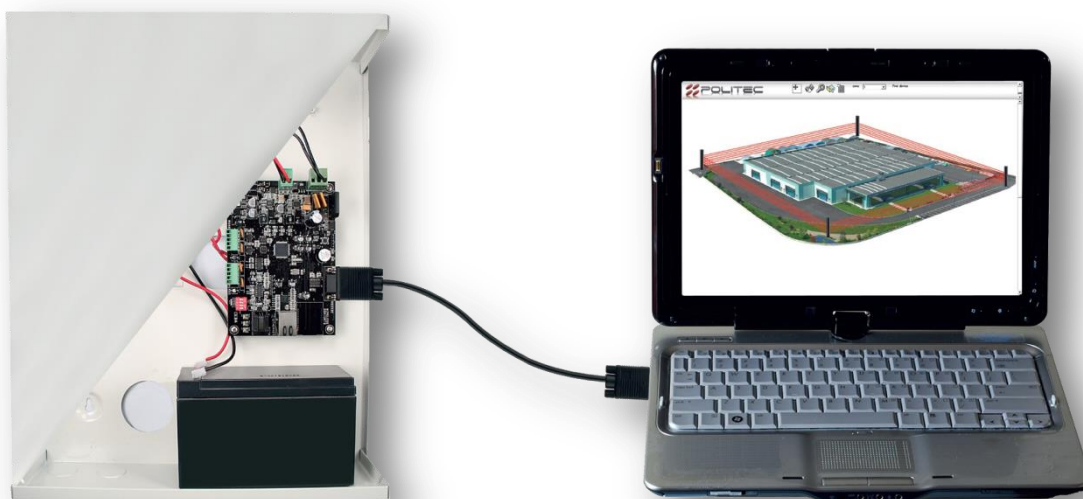


ADEBUS & GapidExplorer

**Monitoring control panel
Installation manual & cabling**

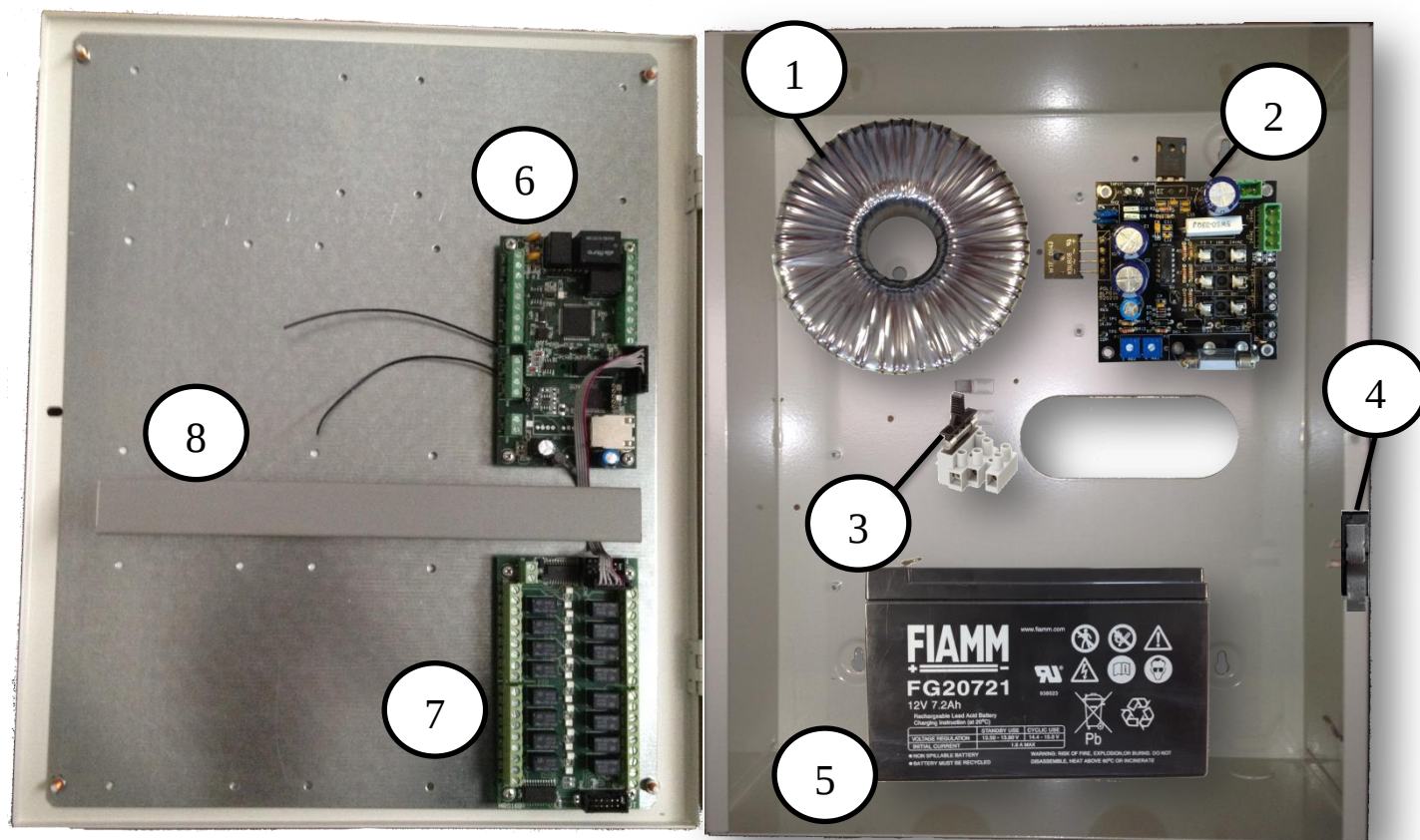
Versione software 1.4



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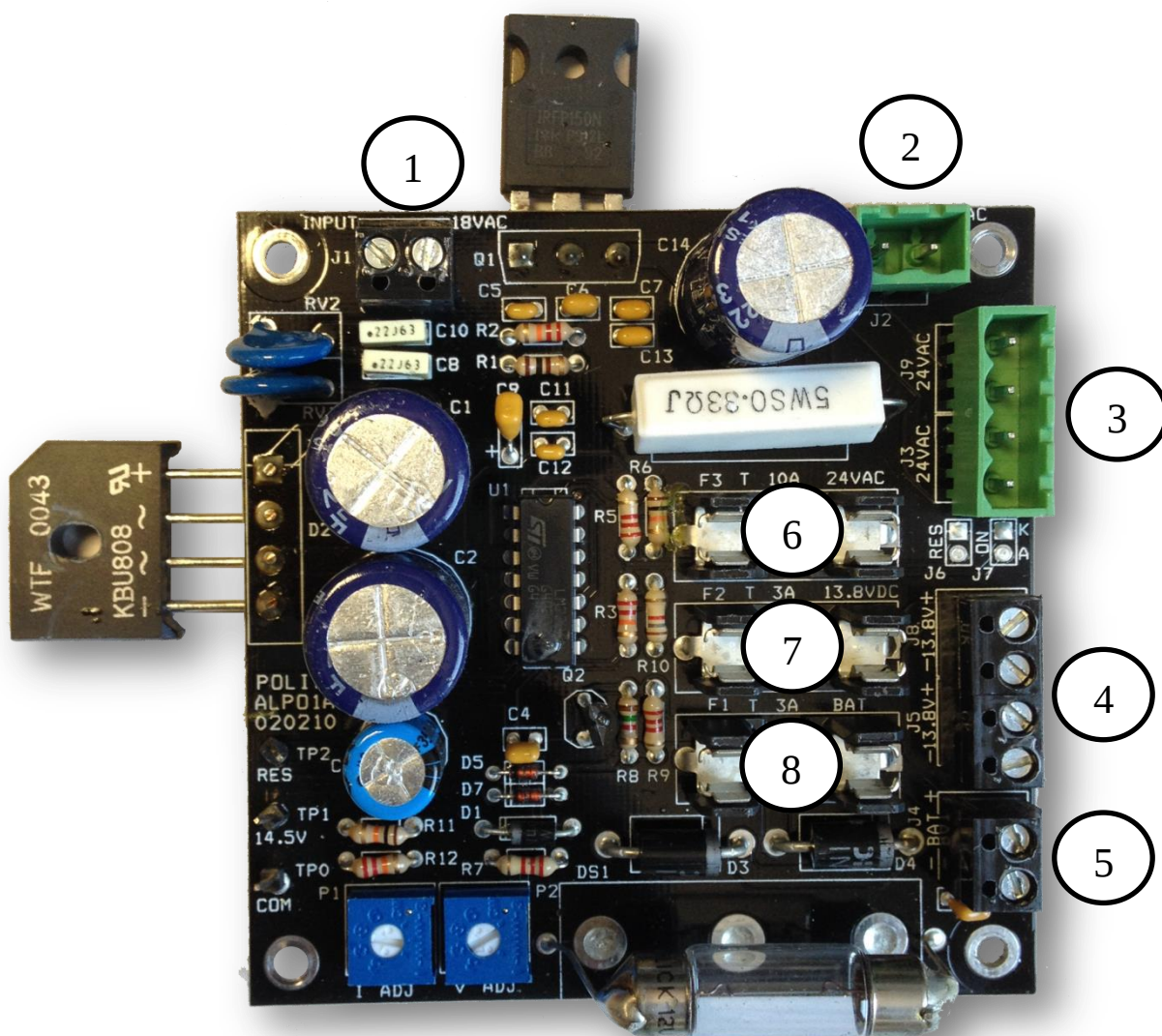
1. ADEBUS COMPONENTS



	POLITEC CODE	DESCRIPTION
1	TRASF LAR22S	Transformer 18/24 Vac
2	ALPO1B	Supply board
3	MORS 3 POLI Fuse	
4	TAMPER	
5	BATTERIA (Not included)	Battery compartment 17Ah
6	ADEBUS G	Board CA230
7	ADEBUS ESP	16 relay output expansion
8	CHANNEL CABLE GLANDS	

2. BOARDS DESCRIPTION

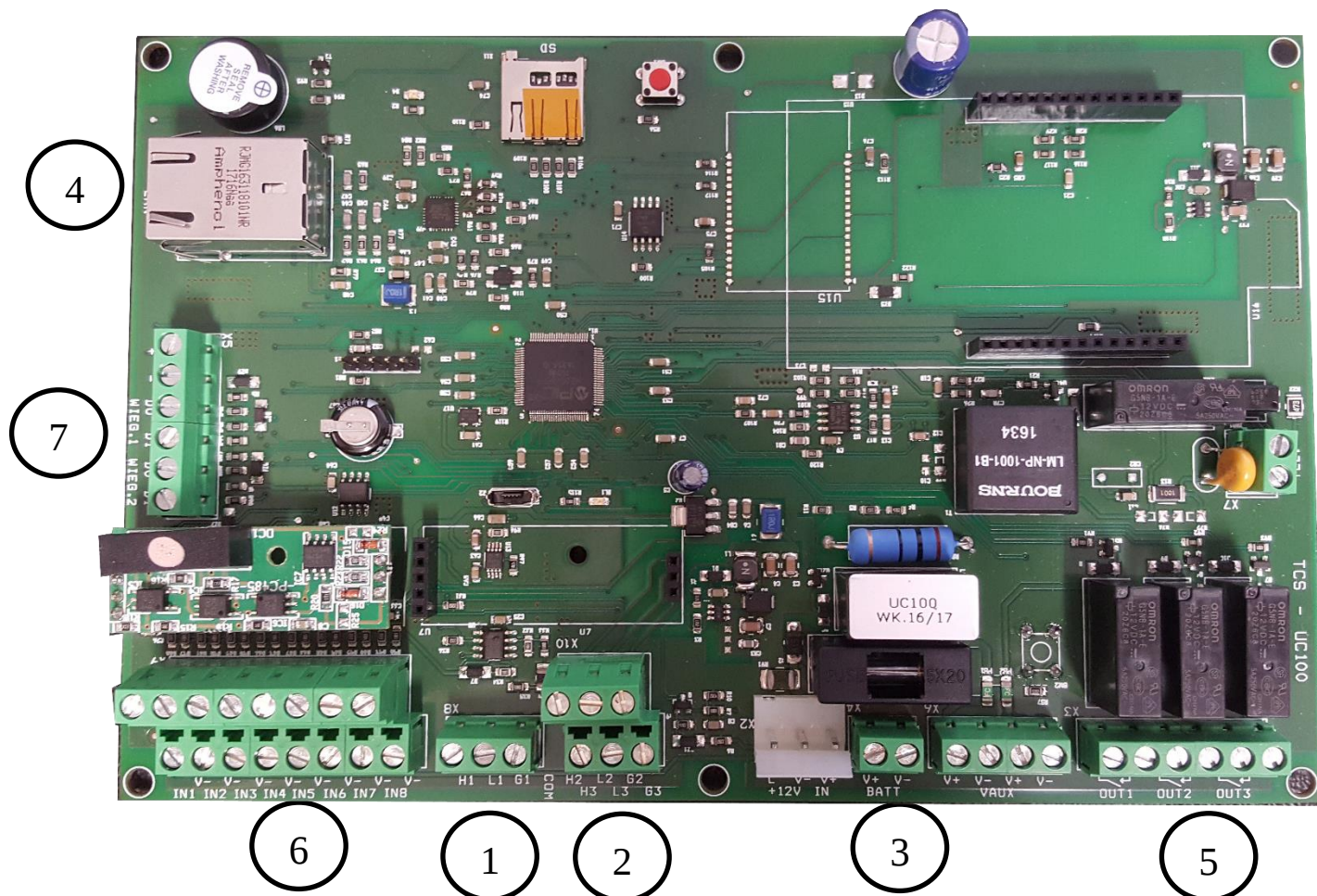
ALPO1 B Supply board



Components

1	ACCESS 18VAC	5	BATTERY OUTPUT
2	ACCESS 24VAC	6	FUSE 10A (24Vac)
3	OUTPUT 24VAC	7	FUSE 3A (12Vcc)
4	OUTPUT 0-13,8VCC	8	FUSE 3A (battery)

ADEBUS G MotherBoard ADEBUS

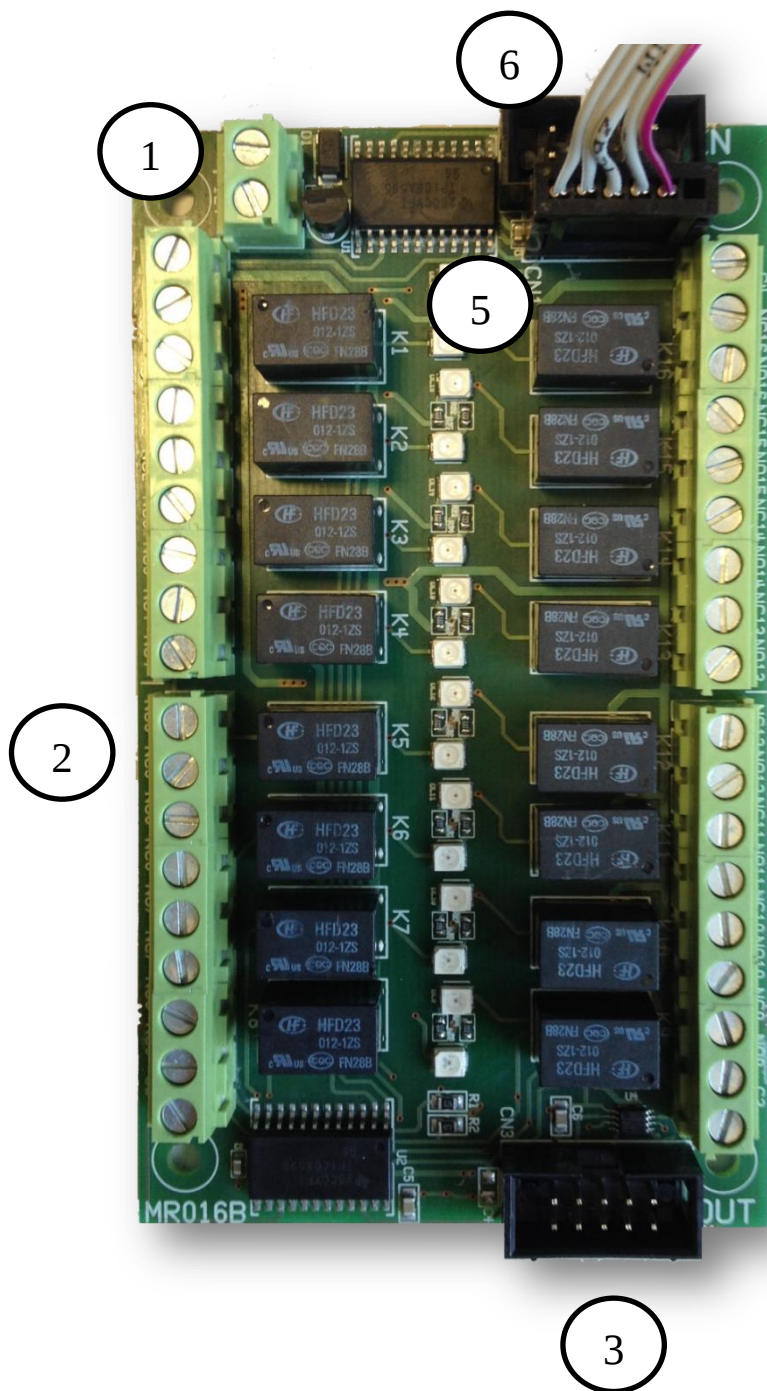


Components

1	INPUT SERIAL LINE COM1	5	RELAY OUTLET BLOCK
2	INPUT SERIAL LINE COM2	6	ACCESS
3	ACCESS 0-12VCC	7	RELAY EXPANSION CONNECTION
4	SOCKET LAN		

ADEBUS ESP

16 relay output expansion for ADEBUS

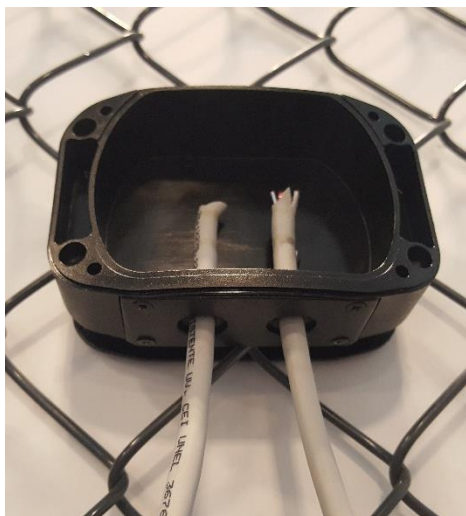


Components

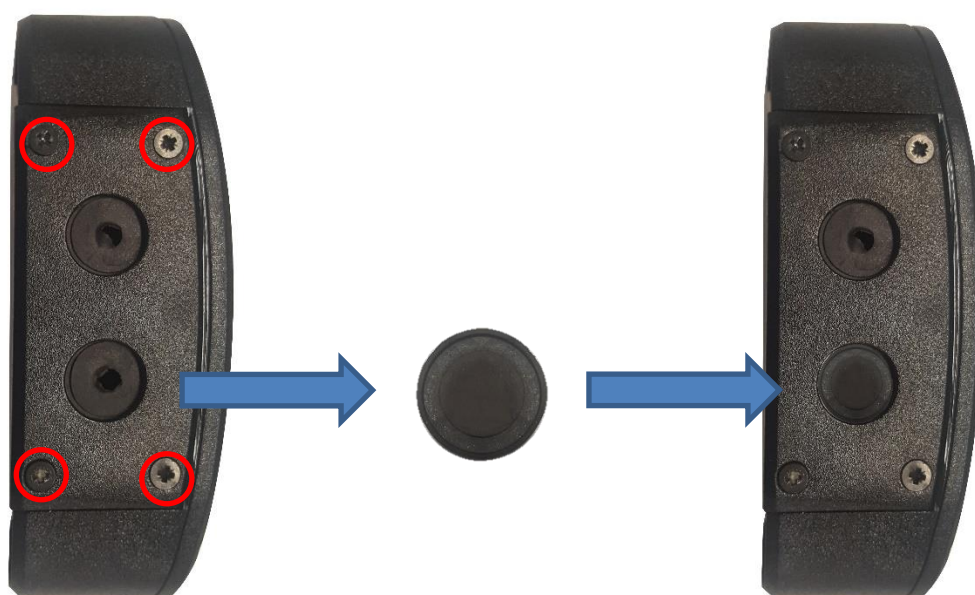
- | | |
|---|--|
| 1 | INPUT 0-12VDC |
| 2 | RELAY RELEASE LOCK 1-8 |
| 3 | OUTPUT CONNECTOR TO NEXT EXPANSION CARD |
| 4 | RELAY OUTPUT BLOCK 9-16 |
| 5 | INPUT CONNECTOR FROM MOTHER BOARD CA230 |
| 6 | INPUT CONNECTOR FROM PREVIOUS EXPANDER BOARD |

3. ASSEMBLY

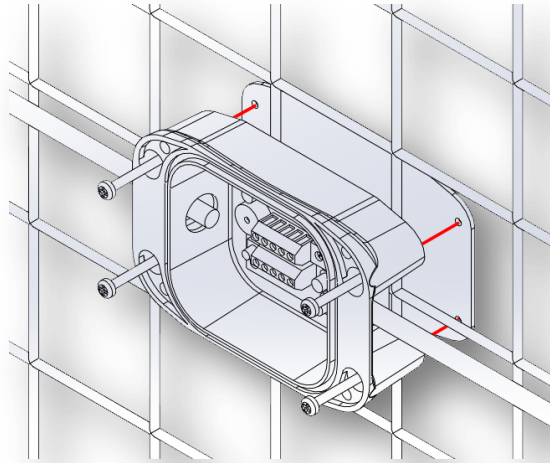
1. Insert the cable into the Gapid



2. Unscrew the 4 screws on the plate and replace the gasket of the last line sensor with the supplied cap



3. Wire the sensor
4. Place the Gapid in the center of the panel or network and screw it onto the fixing plate on the other side. Tighten the screws firmly to prevent the device from moving.



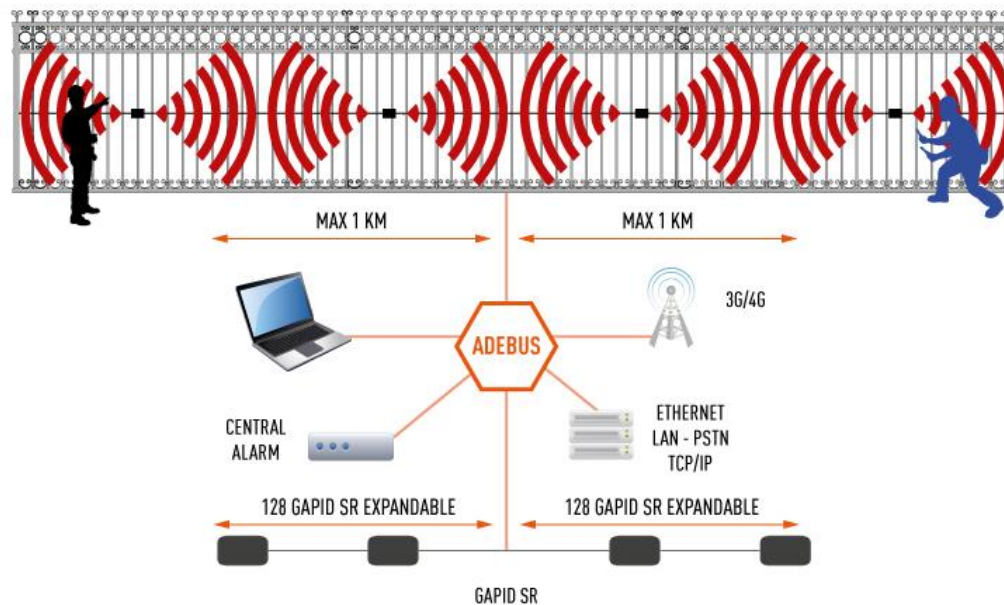
5. Clamp the cable to the network / deleted



6. After calibration and programming, close the device making sure that the gasket is well positioned inside the compartment.



4. START OPERATING

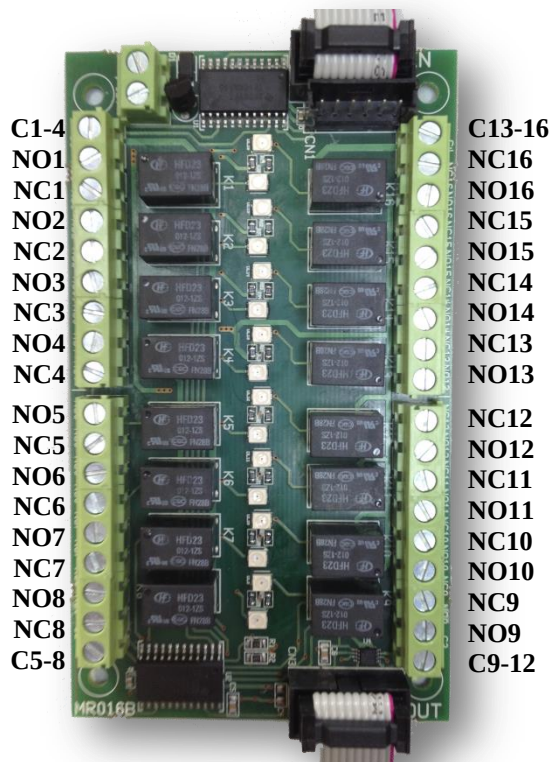


The ADEBUS system manages up to 256 Gapid SR divided into 2 branches (maximum length 750m each) using both the Com1 and Com2 serial ports (the ADEBUS S2 accessory is required for Com1).

Instead, using only one serial port, it is mandatory to create a single RS485 bus branch, without making further branches. In this case, 128 sensors can be used on the same branch.

The system is accessible via dedicated software and via WEB.

Output relay connections



The condition of use of the contacts marked on the board (NC, NO) refers to the relay in rest condition, if the relays are energized the operating condition is reversed.

NB: Relay output connections are divided into 4 groups for each expansion card, and the municipalities are as follows:

- C1-4 = common first 4 relays
- C5-8 = common second 4 relays
- C9-12 = common third 4 relays
- C13-16 = common quarters 4 relays

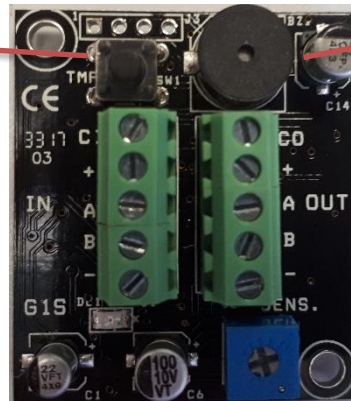
5. GAPID SR SENSOR

Tamper

Ci
+
A
B
-

Input connector:

link to the previous Gapid or the Adebuss



Buzzer

(activated by software)

Co
+
A
B
-

Output connector:

Connection to the next Gapid

Sensitivity adjustment trimmer:

It is generally used to verify sensitivity in the field.

Through software this sensitivity will be overwritten.

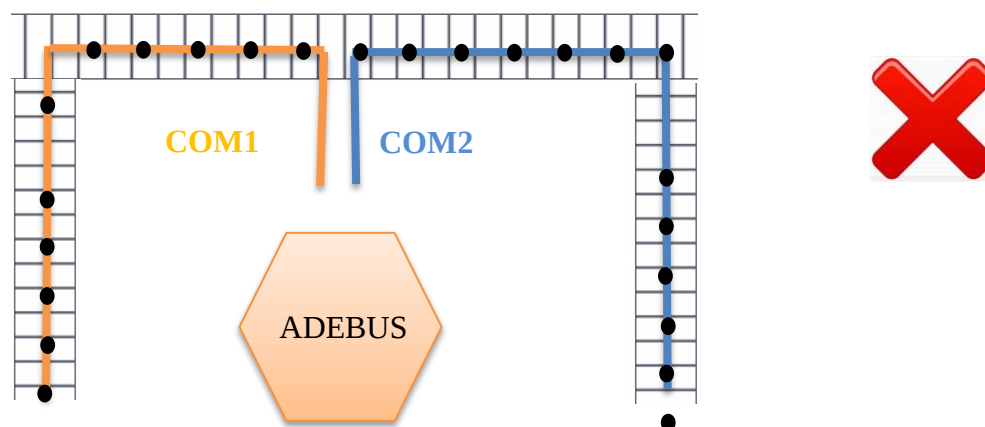
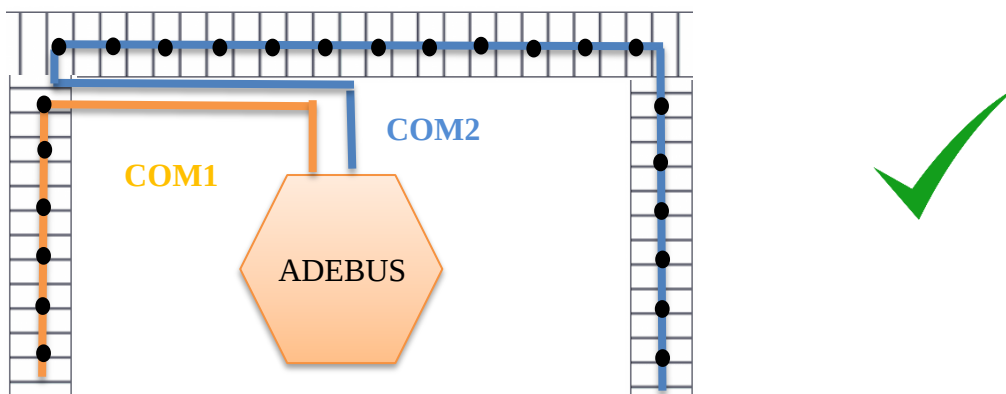
The accelerometric sensor has a detection around 5m for a maximum of 7m, it can vary depending on the fence on which it is applied.

6. INSTALLATION TIPS

Apply the sensor to the center of each panel so that the vibrations are the same for all the sensors.

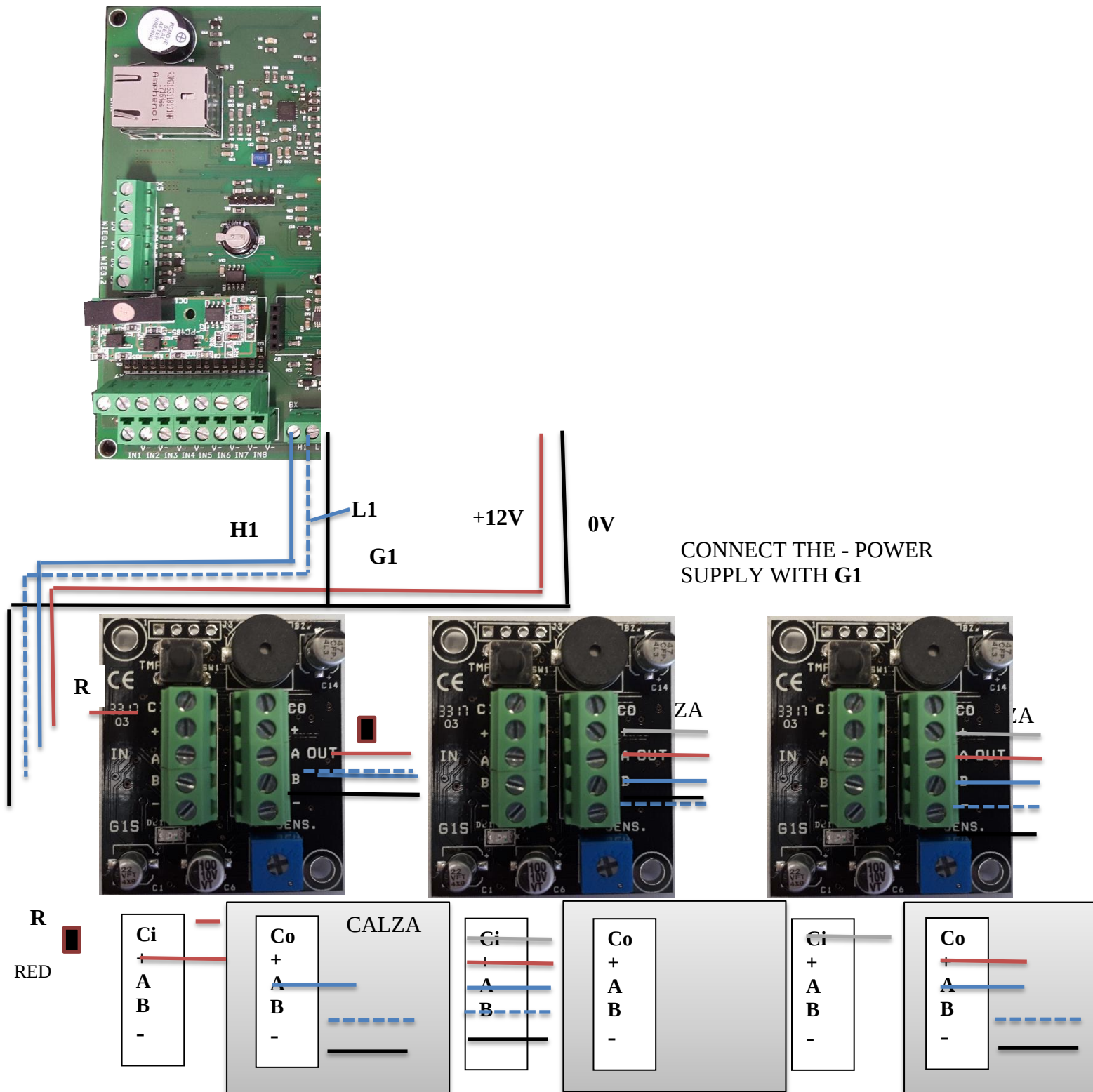
Start the assembly of the first sensors of each serial branch starting from the beginning of the fence.

Exaple.



7. SENSOR AND CENTRAL CONNECTION

Serially connect (enter and exit) the Gapid sensors as shown in the diagram.



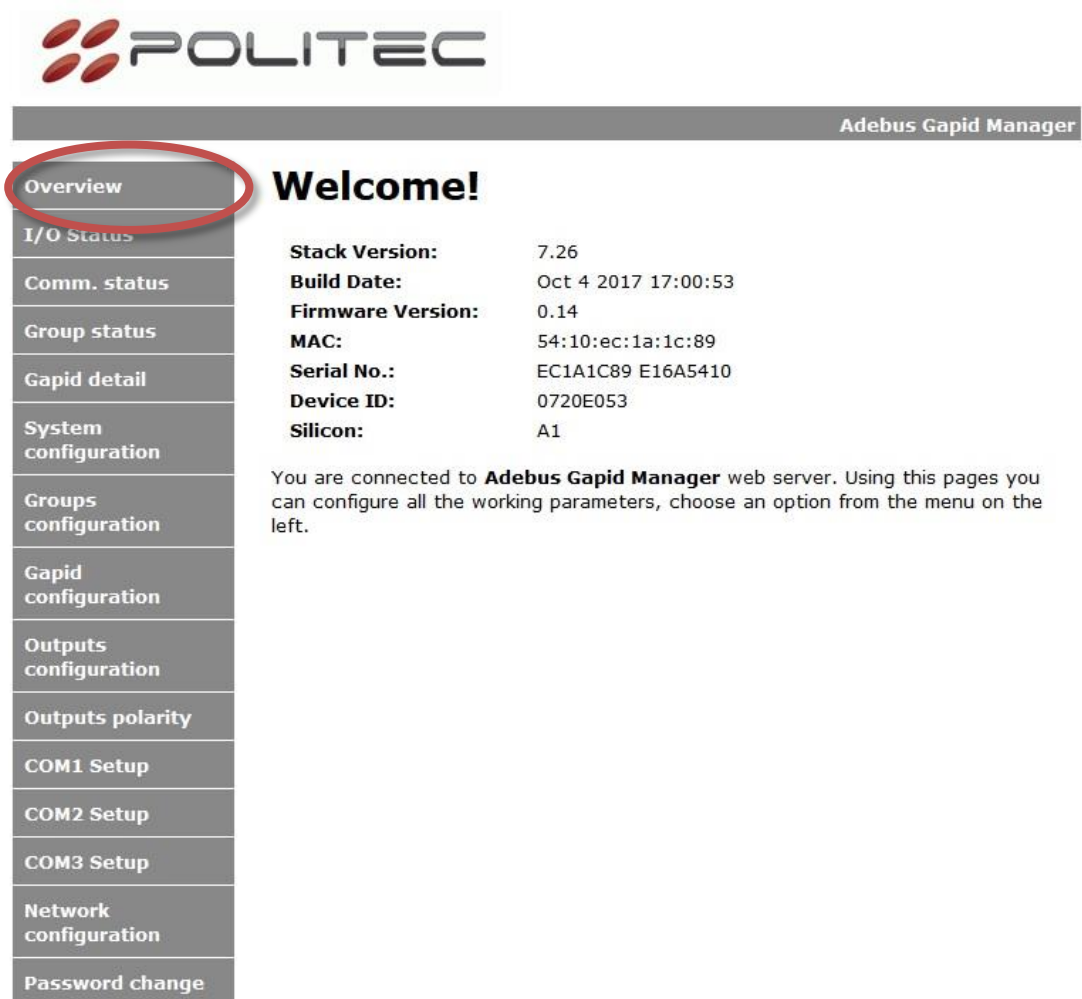
NB. Connect on the first sensor of the line an R of 10k between Ci and Positive supply, do not close the ring.

8. ADEBUS BOARD (CA230) FIRST CONNECTION THROUGH IP 192.168.1.222

Connect the PC to the LAN connector of the ADEBUS G card with an Ethernet cable.
The system is accessible through Gapid Explorer software or on the WEB.

**N.B.: for the first access: username: admin,
 password: admin.**

Overview WEB





Adebuss Gapid Manager

Overview

Welcome!

Stack Version: 7.26
Build Date: Oct 4 2017 17:00:53
Firmware Version: 0.14
MAC: 54:10:ec:1a:1c:89
Serial No.: EC1A1C89 E16A5410
Device ID: 0720E053
Silicon: A1

You are connected to **Adebuss Gapid Manager** web server. Using this pages you can configure all the working parameters, choose an option from the menu on the left.

9. GAPID EXPLORER INSTALLATION

Install the supplied GapidExplorer program using the **WinXP.lnk.exe** file.
The program is compatible with Windows 7 and newer versions.

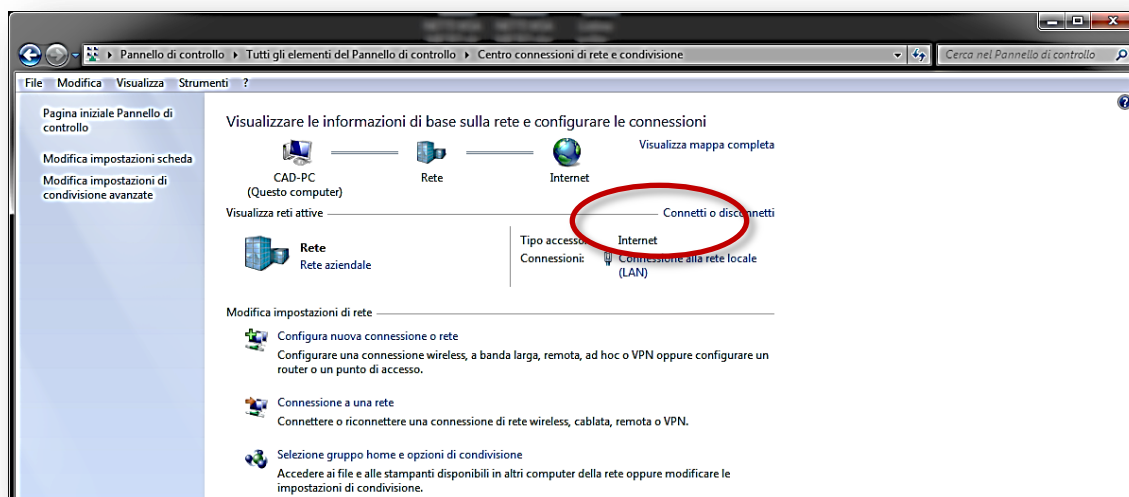
10. GAPID EXPLORER

Gapid Explorer is a supervision and configuration program for Gapid sensors.

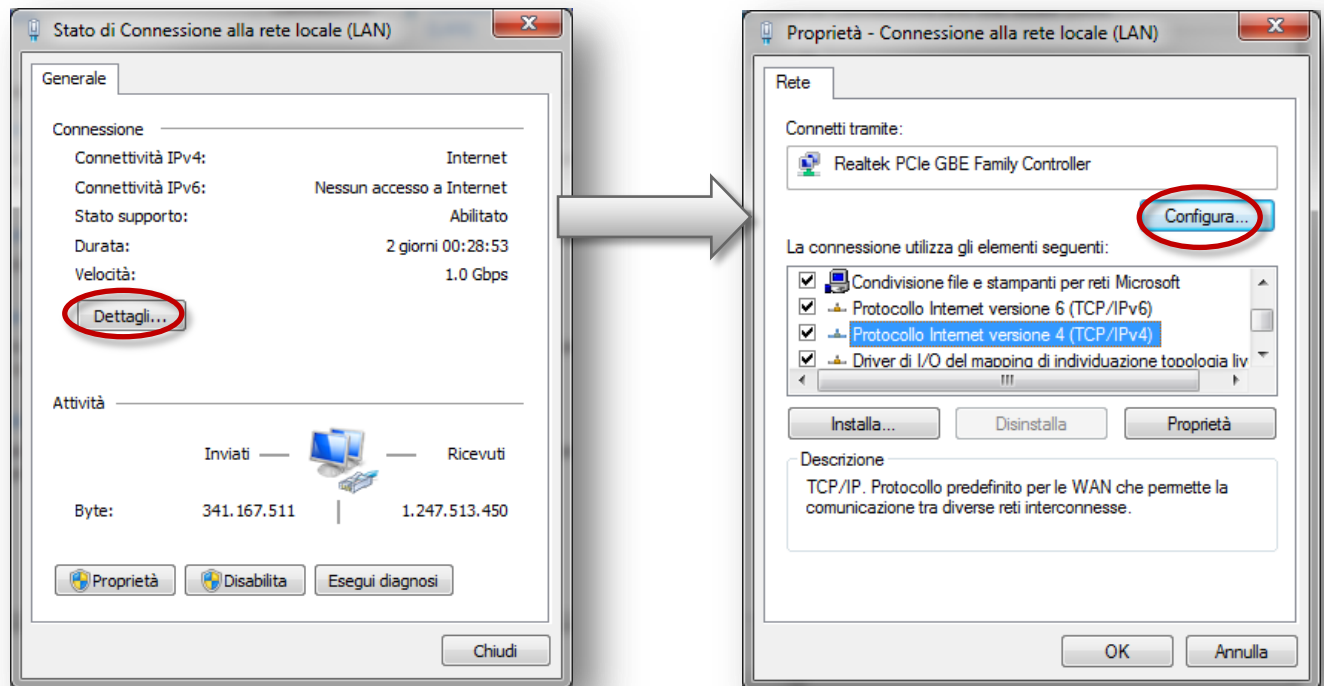
The software can be used in two different languages (English, Italian).

FIRST ACCESS, PC DIRECT CONNECTION - ADEBUS G

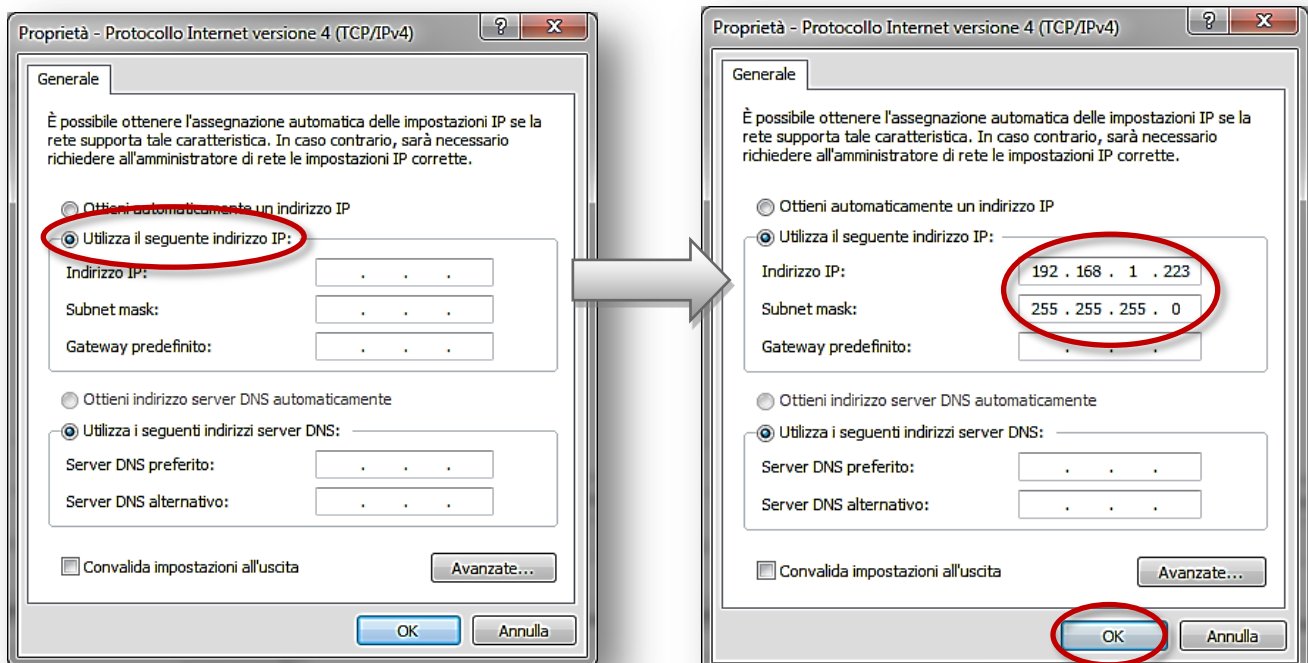
- Make direct connection with Static IP address.
- network connections (eg WINDOWS 7);
- with the left mouse button select and click on the local area network connection (LAN)



- Use the left mouse button to select and click properties. Open the window, with the left mouse button select Internet Protocol and click Properties.



Choose, if not already selected, Use an IP address different from that of the ADEBUS G card (default is 192.168.1.222) for example the address 192.168.1.223 and click on Subnet mask to appear as follows: 255.255.255.0. Save with OK.



FIRST START

Il software AdebUSExplorer richiede un PC dotato di Windows 7 o successivo.

Main mask

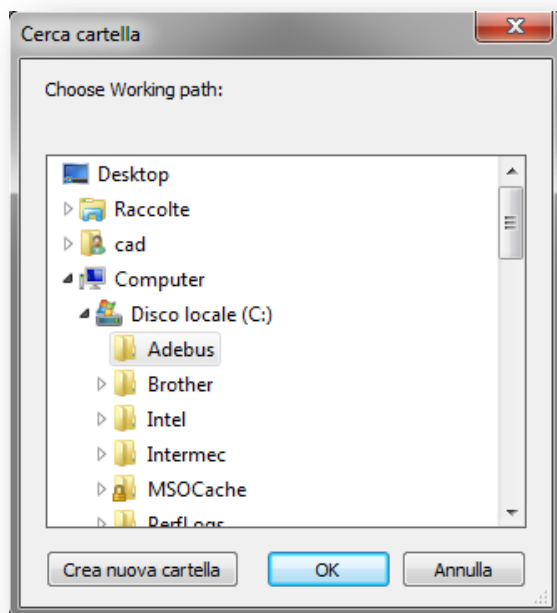
When switched on, the program presents the available functions, the use of which is illustrated below. Proceed in the order shown below.



Working path

It allows you to modify the workbook of the program where the database of events and sites downloaded in **.db format** is created.

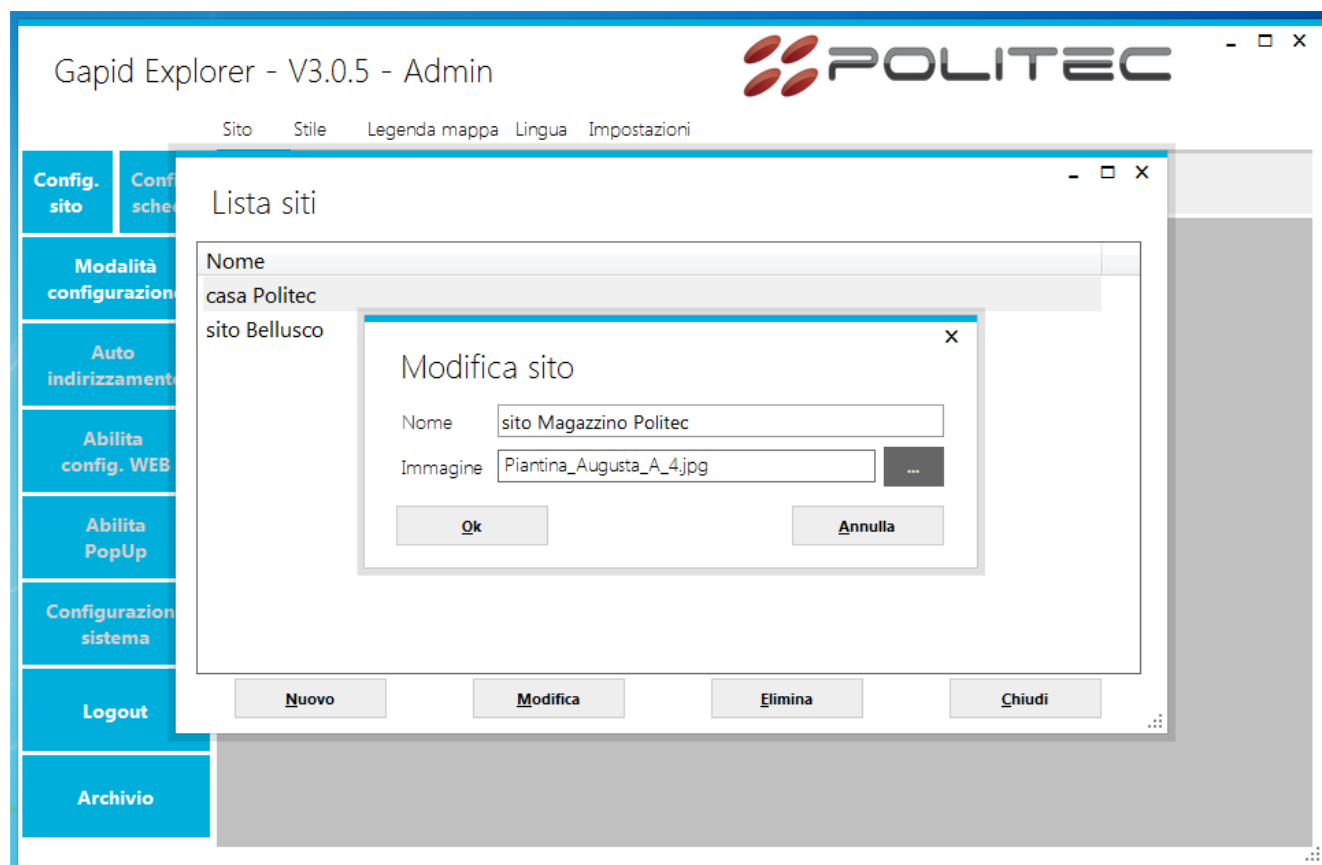
These folders can be changed via the Settings menu, Workbooks.



SITE CREATION

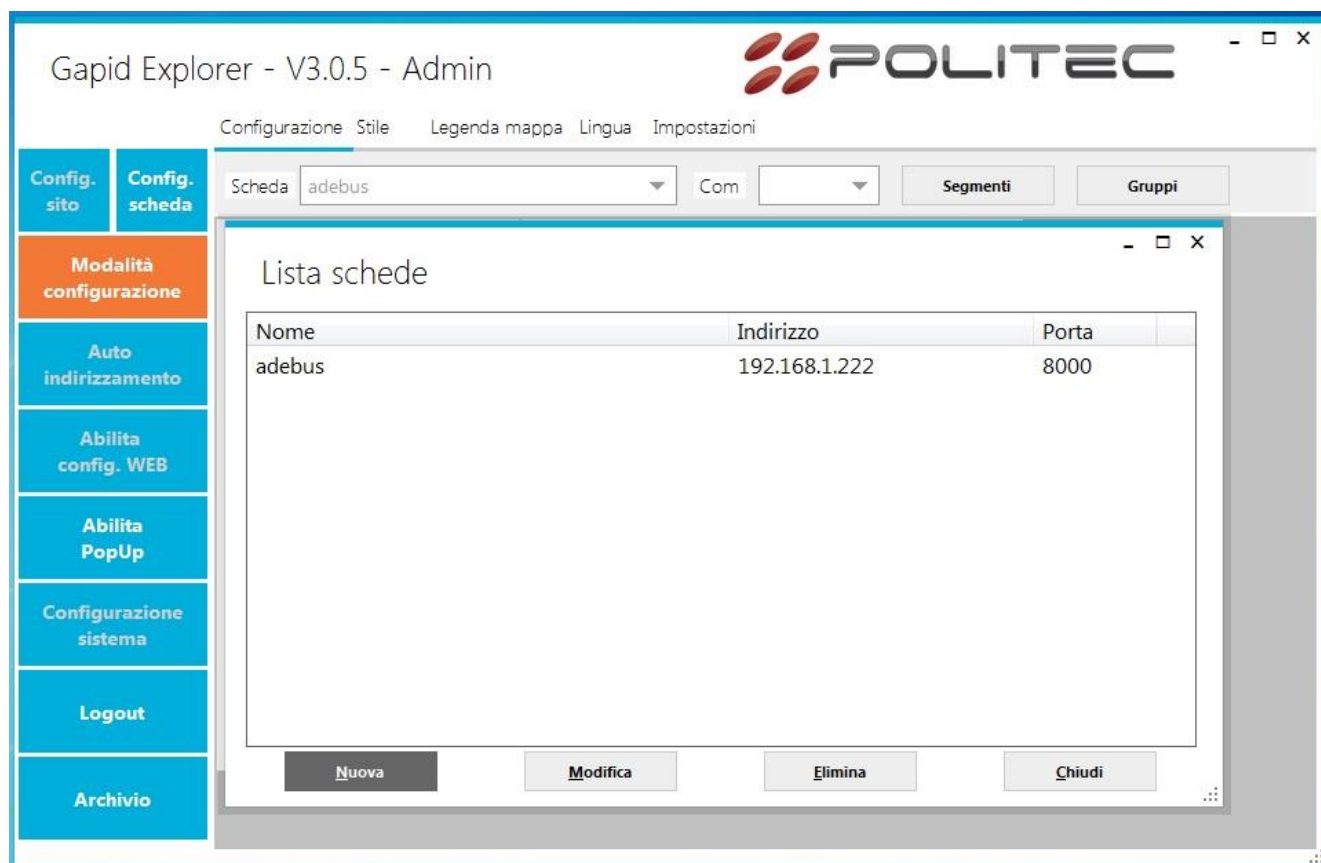
View the list of registered and configured sites.

To create a new site you must enter the site name and insert an image file that represents the site map.



Select the site created using the drop-down menu and activate the Configuration Mode function.

Select Configuration Card and enter the name of the Adbus G card with its IP address and port 8000. For large systems it is possible to insert an indefinite number of Adbus G cards within the same system.



Connect to the site and perform the **self-addressing** with the appropriate button to activate all the Gapids on the configured COM.



The system will provide a result of auto-redirection.

Select the created card, select the serial port COM1 - COM2 connected to the Gapid SR sensors and activate the Segments function.

Create segments with the left mouse button inside the image.
They represent the sensors connected on cable along the fences.
For each segment the number of Gapid SR present in the line is requested.

Using the right button you can connect the various segments and modify them.



Once all the segments have been created, select the Groups function to associate the sensors. Each Group must contain at least 4 sensors.

If some sensors are not associated with Groups, these sensors will be considered completely independent (eg: A single sensor applied to an iron gate between two electrically welded meshes).



SITE CONFIGURATION

Click on the group with the right mouse button, you can access the Group configuration. Once the configuration has been carried out, all the sensors within the Group will present this configuration. Send the Structure and the new configuration to configure a group.

- X

Diagnostica / Configurazione

Gruppo / Gapid: Recinzione Ovest: COM1 g1 - COM1 g4

Online

Prima porta:

Primo indirizzo:

Ultima porta:

Ultimo indirizzo:

Sensibilità:

Modalità: Reset

Gin: min

Copia >>

Locale

Prima porta:

Primo indirizzo:

Ultima porta:

Ultimo indirizzo:

Reset structure
Invia struttura

Sensibilità: 1 ☐ Hardware

Modalità: Reset ☐ Avanzato

Gin: (0 - 60 min)

Invia

Uscite



Current configuration



New configuration

- **SENSITIVITY:** Sensitivity of the sensors inside the group, the higher the threshold, the pre-alarm threshold of the single sensors is low. The group alarm is based on the analysis of all the sensors within the group. Unleashed the pre-alarm of a single sensor, the concentrator will carry out checks along the entire group line to confirm the alarm.
- **MODE:** It is the type of sensor programming within the group depending on the application.
- **Gin:** To send a different number from 0 the group will be inhibited for the equivalent in minutes.

Click on Outputs you can access the menu of the *outputs related* to the Group.

Diagnostica / Configurazione

Gruppo / Gapid: Recinzione Ovest: COM1 g1 - COM1 g4

Online

Associazione uscite

Online	Locale
Disabilitato: 0	Disabilitato: 0
Offline: 0	Offline: 101
Allarme: 0	Allarme: 102
Tamper: 0	Tamper: 103
Risonanza: 0	Risonanza: 0
Vin Low: 0	Vin Low: 0
Test: 0	Test: 0
Autoacquisizione per allarme: 0	Autoacquisizione per allarme: 0
Autoacquisizione per disqualifica: 0	Autoacquisizione per disqualifica: 0

Copia >> Invia

Copia >> Invia

Uscite

Relay outputs of the Adebuss are managed as follows:

OUTPUT NUMBER	DESCRIPTION
1 ... 3	Master outputs.
101 ... 116	Outputs of the expansion board 1.
201 ... 216	Outputs of the expansion card 2.
301 ... 316	Outputs of the expansion card 3.
401 ... 416	Expansion card outputs 4.
501 ... 516	Expansion card outputs 5.
601 ... 616	Expansion card outputs 6.

Click on the group with the right mouse button, you can access the configuration of the *single Gapid*.

- **SENSITIVITY:** Sensitivity of the individual sensors, the higher the threshold, the pre-alarm threshold of the individual sensors is low. The group alarm is based on the analysis of all the sensors within the group. Unleashed the pre-alarm of a single sensor, the concentrator will carry out checks along the entire group line to confirm the alarm.
- **MODE:** It is the type of sensor programming depending on the application.
- **Gin:** Send a number different from 0 the group will be inhibited for the equivalent in minutes.
- **Beep:** The sensor emits a continuous beep for 1 minute to be identified.
- **Test:** In case the sensor sends a pre-alarm signal it sounds.
- This function can be used during the testing phase to properly select the alarm thresholds.
- **Disabled:** The sensor can be disabled. It will no longer give any tamper or alarm signal.

Click on the system configuration in the main menu you can access the algorithm thresholds and the input configuration.

Gapid Explorer - Configurazione di sistema

Scheda: aдебус

Online		Locale	
Gapid su COM1	12	Gapid su COM1	12
Gapid su COM2	0	Gapid su COM2	0
Peak time	30	Peak time	0
Percentuale Gapid vicini	20	Percentuale Gapid vicini	0
Percentuale di media	50	Percentuale di media	0
Ingresso 1 abilita registrazione	☐	Ingresso 1 abilita registrazione	☐
Ingresso 1	0	Ingresso 1	0
Ingresso 2	0	Ingresso 2	0
Ingresso 3	0	Ingresso 3	0
Ingresso 4	0	Ingresso 4	0
Ingresso 5	0	Ingresso 5	0
Ingresso 6	0	Ingresso 6	0
Ingresso 7	0	Ingresso 7	0
Ingresso 8	0	Ingresso 8	0

Copia >> **Invia**

Click on Copy and Send to apply the standard configuration of the algorithms.

Activate the "Input 1 enable logging" flag so that the system records events in the archive only if input 1 of the Adebuss G card is balanced to ground of 1kΩ.

OPERATING STATUS

When the system is active the Groups will present different colors in case of recorded events such as Alarm, Tamper, Offline, Disabled.

These events will also be associated with PopUp, if enabled.

Gapid Explorer - V3.0.5 - Admin



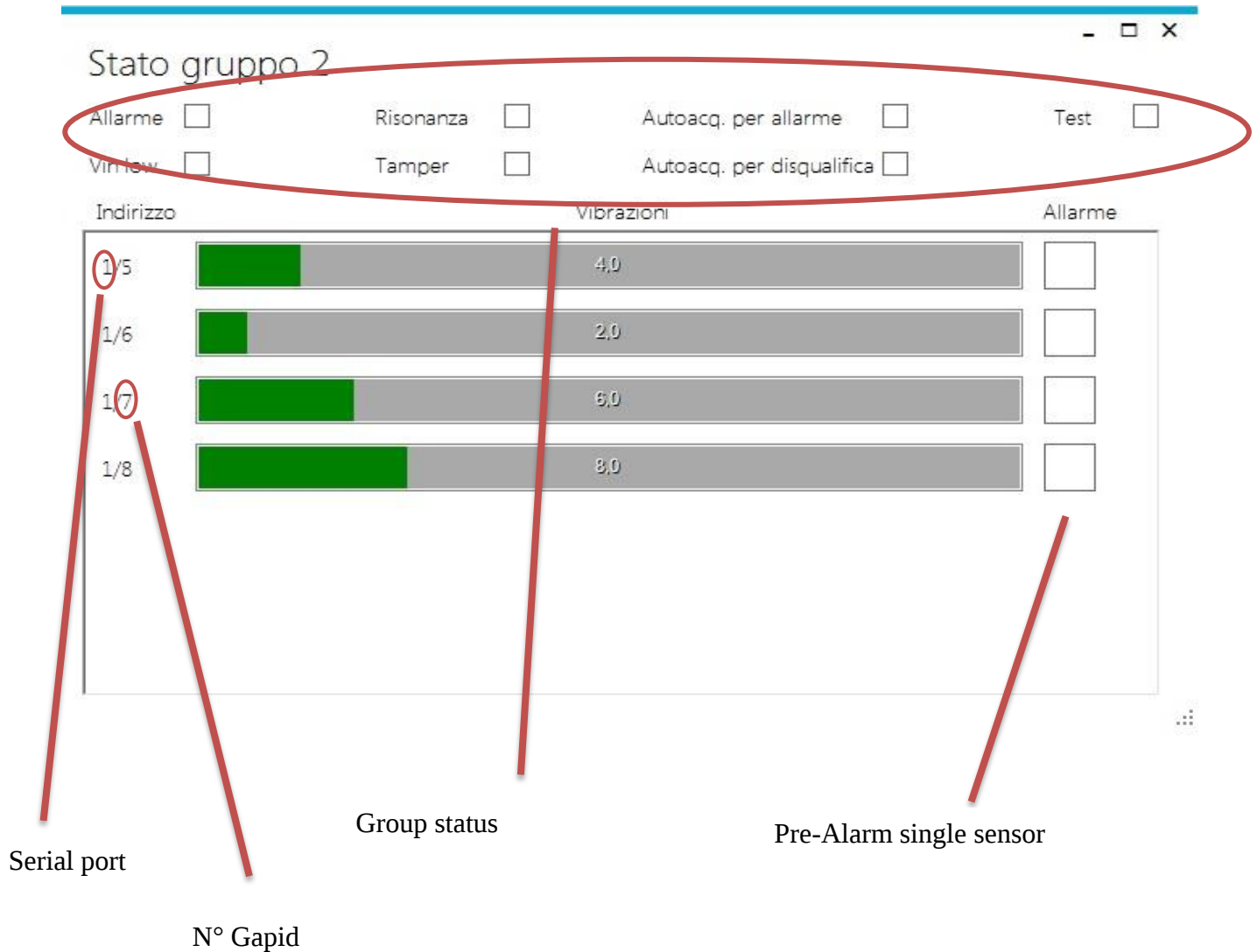
Sito Stile Legenda mappa Lingua Impostazioni

Rosso lampeggiante = allarme
Giallo lampeggiante = manomissione

Grigio = disabilitato
Croce rossa = offline



By double clicking on the group or on the single sensor if it is not associated, it is possible to check the operating status.



CONFIGURATION AND MANAGEMENT ON WEB

To use also the configuration via WEB it is necessary to enable through the appropriate button Enable config. WEB.

This function is normally disabled to keep the safety level of the system high.



Through the WEB management it is possible to view the status of the individual groups, sensors and modify the configurations similar to the software.

Example. Group status:

POLITEC

Adebus Gapid Manager

Overview

I/O Status

Comm. status

Group status

Gapid detail

System configuration

Groups configuration

Gapid configuration

Outputs configuration

Outputs polarity

COM1 Setup

COM2 Setup

COM3 Setup

Network configuration

Password change

Group status

Group: 2

Address	Pulses	Alarm
1/5	0	
1/6	1	
1/7	0	
1/8	0	

ARCHIVE

The **Archive menu** displays the history of the events recorded on the Adebus G card.

Event storage can be enabled or disabled through system configuration.

The AdebusG tab maintains a maximum of 32,000 events, overwriting the oldest if space is available. To view a larger number of events, you must open **.db** database files in the Gapid Explorer workbook using an appropriate program.

Archivio

DateTime	Descrizione	Status	Gapid	Com	Board
22/01/2018 11:08:03	Allarme gruppo	0	1	0	adebus
22/01/2018 11:08:03	Allarme	0	4	1	adebus
22/01/2018 11:08:02	Allarme	0	3	1	adebus
22/01/2018 11:08:01	Allarme	0	5	1	adebus
22/01/2018 11:08:01	Allarme	0	1	1	adebus
22/01/2018 11:08:00	Allarme	0	10	1	adebus
22/01/2018 11:07:59	Allarme	0	7	1	adebus
22/01/2018 11:07:58	Allarme	0	8	1	adebus
22/01/2018 11:07:58	Allarme	0	11	1	adebus
22/01/2018 11:07:58	Allarme	0	9	1	adebus
22/01/2018 11:07:58	Allarme	0	12	1	adebus
22/01/2018 11:07:58	Allarme	1	4	1	adebus
22/01/2018 11:07:57	Allarme	0	4	1	adebus

Filtri

Da data:

A data:

Scheda:

Com:

Gapid:

Tipo allarme:

Max eventi:

ENABLE POPUP

The system allows to use PopUp in case of important events of the system.
During the group configuration phase it is possible to select which ones to select and enable.
These PopUps are linked to the event archive downloaded on PC.



SETTINGS

It's possible to change the workbook and the user and admin passwords.

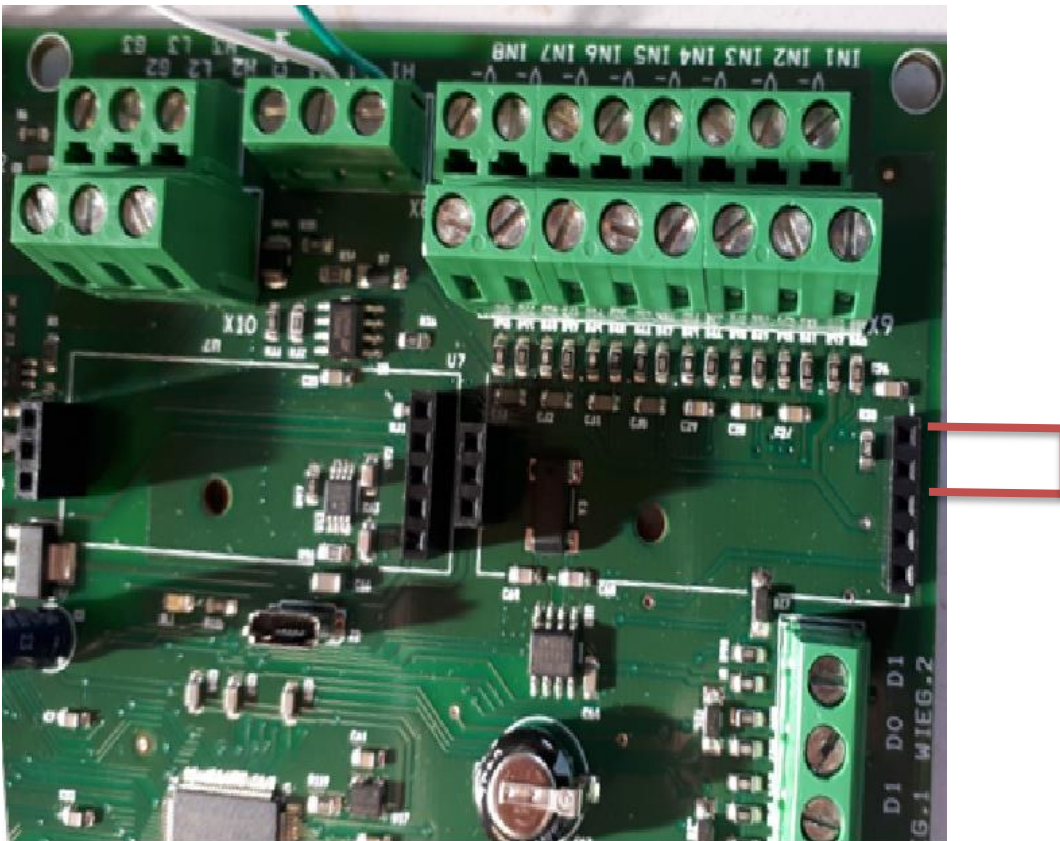


The standard user can only view the system status and can not modify outputs \ configurations.

ADEBUS G BOARD RESET

You can reset the Adebuss G card to the factory settings by doing this:

- Disconnect the Adebuss G card
- Remove the COM1 serial port module.
- Make a jumper on contact 3-5.
- Feed and wait for the red LED to flash quickly
- Disconnect, remove the jumper and reconnect the serial module
- Power up.



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