other for the Modbus TCP Master.

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 (PROFINET side);
- In the fields "SUBNET Mask" insert the SubNet Mask (PROFINET side);
- 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 (PROFINET side);
- 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;
- In the field "Number Byte IN" insert the number of input byte of the slave station;
- In the field "Number Byte Out" insert the number of output byte of the slave station;
- In the field "Diagnostic" insert the starting byte of the PROFINET array where you will save the diagnostic of Modbus. It is possible to enable/disable this function using the checkbox.
 For more informations about the diagnostic, see "Diagnostic" section on page 19.

🔛 Set Communication 💌
SW67611 Set Communication Setting
PROFINET
IP ADDRESS
192 .168 .0 .10
SUBNET Mask
255 .255 .255 .0
GATEWAY
192 . 168 . 0 . 1
Port 34964
PROFINET Name of Station
devicename1
Number Byte IN 500
Number Byte Out 500
Diagnostic 0
Modbus TCP Master
IP ADDRESS
192 .168 .0 .5
SUBNET Mask
255 . 255 . 255 . 0
GATEWAY
192 . 168 . 0 . 1
TimeOut (ms) 1000
Cyclic Delay (ms) 100
OK X Cancel

Figure 3: "Set Communication" window



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The means of the fields for the "Modbus TCP Master" section are:

- ✤ In the fields "IP ADDRESS" insert the IP address that you want to give to the Converter (Modbus TCP side);
- In the fields "SUBNET Mask" insert the SubNet Mask (Modbus TCP side);
- 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 (Modbus TCP side);
- ✤ 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 delay between two requests is defined.



SET MODBUS ACCESS:

By Pressing the "**Set Modbus Access** " button from the main window for SW67611 (Fig. 2) the window "Set Access" appears (Fig. 4).

The window is divided in two parts, the "Modbus Read" that contains the Modbus registers/status readable by the Converter and "Modbus Write" that contains the Modbus registers/status writeable by the Converter.

The meaning of the fields in the window are the follows:

- In the field "Slave IP Address" the address of the Modbus device you have to read/write is defined;
- In the field "Port" the port used for require the Modbus data is defined;
- In the field "Slave ID" is possible to insert the ID the address of the Modbus device you have to read/write;
- In the field "Type" insert the data type of the Register you would like to read/write. You can choose between the following:
 - Coil Status (R/W);
 - Input Status (R);
 - Holding Register (R/W);
 - Input Register (R);
- In the field "Address" the start address of the register/status to read/write is defined;
- In the field "NPoint" insert the number of consecutive registers/status to read/write;
- In the field "Poll Time" insert the time (expressed in milliseconds) used for read/write the register/status. If zero, the request isn't made;

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~		4											
5	W6761	. 1											
Se	t Modbus TCP Mas	ster Ac	cess										
Modbus Read Modbus Write													
N	Slave IP Address	Port	Slave ID	Туре	Address	NPoint	Poll Time	Max Error	Position	Start Bit	Mnemon	ic	
1	192.168.0.11	502	1	Holding Register	100	1	1000	0	0	0			
2	192.168.0.11	502	1	Input Register	100	1	1000	0	2	0			
3	192.168.0.11	502	1	Coil Status	200	10	5000	0	4	0			
4													
5													
	✓ ок		Cancel	Delete Ro		9	Row Naster Ac	cess					
Set	V6761 Modbus TCP Mas	1 ter Acc				9		cess					2
Set Iodb	W6761 Modbus TCP Mas	1 ter Acc		Set	t Modbu	s TCP N	Aaster Ac	Cess On Change	Max Error	Position	Start Bit		3
Set	W6761 Modbus TCP Mas	1 ter Acc	ess Slave ID	Set	t Modbu	s TCP N	Aaster Ac		Max Error 0	Position 0	Start Bit		>
Set Iodb	W6761 Modbus TCP Mas Mus Read Modbus V Slave IP Address	1 ter Acc Write Port	ess Slave ID	Set	t Modbu	s TCP N	Aaster Ac	On Change					>
Set fodb	W6761 Modbus TCP Mas us Read Modbus V Slave IP Address 192.168.0.11	1 ter Acc Write Port 502	ess Slave ID 1	Set	Address	s TCP N NPoint 2	Aaster Ac Poll Time 1000	On Change	0	0	0		>
Set	W6761 Modbus TCP Mas us Read Modbus V Slave IP Address 192.168.0.11 192.168.0.11	Vrite Port 502 502	Slave ID	Set Type Holding Register Holding Register	Address 100 123	s TCP N NPoint 2 4	Aaster Ac Poll Time 1000 1000	On Change	0	0 4	0		

Figure 4: "Set Access" window



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- In the field "Max Error" insert the number of consecutive errors that the Master waits before discard the row from the cycle of requests;
- By checking the field "On Change" the Modbus write request is made only if PROFINET data are changed; otherwise is sent cyclically, using the "Poll Time". This feature is used only on "Modbus Write" section;
- In the field "Position" is possible to select the position where take/save the data from PROFINET array;
- The field "Start Bit" is used for select from which Bit save the data (to use only when the "Type" is 'Coil Status' or 'Input Status' and the "NPoint" is more than one);
- ✤ In the field "Mnemonic" is possible to insert a description of the data inserted in the row.

<u>Note:</u>

If you want that the Modbus register/status is written only when data are changed, the "Poll Time" of the row must be 0.

/ <u>Note:</u>

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

XML FILE:

By Pressing the "**PROFINET XML**" button from the main window for SW67611 (Fig. 2) it is possible to generate the xml file to be imported into the master PROFINET.

Figure 5: "PROFINET XML File Name" window

NOT WED	PROFINET XML File Name	×
SW67611 Create the PROFINET XM	_ GSD File	
Select the PROFINET XML File Nan	ne	
Fixed Part GSDML-V2.25-ADFweb-HD67611	User Part HD67611	Fixed Part -20150128.xml
🗸 ок 🔀	Cancel	



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UPDATE DEVICE:

By pressing the "Update Device" button it is possible to load the created Configuration into the device; and also the Firmware, if is necessary.

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

- Turn off the Device;
- Put Dip2 of 'Dip-Switch A' at ON position;
- Turn on the device
- Connect the Ethernet cable;
- Insert the IP "192.168.2.205";
- Press the "Ping" button, must appear "Device Found!";
- Press the "Next" button;
- 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 Dip2 of 'Dip-Switch A' at OFF position;
- Turn on the device.

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

	SW67611 Ethernet U	Jpdate ×
	INIT : Waiting FIRMWARE : Waiting	Ver. 1.002
Figure 6: "Update device" windows	PROJECT : Waiting	

Update Firmware from Etherner (UDP)
SW67611 Update Firmware from Etherner (UDP)
Insert the IP Address of HD67611 192 . 168 . 2 . 205
Check the Connection the device
Cancel Next
Update Firmware from Etherner (UDP)
SW67611 Update Firmware from Etherner (UDP)
Update Device Options
Firmware
✓ Read Firmware when finish ✓ Project
Read Project when finish
Execute update firmware



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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;
- Press the "Ping" button, must appear "Device Found!";
- Press the "Next" button;
- 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 update.

/ Note:

When you install a new version of the software it is better if the first time you do the update of the Firmware in the HD67611-A1 device.

Note:

When you receive the device, for the first time, you have to update also the Firmware in the HD67611-A1 device.

<u>Warning:</u>

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

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

2	SW67611 Ethernet Update	×
INIT : P	PROTECTION	Ver. 1.002
FIRMWA	RE : PROTECTION	
PROJEC	T: PROTECTION	

Figure 7: "Protection" window



In the case of HD67611-A1you have to use the software "SW67611": <u>www.adfweb.com\download\filefold\SW67611.zip</u>.

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MODBUS DIAGNOSTIC OVER PROFINET:

During the normal functioning of the device, if all the programmed Modbus requests have received a valid reply (not an exception error), every PROFINET frame has the "Data Status" byte at the value of 0x35.

Otherwise, if at least one Modbus reply is not valid, the "Data Status" byte assumes the value 0x15; that means "Problem Indicator".

Moreover, it is possible to save the Modbus Diagnostic on Output PROFINET array using the field "Diagnostic" of the section "Set Communication".

In this case, the status of each Modbus request defined in the section "Set Access" is saved starting from the byte of the PROFINET array defined in the section "Set Communication".

Each bit will represent the status of a Modbus request:

- ✤ If for a request the converter receives a correct response, the status bit is put to `0';
- ✤ If for a request the converter receives a wrong response or it doesn't receive any response, the status bit is put to `1'.

Example:

In the section "Set Access" are defined 8 Modbus reading requests ("Modbus Read" table) and 8 Modbus writing requests ("Modbus Write" table). The Modbus reading requests are working and the Modbus writing request are not working.

The status bits of the Modbus Diagnostic on PROFINET will be:

	Byte x						Byte x+1								
bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0	t0 bit7 bit6 bit5 bit4 bit3 bit2 bit1					bit0		
0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

where x' is the starting byte of the PROFINET array where the Modbus diagnostic is saved.

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Figure 8: Mechanical dimensions scheme for HD67611-A1



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ORDERING INFORMATIONS:

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

HD67611 - A 1 Connectors Type 1: Removable 5mm Screw Terminal Enclosure Type A: 1M, 35mm DIN Rail mounting Device Family HD67611: PROFINET / Modbus TCP Master - Converter Order Code: HD67611-A1 Converter PROFINET / Modbus TCP Master Converter

ACCESSORIES:

Order Code: AC3400	1 -	35mm Rail DIN - Power Supply 220/240V AC 50/60Hz - 12 V AC
Order Code: AC3400	2 -	35mm Rail DIN - Power Supply 110V AC 50/60Hz – 12 V AC



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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 by Siemens. In the case of using a control system from another supplier, refer to attend to the associated documentation.

These are the steps to follow:

1) Install the description file of the module.



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Press the "Devices and networks" button (1), from the right drop-down menu, under "Other field devices→PROFINET IO→Gateway→ADFWEB.com→HD67611" double click on "modbus" module (2).

Mote:

If you have installed more than one GSD file, go to the Information section and in the "Version" field select the correct gsd file (3), before double clicking on "modbus" module

MA Siemens - Guide		_ • ×
<u>P</u> roject <u>E</u> dit <u>V</u> iew <u>Insert O</u> nline Optio <u>n</u> s <u>T</u>		Totally Integrated Automation
	(여 ± 📊 🖥 🛄 🔛 🔛 🦉 Go online 🖉 Go offline 🏭 🖪 📳 🛠 🖃 🛄	PORTAL
Project tree 🔲 🗸	Guide → Devices & networks	Hardware catalog 📑 🗉 🕨
Devices	🚰 Topology view 🔹 Network view 🛐 Device view	Options 😐
BOO B	💦 Network 👖 Connections S7 connection 💌 🐫 🖽 🍳 ± 100% 💌	
outs	~	✓ Catalog ✓ Catalog ✓ Catalog ✓ Search> ✓ Mu wit ✓ Filter ✓ Filter
Z Guide		<search></search>
Add new device Add new device Add new device	PLC_1 SERIAL	Filter
• [] PLC_1 [CPU 1212C AC/DC/Rly]	CPU 1212C CAN DP-NORM Not assigned	Drives Gateway
Unassigned devices Gommon data		
Common data Documentation settings		✓ DFweb.com
Languages & resources	×	• 🚂 HD67078
Online access		• HD6707882
SIMATIC Card Reader	Network overview Connections	• 10 HD67602
	Y Device Type Address in subnet Subnet Master system Comr	▶ 🕞 HD67604a1 =
	SIMATIC 1200 station_1 SIMATIC 1200 station PLC_1 CPU 1212C AC/DC/Rly	HD67605
	- GSD device 1 GSD device	 HD67604 HD67605 HD67606 HD67606 ANI
		I CAN
		HD67609 HD67609 HD67609-A1 HD67679 HD67679 Information
	GSD device_1 🖸 Properties 🚺 Info 🚯 🖏 Diagnostics 📑 🖃 🥆	▶ 🛅 HD67609-A1 ▶ 🚰 HD67679 🗸 🖉
	General	✓ Information
	General General	~ · · ·
		Order no.: HD67606-A1 3
	Name: GSD device_1	Version (GSDML-V2.25-ADFWEL
	Author: Utente	Description:
	Comment:	Description.
		Profinet CAN Adapter
> Details view		►
✓ Portal view	Devices & ne	Project Guide opened.

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Connect the PLC to the HD67611 module by drawing the Ethernet wire between the two Ethernet ports. Then assign the IP Address (1) defined in the Compositor_SW67611 to the HD67611-A1. Then double click the "Module" (2).

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- Then double click on the "Serial" label (1) and in the field name change it accordingly to the name defined in the Compositor_SW67611 (2). Then add the main module "Module" by double click on the item called "Module" (3).

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5) Load the configuration into the PLC.

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	Configured access	s nodes of *PLC_1*									
	Device	Device type	Туре	Address		Subnet					
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Online status information:											
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OTHER REGULATIONS AND STANDARDS:

WEEE INFORMATION

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

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

RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE

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

CE MARKING

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



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WARRANTIES AND TECHNICAL SUPPORT:

For fast and easy technical support for your ADFweb.com SRL products, consult our internet support at <u>www.adfweb.com</u>. 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 <u>www.adfweb.com</u>. 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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