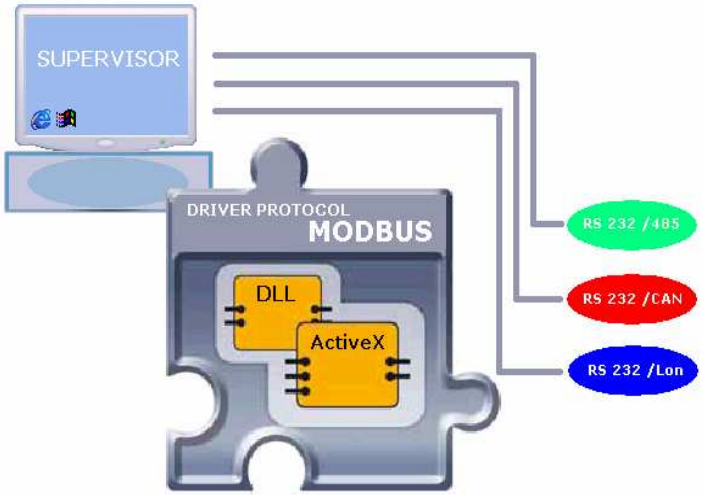
User Manual

Revision 2.000
English

®SWD-MRTU
Driver Software for ModbusRTU DLL & ActiveX version



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UPDATED DOCUMENTATION:

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- Updated
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REVISION LIST:

Revision	Date	Author	Chapter	Description
1.001	07/06/2005	Dp	All	
1.002	22/06/2007	Av	All	Revision
1.003	26/06/2007	Av	All	Revision
2.000	09/10/2008	Fl	All	New document format

WARNING:

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TRADEMARKS:

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INTRODUCTION:

The product is a software component presented as a library that is available in two version: DLL and ActiveX. Both have available functions for the following: the organization of the library, initialization, writing, reading and closing.
The library can be used with any system /Programming language such as Visual C, Visual Basic, Delphi, C Builder, Basic Script and HTML.
Applications are provided with the library.

The product functions with various ADFweb products that use the modbus as a communication system: the serial converter 232/485 (code order: HD67118) and the Configurable Modbus to CANopen Gateway (code order: HD67002).

DRIVER CHARACTERISTICS:

- ModBUS functions implemented:
  - Read Holding Registers
  - Write Single Register
  - Write Multiple Register

SOFTWARE COMPATIBILITY:

- Windows 9x, Windows 2000 , Windows XP

FILE CONTENTS: SWD-MRTUv1.ZIP:

Contains the following folders and files:

- Readme.txt
- ADF00007-0.PDF (Manual SWD-MRTU)
- ADF00006-0.PDF (Manual HD67118)
- Folder ADF_ModbusDLL
  - ADF_Modbus.dll
  - Folder Example Delphi
  - Folder Example Visual Script
  -

The number of the software version and the "document code" of the related documentations is contained in the file readme.txt .

THE MODBUS FUNCTIONS EXPORTED FROM THE LIBRARIES

Modbusinitialize

PARAMETERS:

Name	Description	Data type	Value
PortN	Number of the port	Unsigned char	0-255 0 = COM1 1 = COM2
Baud rate	Communication speed	Unsigned long	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Parity	Control of parity	Unsigned char	0 = none 1 = odd 2 = even
Data bits	Data size in bit	Unsigned char	4, 5, 6, 7, 8
Stop bits		Unsigned char	0 = 1 stop bit 1 = 1.5 stop bit 2 = 2 stop bits
Timeout	Timeout in milliseconds (used in the operations of reading and writing data)	Unsigned int	

RETURN VALUE:
The function returns an "unsigned char" that can take on the following values:

0 if there is an error.
1 if the operation is completed correctly
2 Dll just initialized
3 Dll busy
5 Unable to access to the Com port
7 Not correct parameter

ModbusRead

PARAMETERS:

Name	Description	Data type	Value
Num slave	Device address	Unsigned char	1 - 247
tipo	Type of data to read	Unsigned char	3 - holding register
address	Data address	Unsigned int	1 - 65535
npoint	Number of variables	Unsigned int	Register 1-99
data	Memory pointer	Unsigned int *	Data pointer

RETURN VALUE:

The function returns an "unsigned char" that can take on the following values:

0 Error in read
1 if the operation is completed correctly
2 Dll not initialized
3 Dll busy

ModbusWrite

PARAMETERS:

Name	Description	Data type	Value
Num slave	Device address	Unsigned char	1 - 247
tipo	Type of data to write	Unsigned char	3 - holding register
address	Data Address	Unsigned int	1 - 65535
npoint	Number of variables	Unsigned int	Reg 1-99
data	Memory pointer	Unsigned int *	Data pointer

RETURN VALUE:

The function returns an "unsigned char" that can take on the following values:

0 Error in write
1 if the operation is completed correctly
2 Dll not initialized
3 Dll busy

Modbusdeinitialize

PARAMETERS: none

RETURN VALUE:

The function returns an "unsigned char" that can take on the following values:
1 if the operation is completed correctly
0 if there is an error.

DIMENSION OF DATA

unsigned char is a 8bit data
unsigned int is a 16bit data
unsigned long is a 32bit data

ACCESSORIES:

Order Code: **HD67002** **-** Gateway CANopen / Modbus Slave RTU

Order Code: **HD67118** - Adapter RS232 / RS485

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
HD67002	Gateway CANopen / Modbus Slave RTU	www.adfweb.com?Product=HD67002
HD67118	Adapter RS232 / RS485	www.adfweb.com?Product=HD67118