

XGAVAZZI Driver Manual

Carlo GAVAZZI Instruments Protocol Driver



WM1-DIN



CPKSoft Engineering Process Monitoring and Industrial Automation Software

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1. Introduction

CPKSoft Engineering assumes no responsibility for any errors that may appear in this document. If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us.

This driver is included with all unlimited licenses of TAS-HMITalk. It is not sold separately. It requires the TAS-HMITalk ActiveX to work, therefore it cannot be used as a stand-alone driver.

If you use this driver in your applications, you need to include the `xgavazzi.tlk` in the set of files that you distribute. This file must be located in the same folder where the `hmitalk.ocx` file is registered in order to be found by the activex when the applications are executed.

The source-code for the `xgavazzi.tlk` driver is available in plain-C language for additional USD 299 if you own a license of TAS-HMITalk 8.04 or higher.

Refer to the following link to visit the `xgavazzi` driver page at CPKSoft Engineering website: <http://www.cpksoft.com/tabid/55/ProductID/40/PageIndex/1/Default.aspx>.

Visit this link if you want to see a complete list of drivers that are currently available for TAS-HMITak: <http://www.cpksoft.com/Drivers/tabid/55/Default.aspx>.

Also, refer to this link if you are interested in purchasing a license of the most recent version of TAS-HMITalk: <http://www.cpksoft.com/Products/tabid/54/Default.aspx>.

We welcome your comments about this document. You can reach us by e-mail at [contact @ cpksoft.com](mailto:contact@cpksoft.com).

2. Driver details

2.1. Driver overview

XGAVAZZI driver allows you to connect with Carlo GAVAZZI Instruments, WM1-DIN Power Meter Series.

RS-232 and RS-485 communications are both supported by these meters. Up to 32 meters can be connected when using RS-485.

2.2. Supported devices

This driver can communicate with these devices, but is not necessarily limited to this list:

GAVAZZI WM1-DIN Power Meter Series

3. Command list

3.1. Request for Volt

Description of this command:

This command reads the Voltage value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

3

3.2. Request for Ampere

Description of this command:

This command reads the Current (amps.) value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

4

3.3. Request for Power Factor / CosFi

Description of this command:

This command reads the Power Factor value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

5

3.4. Request for W

Description of this command:

This command reads the Active Power value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

6

3.5. Request for VA

Description of this command:

This command reads the Aparent Power value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

7

3.6. Request for VAR

Description of this command:

This command reads the Reactive Power value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

8

3.7. Request for Energy

Description of this command:

This command reads the Energy value of the Power Meter.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

9

3.8. Request for Output State

Description of this command:

This command reads Status of the Power Meter's Output. This command is considered as an Analog Input holding digital information.

Type of data handled by this command:

Analog Input

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

10

3.9. Activate Output

Description of this command:

This command activates an output of the Power Meter.

Type of data handled by this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

0

3.10. Deactivate Output

Description of this command:

This command deactivates an output of the Power Meter.

Type of data handled by this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

1

3.11. Reset Total Value

Description of this command:

This command resets total values of the Power Meter.

Type of data handled by this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

Address (0-255)

Meaning of the DriverP1 parameter:

2

4. Appendices

4.1. Error messages

The following list shows all the possible error messages that can be returned by the protocol driver during a failed communication in the 'DriverStatus' property.

This list does not include some error messages that can be returned by the activex component while attempting to establish a connection.

- [1005] DRIVER (Internal): Invalid driver stage
- [1300] PROTOCOL (Timeout): No answer
- [1421] PROTOCOL (Format): Negative acknowledge received from device
- [2001] CONFIG (DataType): Analog outputs are not supported by this driver
- [2002] CONFIG (DataType): Digital inputs are not supported by this driver
- [2147] CONFIG (NumValues): Only one value can be read or written
- [3515] CONFIG (P1): Invalid command (0/1/2)
- [3529] CONFIG (P1): Invalid command (3/4/5/6/7/8/9/10)
- [8255] CONFIG (Remote): Overflow error present on requested data
- [8349] CONFIG (Remote): Unknown error present on requested data

4.2. Keywords list

The following list shows a set of words directly related to this driver.

"Carlo, GAVAZZI, Instruments, Meter, Power, Series, WM1DIN".