

## QUICK START GUIDE

### Z-GPRS2

Advanced GSM/GPRS Multiprotocol Datalogger

With embedded I/O and telecontrol functions

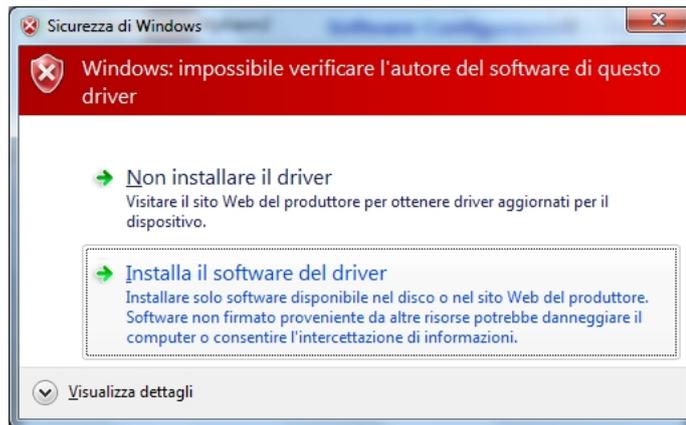
## 1. SOFTWARE INSTALLATION

- 1) Connect to the site [www.seneca.it](http://www.seneca.it)  
In the section “Product search” select “code selection” the product “Z-GPRS2”:



Then in the “Download” page, download the software “Easy Z-GPRS2 / Z-Logger”

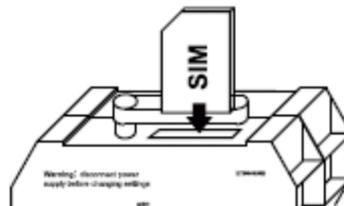
- 2) Install the software Easy Z-GPRS2/Z-Logger o Easy Setup, the operating system supported are: Micorsoft™ Windows xp™, Micorsoft™ Windows Vista™, Micorsoft™ Windows 7™
- 3) At the end of the installation confirm the driver installation:



At the end, the system it's ready to be connected with Z-GPRS2.

## 2. MODEM GSM SET-UP

- 1) Screw the supplied antenna or the optional antenna in clockwise.
- 2) If you want to use Z-GPRS2 with a GSM SIM card, first insert-it into a GSM cellular and delete all messages in the SIM.
- 3) After, insert the SIM card on Z-GPRS2:



**NOTE: Z-GPRS2 can only work with GSM SIM, UMTS SIM are not supported.**

**NOTE: Z-GPRS2 can function as a data logger also without saving data to a microSD card by sending data through a GSM-GPRS SIM card.**

**NOTE: Z-GPRS2 can function as a data logger also without a GSM-GPRS SIM card by saving data into a microSD card.**

## 3. Z-GPRS2 INSTALLATION

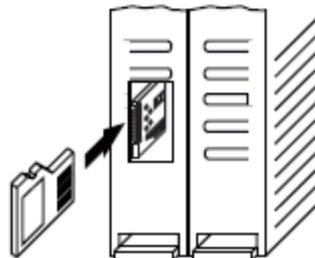
- 1) Connect the inputs/outputs:

Description	Analog inputs		Auxiliary Voltage	Power supply	Screw terminals																																																						
	V/I [2]	V/I [1]																																																									
<p>Analog inputs (V/mA) are configurable with configuration software.</p> <p>* See user manual or Easy SETUP software</p>	Configurable*		<p>+12 Vdc @ 40 mA</p>	<p>11.40 Vdc 19.28 Vac 6.5W</p>	<p>1 [+12 Vdc]</p> <p>2</p> <p>3</p> <p>4 [GND]</p> <p>5 [AI 1]</p> <p>6 [AI 2]</p>																																																						
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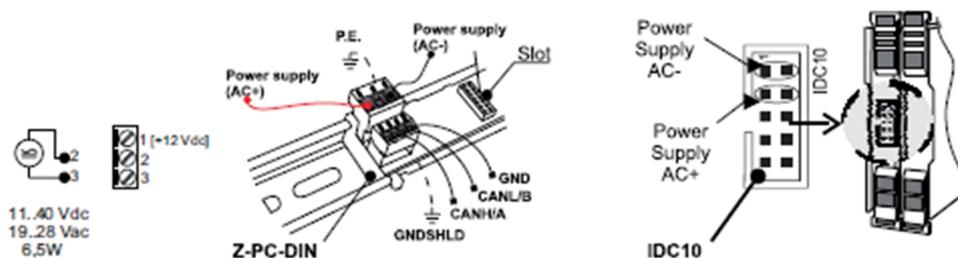
For more info please refer to the installation manual or user manual.

#### 4. FIRST POWER-ON

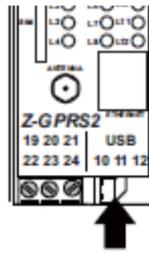
- 1) If you want to save the log also on a microSD card insert-it into the slot:



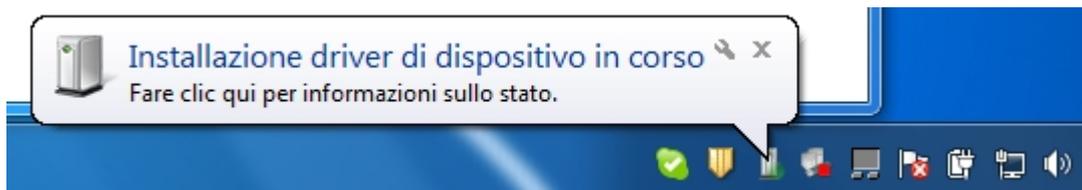
- 2) Power on Z-GPRS2 by screw terminal 2-3 or by the IDC10 connector.



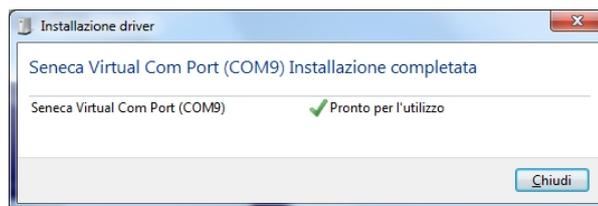
- 3) Connect Z-GPRS2 to the PC by a miniUSB cable (If you don't have a miniUSB cable it's possible to buy the USB-KIT from Seneca):



4) The PC recognize Z-GPRS2:



To speed up the operation, press "ignore download drivers from Windows Update."  
After about 2 minutes:



Now Z-GPRS2 it's connected to the PC.

The operation is performed only the first time that you connect Z-GPRS2.

## 5. LAUNCHING THE CONFIGURATION SOFTWARE

- 1) Launch Easy Z-GPRS2 / Z-LOGGER from Start-> All Programs-> Seneca-> Easy ZGPRS2 / Z-LOGGER
- 2) If you are connected to the Internet, the software will automatically check for a software update (Seneca recommends to use the latest configuration software, see the Z-GPRS2 page on the site [www.seneca.it](http://www.seneca.it))
- 3) To create a configuration follow the instructions that provides the software

For more information, refer to the user manual downloadable from the [www.seneca.it](http://www.seneca.it) website in the Z-GPRS2 section.

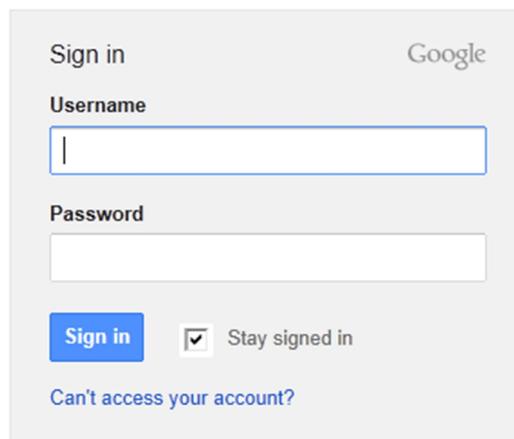
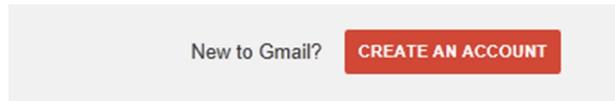
## 6. USING E-MAILS

To allow Z-GPRS2 to send E-MAILS previously is essential to create an e-mail sender address:

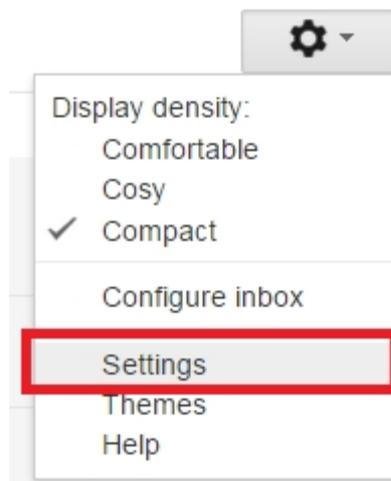
## 6.1. USING AND CREATING A GOOGLE GMAIL™ ACCOUNT FOR SENDING GPRS E-MAILS

The steps to create a new email address on gmail.com are as follows:

- 1) With a browser type www.gmail.com
- 2) Click on “Create an account”
- 3) Fill in all fields, for more information refer to the help pages of the site gmail.com



- 4) Set the account as shown. Open the setting menu



- 5) Select “other google account setting” from “Accounts and import” tab



6) In the “Access” section, Click on “Access app for less secure” (the last item)

### Access

Password

Email Recovery

Phone number recovery

Secret Question

Occurs in two steps

Access app for less secure

Stuck

Click

7) Active the “access app for less secure”

Access app for less secure  Disable

Active

8) After this an email form google advise about changing

9) If the account is already active the changing the parameter “access app for less secure” will be active in 3 days, otherwise the changing will be already active in a new account creation.

10) In the configuration software refer to the following example configuration:

**E-MAIL CONFIGURATION**

ENABLE E-MAIL? YES

E-MAIL

DEVICE E-MAIL ADDRESS example@gmail.com

EMAIL - GPRS

SMTP SERVER smtp.gmail.com PORT 465

PROTECTED CONNECTION (SSL) REQUIRED FROM SERVER? YES

REQUIRED AUTHENTICATION? YES

SMTP SERVER AUTHENTICATION

USERNAME example@gmail.com

PASSWORD [REDACTED]

***EMAIL account via the Ethernet port is not supported.***

## **7. SMS SEND-RECEIVE TEST**

To verify the correct send-receive SMS configuration, send the following SMS from a mobile phone with number that has been entered as "Administrator":

### ***status***

At this SMS Z-GPRS2 must respond with an SMS message containing the information requested in the configuration.

## **8. E-MAIL SEND TEST**

To verify the correct EMAIL send configuration, you can execute the test into the "Test Configuration" section of the configuration software by the "TEST E-MAIL" button.

You can also send the following SMS from a mobile phone with number that has been entered as "Administrator":

### ***email test***

At this SMS Z-GPRS2 must respond with an E-MAIL message to the first administrator E-mail address with object:

***"zgprs2:test"***

With the attachment "zgprs2\_TEST.txt".

***For sending E-MAIL via ethernet port you can not enable SSL protection, as a result you can not use the gmail account. For sending E-mail with Ethernet connection Seneca recommends always to use an owner SMTP server.***

## **9. FTP SEND TEST**

To verify the correct FTP send configuration, you can execute the test into the "Test Configuration" section of the configuration software by the "TEST FTP" button.

You can also send the following SMS from a mobile phone with number that has been entered as "Administrator":

### ***ftp test***

At this SMS Z-GPRS2 must send to the FTP server configured, into the configured directory, the "zgprs2\_TEST.txt" file.

## **10. TROUBLESHOOTING**

<b>PROBLEM</b>	<b>SOLUTION</b>
<p>Sending the SMS command: email test no email reaches the administrator's email address</p>	<p>-Make sure the set APN corresponds to the mobile service provider's and whether access requires authorisation. See: <a href="http://wiki.apnchanger.org/Main_Page">http://wiki.apnchanger.org/Main_Page</a> -Make sure the GSM signal is over 2/7 -The email ended up in SPAM -The SMTP server supports SSL protection and the gateway was not correctly set</p>
<p>Using the configuration software in the "Test configuration" section when you press the button:  TEST E-MAIL  no e-mail arrives at the administrator e-mail address</p>	<p><b><i>If you send Log via Ethernet, Seneca recommended to use an owner SMTP server.</i></b>  -The email is in the SPAM directory  -The SMTP server supports only SSL security, in the ethernet port you can not enable SSL protection</p>
<p>Sending the SMS command:  ftp test  no ftp file reaches the set ftp server</p>	<p>-The FTP server folder does not exist. Create the folder on the ftp server first. -Make sure the ftp server IP address/name are correct -Make sure the ftp server login user name/password are correct</p>
<p>Using the configuration software in the "Test configuration" section when you press the button:  TEST FTP  no ftp file arrives in the configured ftp server</p>	<p>-If you are using the ethernet port for sending FTP file the microSD card must be inserted -The folder on the FTP server on which you created the file does not exist, first create the folder in the ftp server -Check the correctness of the IP / name of the FTP server -Make sure that the username / password to access the ftp server are correct</p>
<p>The GSM signal is always 0/7 and the GSM led continues to flash fast</p>	<p>-The inserted SIM is not recognised. Clean or replace the SIM  -The SIM PIN is enabled. Insert the SIM in a mobile phone and disable the PIN or enable it and insert the PIN code in the setup software</p>
<p>The GSM signal is too low</p>	<p>-Wait at least 10 minutes from turning on the device before reading the GSM value</p>

	<ul style="list-style-type: none"> <li>-Try using another mobile service provider's SIM</li> <li>-Move the Z-GPRS2 installation</li> <li>-Use an optional external antenna: for further information, contact Seneca or visit the Z-GPRS2 section at <a href="http://www.seneca.it">www.seneca.it</a>.</li> </ul>
Residual credit is not sent for the SIM	<ul style="list-style-type: none"> <li>-Check the method used to receive residual credit from the mobile service provider (ring or SMS, SMS request text).</li> <li>-The SIM is not top-up but subscription</li> </ul>
No communications from RS485 serial #1 BUS IDC10	<ul style="list-style-type: none"> <li>-Turn switch SW2 to "ON" see chapter <b>Errore. L'origine riferimento non è stata trovata.</b></li> </ul>
Z-GPRS2 worked correctly for a few days/months but stopped sending SMS and logs.	<ul style="list-style-type: none"> <li>-No SIM credit. Top-up the SIM card.</li> <li>-The SIM card expired, replace the SIM card or contact your mobile phone provider.</li> </ul>
Z-GPRS2/Z-Logger firmware update from Easy software via USB fails	<ul style="list-style-type: none"> <li>-Update via USB requires Z-GPRS2 / Z-Logger to be powered by a source other than the USB: Power modules from Terminal or IDC10 connector.</li> <li>-Extract the microSD card</li> </ul>
Using Z-GPRS2 via ethernet, you get the SMS: "NTP error"	<p>The clock synchronization is activated, via ethernet this is done via NTP (network time protocol),but you can not contact the NTP server:</p> <ul style="list-style-type: none"> <li>-Make sure that the UDP port 123 is open</li> <li>-Check the configured NTP server address</li> </ul>