

User Manual

Revision 1.002
English



Gateway / Bridge ProfiBus Slave to Serial Communication Slave

(Order Code: HD67562)

for Website information:

www.adfweb.com?Product=HD67562

for Price information:

www.adfweb.com?Price=HD67562

Benefits and Main Features:

- ▶ Very easy to configure
- ▶ Low cost
- ▶ Rail din mountable
- ▶ Galvanic isolation
- ▶ Industrial temperature range:
-30°C / 70°C (-22°F / 158°F)

For others Gateways / Bridges:

CANopen to Modbus

See also the following links:

- www.adfweb.com?Product=HD67001 (Modbus RTU Master)
- www.adfweb.com?Product=HD67002 (Modbus RTU Slave)
- www.adfweb.com?Product=HD67004 (Modbus TCP Master)
- www.adfweb.com?Product=HD67005 (Modbus TCP Slave)

For others Gateways / Bridges:

For **CAN bus 2.0A** and/or **CAN bus 2.0B** to **Modbus**

See also the following links:

- www.adfweb.com?Product=HD67011 (Modbus RTU Slave)
- www.adfweb.com?Product=HD67012 (Modbus RTU Master)
- www.adfweb.com?Product=HD67014 (Modbus TCP Slave)
- www.adfweb.com?Product=HD67015 (Modbus TCP Master)

Do you have an your customer protocol?

See the following links:

www.adfweb.com?Product=HD67003

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

Ask it to the following link:

www.adfweb.com?Cmd=helpme

INDEX:

	Page
UPDATED DOCUMENTATION	2
REVISION LIST	2
WARNING	2
TRADEMARKS	2
INDEX	2
CONNECTION SCHEME	3
CHARACTERISTICS	4
CONFIGURATION	4
USE OF COMPOSITOR SW67562	4
NEW PROJECT / OPEN PROJECT	5
SET COMMUNICATION	6
SET ACCESS	7
GDS FILE	7
UPDATE DEVICE	8
CHARACTERISTICS OF THE CABLES	9
MECHANICAL DIMENSIONS	9
ORDER CODE	10
ACCESSORIES	10
WARRANTIES AND TECHNICAL SUPPORT	11
RETURN POLICY	11
PRODUCTS AND RELATED DOCUMENTS	11

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.

To obtain the updated documentation for the product that you own, note the "Document Code" (Abbreviated written "Doc. Code" on the label on the product) and download the updated from our web site www.adfweb.com/download/

REVISION LIST:

Revision	Date	Author	Chapter	Description
1.000	11/09/2008	FI	All	First release version
1.001	18/09/2008	FI	All	New software version
1.002	13/11/2008	FI	All	Change figure 1

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.

CONNECTION SCHEME:

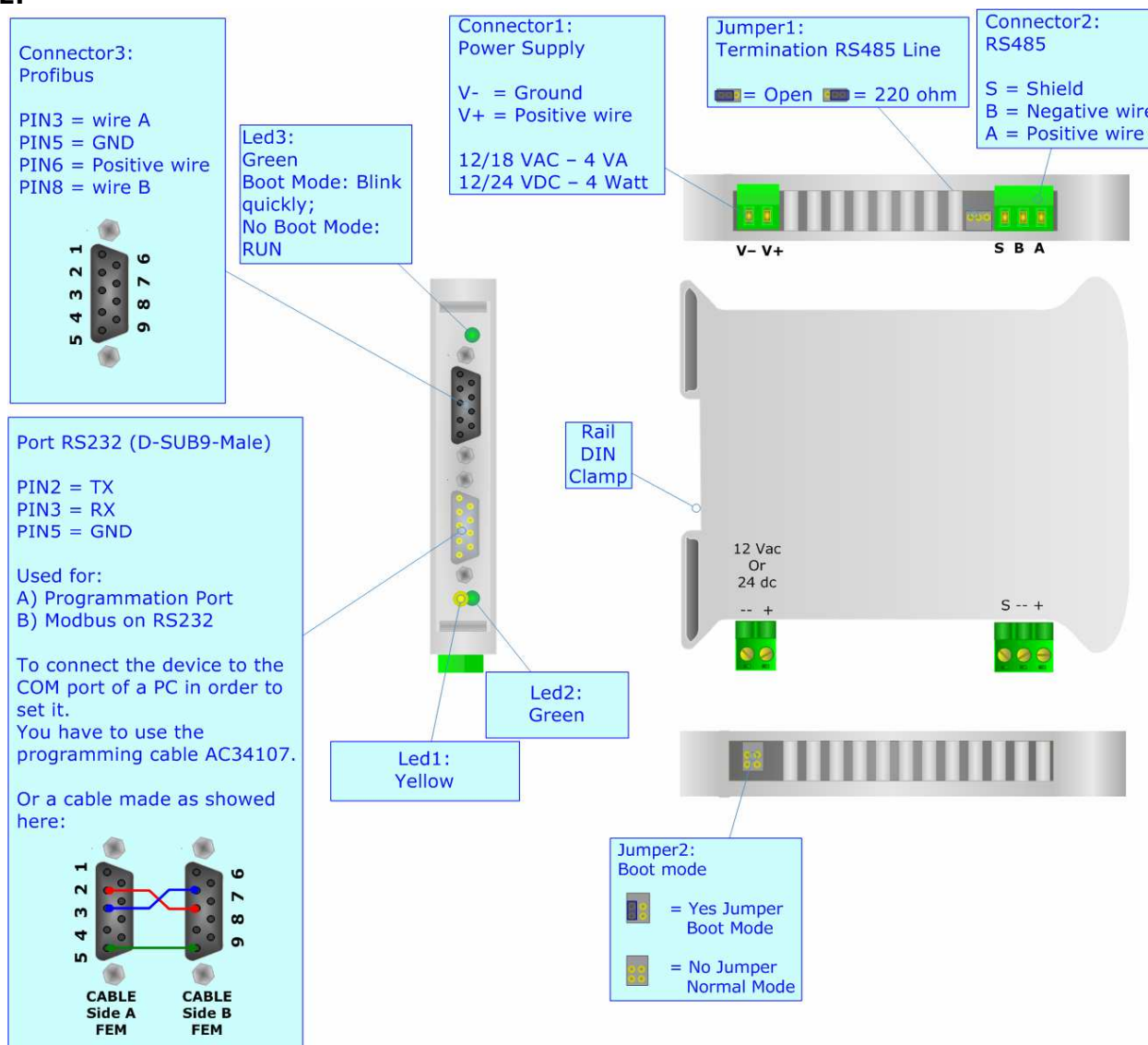


Figure 1: Connection scheme for HD67562

CHARACTERISTICS:

The Configurable Profibus Slave to Serial Communication Slave Gateway allow the following:

- Baud Rate and Parity changeable with software;
- Mountable on Rail DIN;
- Power Supply 12/18V AC, 4 VA o 12/24V DC;
- Temperature range -30°C to 70°C.
- Serials Protocols supported:
 - Modbus RTU;
 - Modbus ASCII;
 - JBUS;
 - Simple Binary Protocol;
 - Simple ASCII Protocol.

CONFIGURATION:

You need Compositor SW67562 software on your PC in order to perform the following:

- Define the parameter of the Profibus;
- Define the parameter of the Serial line;
- Define the read/write registers.

USE OF COMPOSITOR SW67562:

To configure the Gateway, use the available software that runs with Windows, called SW67562. It is downloadable on the site www.adfweb.com and its operation is described in this document.

When launching the SW67562 the right window appears (Fig. 2):

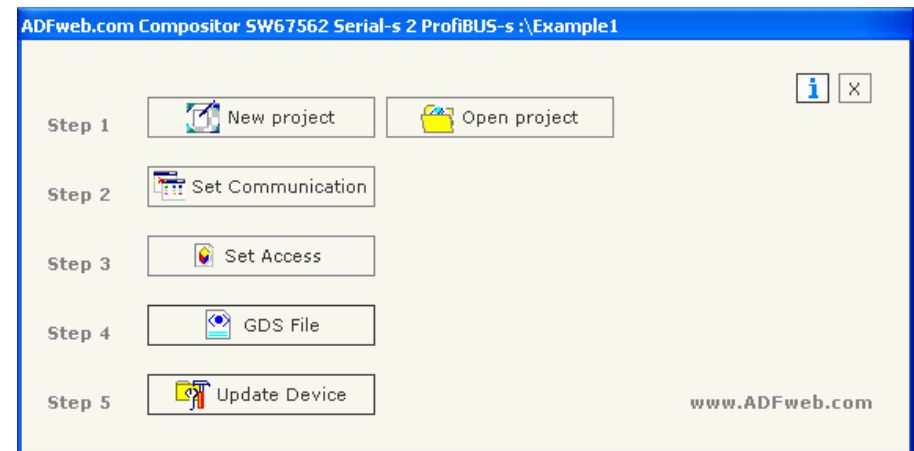


Figure 2: Main window for SW67562

NEW PROJECT / OPEN PROJECT:

The “New Project” button creates the folder which contains the entire device configuration.
A device configuration can also be imported and exported:

- To clone the configurations of a Programmable Profibus to Serial Communication Gateway 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 Project”;
- When a new project is created or an existent project is open, it will be possible to access the various configuration section of the software.

SET COMMUNICATION:

This section define the fundamental communication parameter of two Buses, Serial and ProfiBus.

By Pressing the "Set Communication" button from the main window for SW67562 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The Window is divided in two section, one for the Serial and the other for the ProfiBus.

The means of the fields for Serial are:

- If the field "RS232" is checked, the serial line in use is the RS232, otherwise if field "RS485" is checked, the serial line in use is the RS485;
- In the field "Baud Rate" the baudrate for the serial line is defined;
- In the field "Parity" the parity of the serial line is defined;
- In the field "Dev. ID" the address for the serial side is defined;
- In the subsection "Protocol" it is possible to select the protocol that you wish to use between the following:
 - Modbus RTU;
 - Modbus ASCII;
 - JBUS;
 - Simple Binary Protocol;
 - Simple ASCII Protocol.

The means of the fields for ProfiBus are:

- In the field "ID DEV" the address for the ProfiBus side is defined;
- In the field "Baud Rate" the baudrate for the ProfiBus is defined;
- In the field "N Byte IN" the number of byte from the slave ProfiBus to the gateway are defined;
- In the field "N Byte OUT" the number of byte from the gateway to the slave ProfiBus are defined.

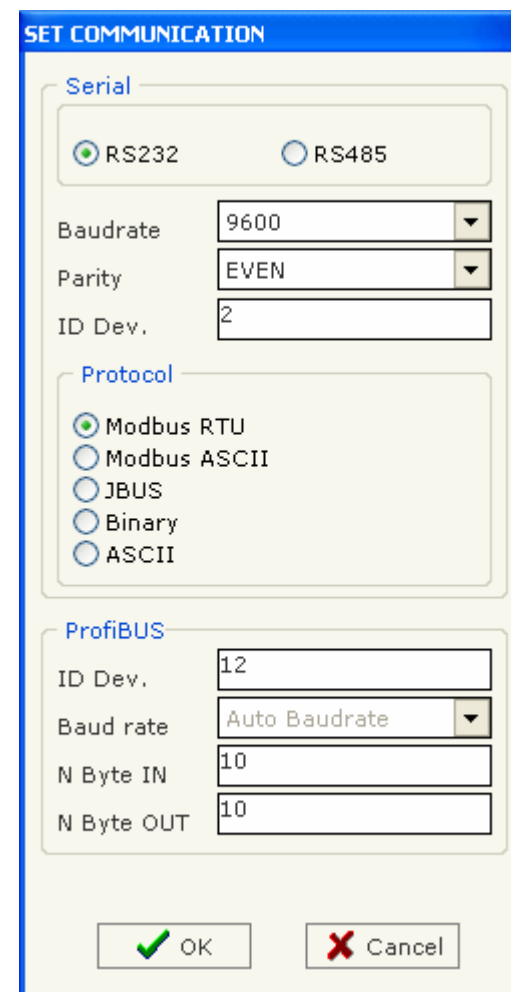


Figure 3: "Set Communication" window

SET ACCESS:

By pressing the "Set Access" button from the main window for SW67562 (Fig. 2) the window "Set SDO Access" appears (Fig. 4):

It is divided in two part, the "ProfiBus IN --> Serial Read" and the "Serial Write --> ProfiBus OUT".

The first part ("ProfiBus IN --> Serial Read") is used to read by using the Serial Line the data that arrived from the Slave ProfiBus.

The second part ("Serial Write --> ProfiBus OUT") is used to write by using the Serial Line the data that will be sent to the Slave ProfiBus.

The Fields in the two table are the same:

- In the field "Address Register" the address for the Serial Line is defined;
- In the field "Address ProfiBus High" is defined the first byte where the data will be saved/loaded in the ProfiBus arrays;
- In the field "Address ProfiBus Low" is defined the second byte where the data will be saved/loaded in the ProfiBus arrays;
- In the field "Mnemonic" the description for the register is defined.

GDS FILE:

By pressing the "GDS File" button is possible to save the GDS file for the ProfiBus side. With this feature you can save the configuration of the gateway of the ProfiBus side.

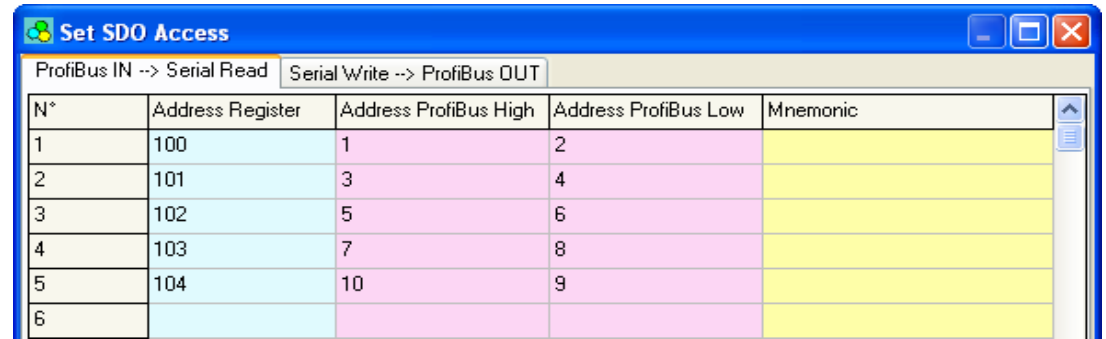


Figure 4: "Set SDO Access" window

UPDATE DEVICE:

Section "Update Device" (Fig. 5):

In order to load the parameters or update the firmware in the gateway, follow these instructions:

- Turn off the Device;
- Connect the Null Modem Cable Form your PC to the Gateway;
- Insert the Boot Jumper (see the Fig. 1 for more info);
- Select COM port and press the "Connect" Button;
- Turn on the device;
- Check the "BOOT Led". It must to blink quickly (see the Fig. 1 for more info);
- Press the "Next" Button;
- Select which operations you want to do. Can select only Firmware or only Project or both;
- Press the "Execute update firmware" to start the upload;
- When all the operation are "OK" turn off the device;
- Disconnect the Boot jumper;
- Disconnect the RS232 Cable;
- Turn on the Device.

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

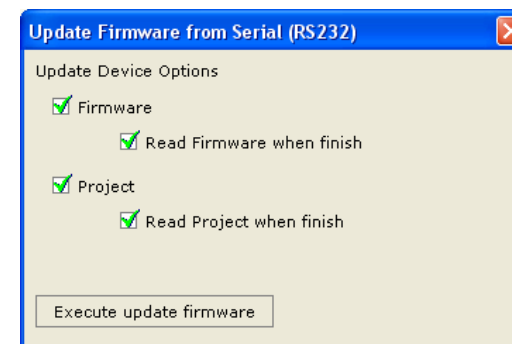
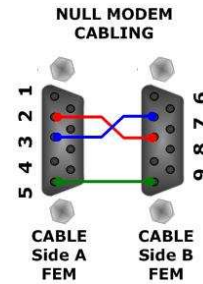


Figure 5: "Update Device" window

CHARACTERISTICS OF THE CABLES:

The connection from RS232 socket to a serial port (example one from a personal computer), must be made with a Null Modem cable (a serial cable where the pins 2 and 3 are crossed).

It is recommended that the RS232C Cable not exceed 15 meters.



MECHANICAL DIMENSIONS:

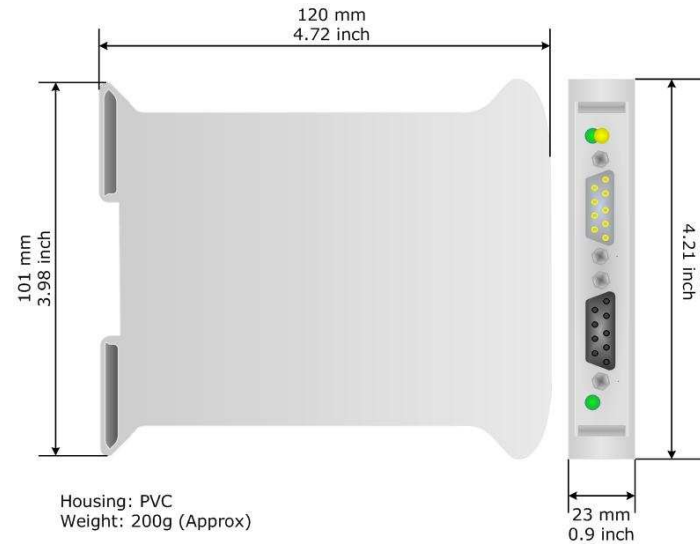


Figure 6: Mechanical dimensions scheme

ORDER CODE:

Order Code: **HD67562** - Gateway/Bridge – ProfiBus Slave to Serial Communication Slave

ACCESSORIES:

Order Code: **AC34107** - Null Modem Cable Fem/Fem DSub 9 Pin 1,5 m

Order Code: **AC34114** - Null Modem Cable Fem/Fem DSub 9 Pin 5 m

Order Code: **AC34001** - Rail DIN - Power Supply 220/240V AC 50/60Hz – 12 V AC

Order Code: **AC34002** - Rail DIN - Power Supply 110V AC 50/60Hz – 12 V AC

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.

PRODUCTS AND RELATED DOCUMENTS:

Part	Description	URL
HD67121	Gateway CANopen / Canopen	www.adfweb.com?product=HD67121
HD67002	Gateway CANopen / Modbus - RTU	www.adfweb.com?product=HD67002
HD67004 HD67005	Gateway CANopen / Modbus - Ethernet TCP	www.adfweb.com?product=HD67004
HD67134	Gateway CANopen / DeviceNet	www.adfweb.com?product=HD67134
HD67117	CAN bus Repeater	www.adfweb.com?product=HD67117
HD67216	CAN bus Analyzer	www.adfweb.com?product=HD67216