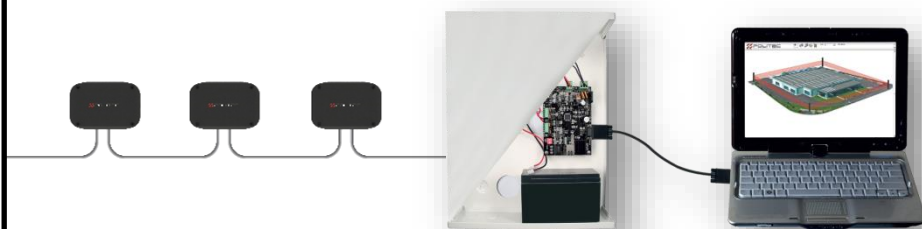




PRODUCT
**ADEBUS &
GAPID EXPLORER**

Product code ADEBUS & GAPID
EXPLORER

ADEBUS & GAPID EXPLORER



MONITORING CONTROL UNIT

INSTALLATION AND WIRING MANUAL VERSION 1.8

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1.Introduction

Congratulations on having purchased the Politec monitoring control unit. This appliance guarantees long-lasting and reliable operation if installed correctly. For correct and effective use, it is necessary to read this instruction manual carefully.



The sensor and the monitoring control unit have been designed to detect intrusions and activate the alarm; it is not a device that prevents intrusion. Politec is not responsible for damage, injury or loss caused by accidents, theft, force majeure (including momentary lightning-induced overcurrent), abuse, improper or incorrect use, faulty installation or inadequate maintenance.

2. Product description

The Adebuss & Gapid Explorer is a monitoring control unit for the management of up to 128 sensors divided arbitrarily into 2 branches (expandable) using both the serial ports Com0 and Com1. Adebuss Gapid manages, supervises and configures every single Gapid SR (or groups) combined with Adebuss hardware boards, set up with the appropriate firmware, reachable through a TCP/IP connection.

This system is ideal for sensor management for perimeter protection of large areas. It is equipped with an internal algorithm system that allows multiple sensors to be installed on the same site in different applications and realtime management of every single vibration. The main features of this system are as follows:

- Detection of each alarm of the individual group or sensor.
- Ability to interact on all system parameters, to know and change the status of the sensors (single or group);
- Each sensor, single or in group, can be configured and verified in real time: all operations can be performed locally or remotely via WEB;
- Store and download up to 32000 events on a PC.



Warnings

Mounting, installation of the barrier and connection to the mains must be carried out by expert and qualified personnel, in compliance with rules and regulations applicable to electrical systems.

3.General warnings

This installation manual contains important information regarding safety for installation: it is necessary to read all the instructions before proceeding with the installation.

Keep this manual for future use.

- If you have any questions or doubts during installation, do not carry out any operations and contact the support service.
- Use of these products for purposes other than those specified in these instructions is prohibited.
- You must not make any change to the components of the product unless stated in the manual in order not to void the warranty; such operations can only lead to malfunctions; Politec assumes no liability for malfunctions or damage due to modified products.
- Depending on the specific situation of use, check for the need for additional devices: detectors or signalling devices.
- During installation, mounting and use of the product, make sure no foreign objects (solids, metals or liquids) are able to penetrate inside the open devices.
- Manufacturer's liability: Politec assumes no liability for failures resulting from incorrect installation; lack of maintenance, incorrect assembly or use.
- Politec is also not liable for incorrect or incomplete operation of the product or failure to detect intrusion.
- Warranty (summary of conditions): Politec guarantees its products for a period of 2 years from the production date. The warranty is applied to those purchasing directly from Politec; there is no warranty for the end user who, in the event of breakdowns or faults, must contact the installer or dealer.
- The warranty excludes aesthetic parts as well as parts subject to normal wear and parts subject to normal consumption such as batteries and accumulators.

3.1 Additional warnings for devices powered by mains voltage

This manual is intended only for technical personnel qualified to install such devices.

- Assessing the hazards that may occur during installation and use of the system, in order to achieve complete safety, it is necessary that installation takes place in full compliance with applicable laws, methods, rules and regulations.
- Before accessing the internal terminals of the product, it is necessary to disconnect all the power circuits.
- If automatic circuit breakers or fuses trip, before resetting them it is necessary to identify the fault and repair it.

3.2 Installation warnings

- Check that all the material to be used is in excellent condition and suitable for use.
- Before proceeding with the installation, check the environmental class of the products in the "technical specifications" chapter.
- Check, by comparing with the values shown in the paragraph "technical specifications".
- Do not place the system components close to heat sources as they could be damaged.
- Each product has its own operating principle: check the instructions for choosing the right position in the respective instruction manual.

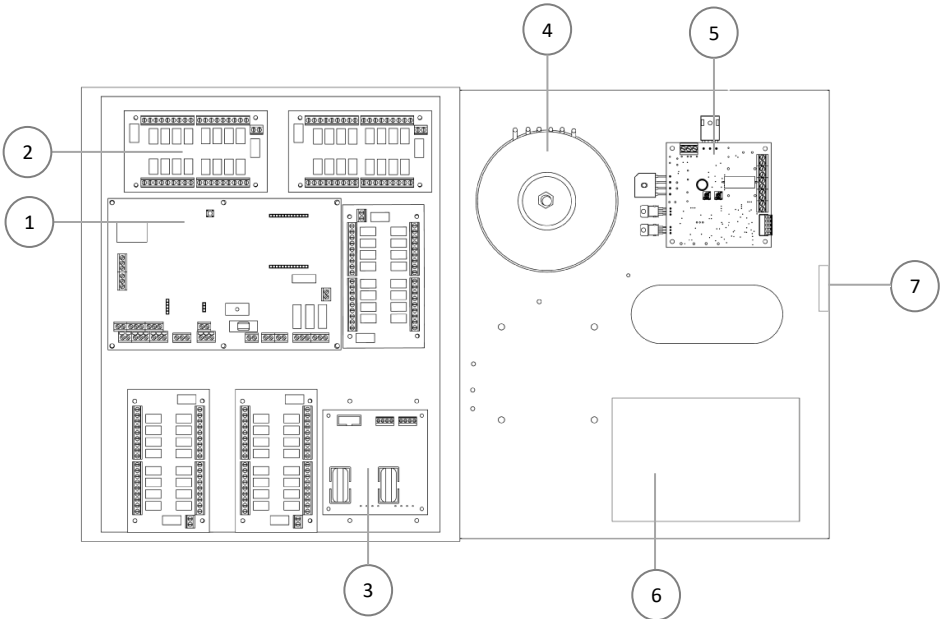


4.Main components list

4.1 The control unit

The box contains the following components and accessories.

When opening the package, check that everything has been included.

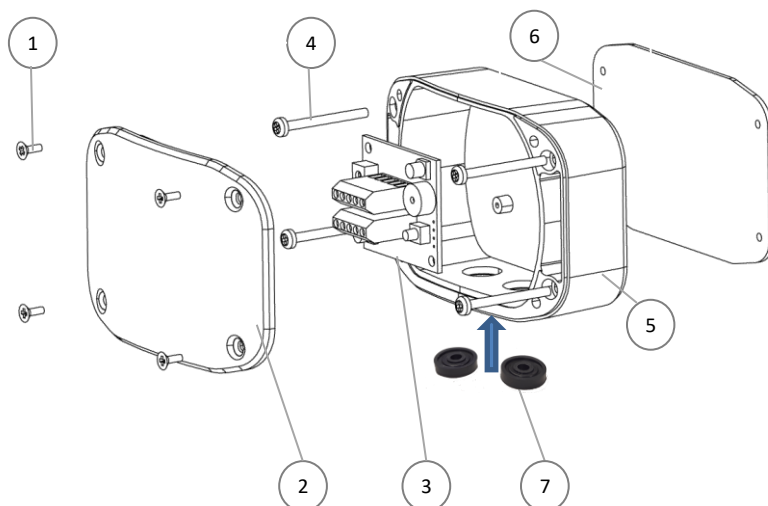


N o.	COMPONENT CODE	DESCRIPTION
1	ADEBUS G	Adebus motherboard
2	ADEBUS ESP	Expansion of 16 relay outputs
3	INTERFACE BOARD	
4	TRASF LAR22S	18/24 Vac transformer
5	ALPO1B	Power supply board
6	BATTERY (not included)	17 Ah Battery compartment
7	TAMPER	

4.2 Gapid SR

The box contains the following components and accessories.

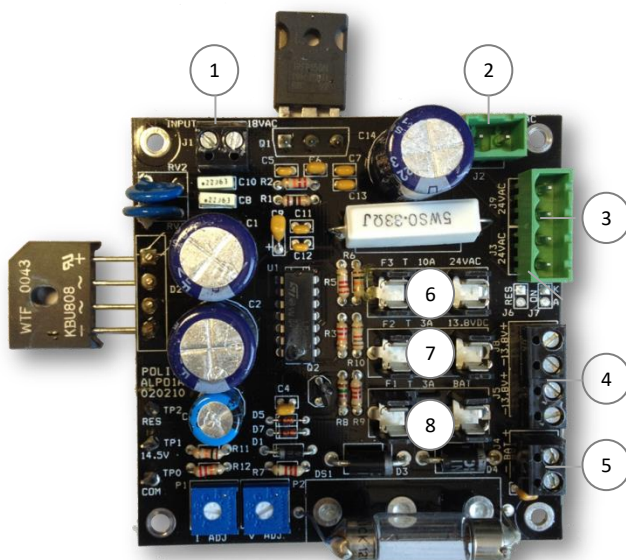
When opening the package, check that everything has been included.



No	COMPONENT
1	Screw 3x7
2	Gapid SR cover
3	Serial CS board
4	Screw 3x20
5	Gapid SR container
6	Fixing plate
7	Cable glands

5.Board Description

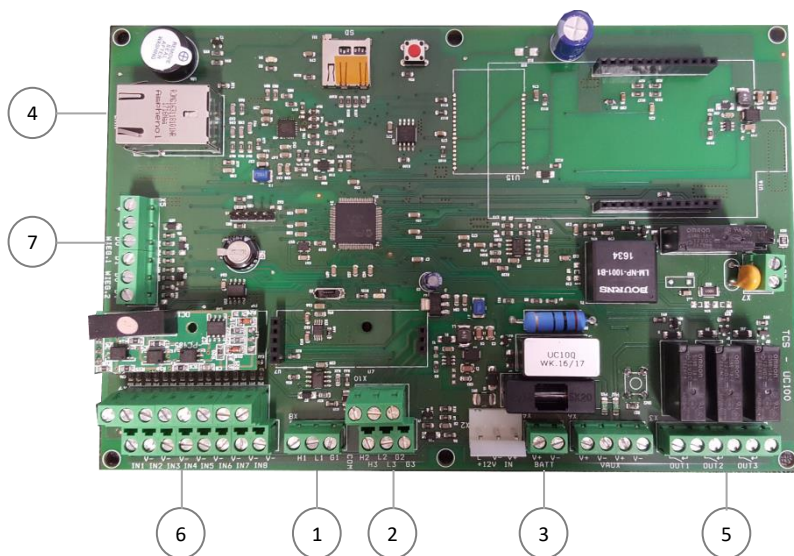
5.1 ALPO1B - Power supply board.



No	COMPONENT
1	18 Vac input
2	24 Vac input
3	24 Vac output
4	0-13.8 Vdc outputs
5	Battery output
6	10 A fuse (24 Vac)
7	3 A fuse (12 Vac)
8	3 A fuse (battery)

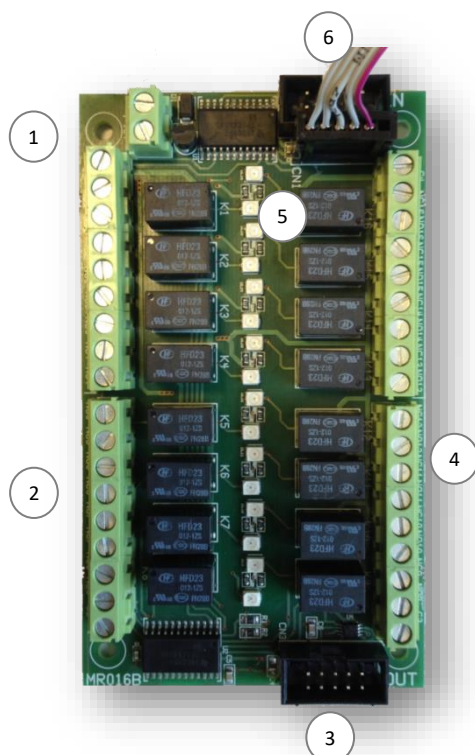


5.2 ADEBUS G - Adebuss motherboard.



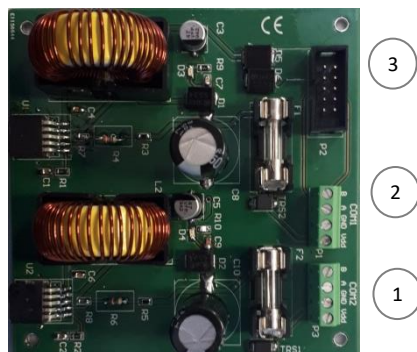
No	COMPONENT
1	Serial input line COM1
2	Serial input line COM2
3	0-12 Vdc input
4	LAN port
5	Relay outputs block
6	Inputs
7	Relay expansion connection

5.3 ADEBUS ESP - Expansion of 16 relay outputs for Adebus.



No.	COMPONENT
1	0-12 Vdc input
2	Relay outputs block 1-8
3	Output connector to next expansion board
4	Relay outputs block 9-16
5	Input connector from CA 230 motherboard
6	Input connector from previous expansion board

5.4 ADEBUS INTERFACE



No.	COMPONENT
1	Serial input line COM1
2	Serial input line COM2
3	Adebus connection

6.Preparation for installation

6.1 Preparing the components before installation

Since the communication between the sensors and the monitoring unit takes place by wire, it is advisable to firstly check that all the parts of the unit and sensors and their possible accessories are present before beginning the installation.

6.2 It is advisable to carry out:

- The installation of the control panel application on a computer
- The installation of the sensors on the perimeters to be protected;
- checking sensor operation using software
- the permanent fixing of each sensor;
- the preparation and carrying out of electrical connections.

In order to avoid errors, operating and installation problems, it is advisable to proceed as follows:

- a) Place all the products with the package open on a table;
- b) Test the functioning of the sensors;
- c) Arrange (without fixing) the sensors in the planned points;
- d) Check that each sensor responds from the application;
- e) Permanently fix the sensors.

Before proceeding with the installation, it is necessary to check the integrity of the product, the adequacy of the model chosen and the suitability of the environment intended for installation:

- Check that all conditions of use fall within the "limits of use" and in the "Technical specifications of the product".
- Check that the environment chosen for the installation is compatible with the total footprint of the product.
- Check that the surface chosen for the installation of the product is solid so as to ensure stable fixing and that it is adequately protected from possible impacts or atmospheric agents.



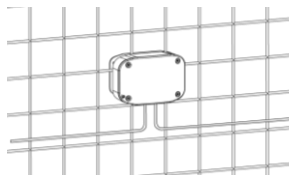
7.Sensor mounting

Placement and installation height

This type of sensor has the optimal sensitivity of a diameter of 5 metres on all types of fences, metal structures and gates. If the fence is supported by poles about 5 metres apart, position the sensor in the centre of this distance, so as to place one in each "sector".

However, it is necessary to take into consideration the type of material of the fence since, depending on whether it is loose mesh, electro-welded or with panels, the material will transmit a different sensitivity.

Position the Gapid in the centre of the panel or the mesh and screw it to the fixing plate positioned on the other side. Tighten the screws firmly to prevent the device from moving.



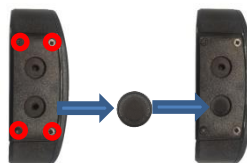
The Gapid SR can be connected to the net and to the Adebis control unit only with the cable supplied which is RS485.

The cable must be inserted in the two slots below: one for input and one for output.



After that, wire the sensors.

The last sensor in line will only have the input cable. At this point, unscrew the 4 screws of the cable gland plate and replace the perforated gasket with the supplied cap.



Fasten the cable with cable ties to the fence or support on which you have mounted the Gapid SR and wire the sensors.



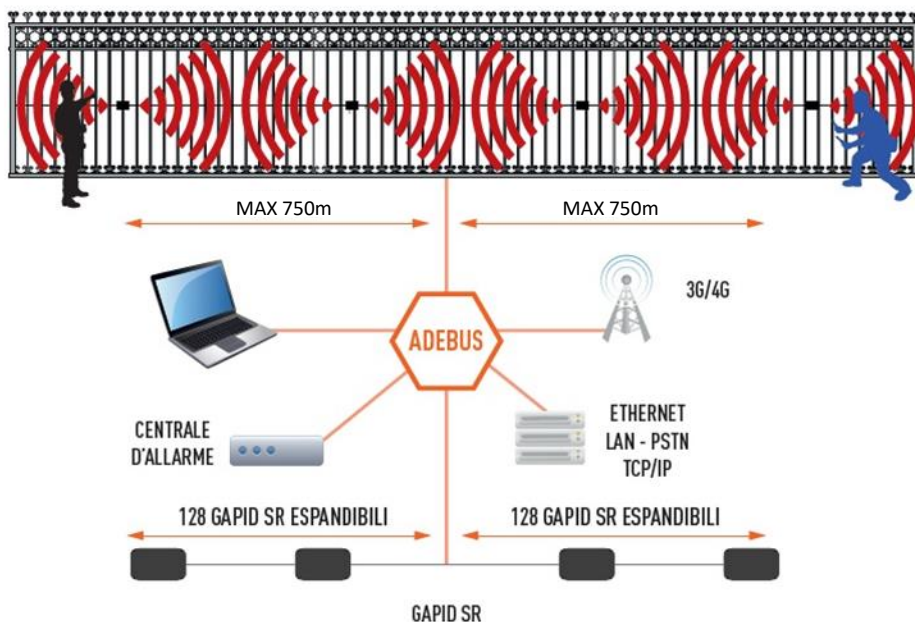
After calibration and programming, close the device making sure that the gasket is well positioned inside the special compartment and that the protective cover closes well.

WARNING:

Product warranty is invalid if there is any hole in the product profile or any component

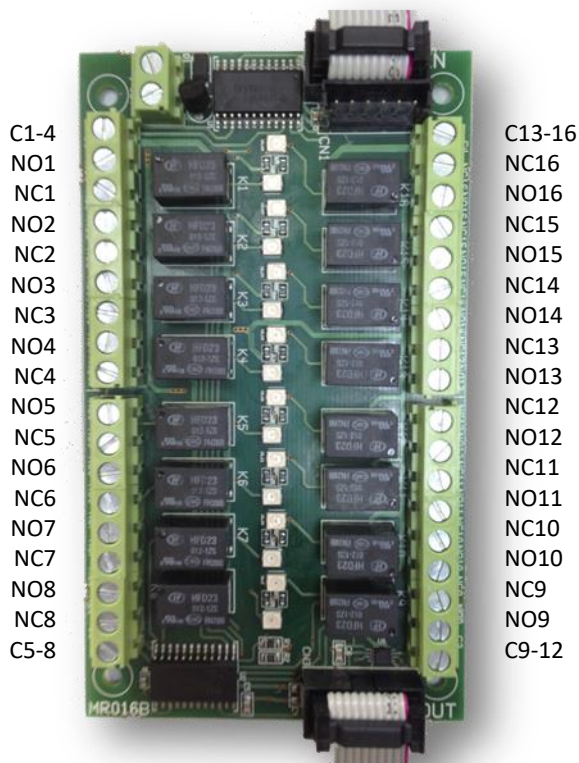
8.Start-up

The ADEBUS system manages up to 256 Gapid SR divided into 2 branches (maximum length 750m each) using both the serial ports Com1 and Com2 (for Com1 the ADEBUS S2 accessory is required), On the other hand, using a single serial port it is mandatory to create a single branch of the RS485 bus, without making further branches. In this case, however, 128 sensors can be used on the same branch. The system is accessible via dedicated software and via the WEB



9. Relay output connections

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



N.B.: The connections of the Relay outputs are divided into 4 groups for each expansion board, and the common ones are as follows:

C1-4 = common first 4 relays

C5-8 = common second 4 relays

C9-12 = common third 4 relays

C13-16 = common fourth 4 relays

10. Gapid SR sensor

Tamper

Signalling buzzer
(activated via software)

Ci
+
A
B
-

Co
+
A
B
-

Input Connector:

Connection to the previous Gapid or the Adbus control unit

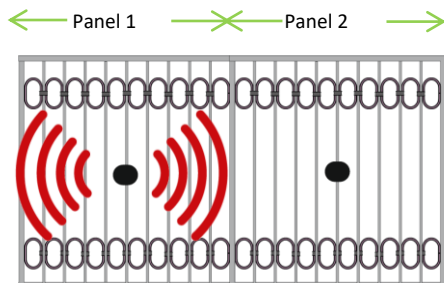
Output Connector: Connection to the next Gapid

Sensitivity adjustment trimmer: It is generally used to check sensitivity in the field. This sensitivity will be overwritten via software.

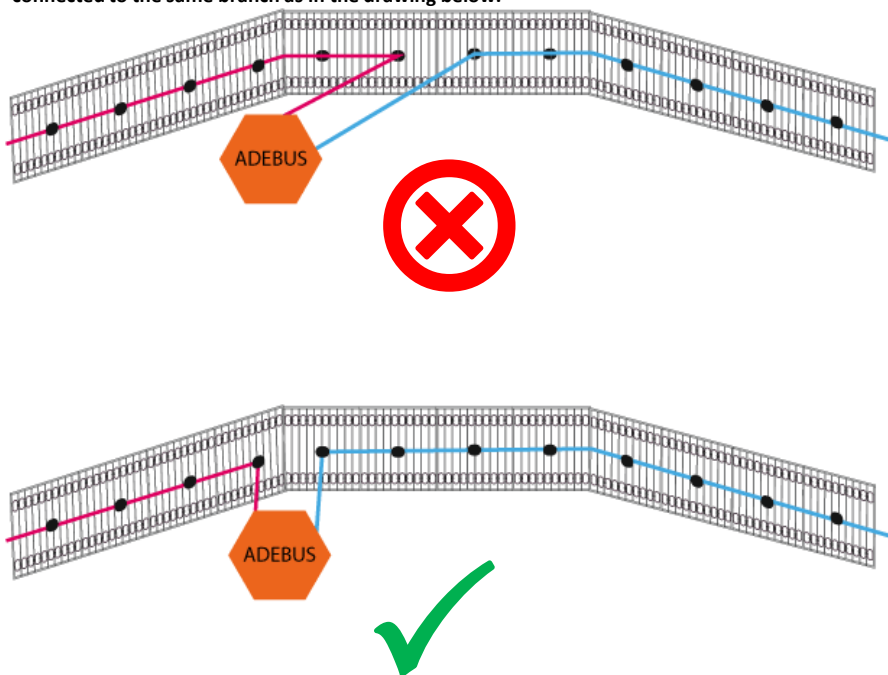
The accelerometer sensor has a detection around 5m for a maximum of 7m, it can vary depending on the fencing on which it is mounted.

10.Installation Method

Mount the sensors equidistant from each other so that the vibrations they will receive are the same for all sensors. Begin mounting the first sensors of each serial branch starting from the beginning of the fencing.



N.B.:For correct operation, all sensors placed on the same side of a continuous fence must be connected to the same branch as in the drawing below.



Operating principles and applications

The system is designed for detection in the event of a breach, trespassing and cutting.

In the case of mounting on masonry, the system only detects an attempt at breaching.

In the case of mounting on netting, cut detection occurs when a potential intruder cuts the netting/mesh and tries to pass through it.

In the case of non-welded netting/mesh mounting, it is necessary to use a panel sensor to have an efficient level of protection against cutting.

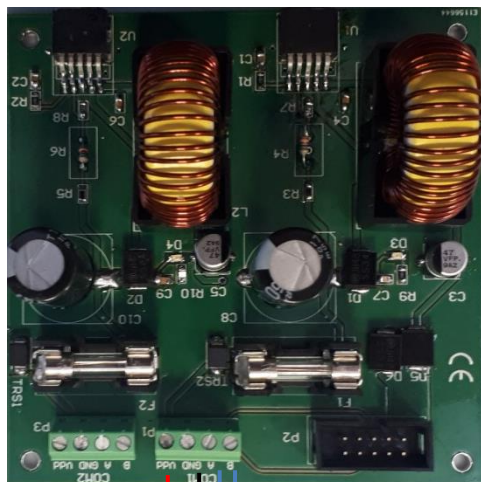
The system works properly only if the fencing is stable and uniform.

Standard applications

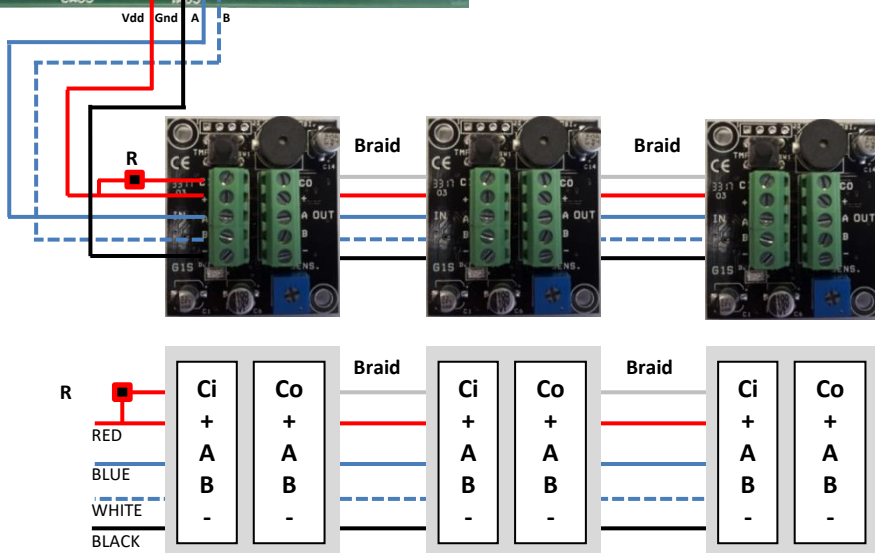
- **Light wire mesh panels:** typical mounting in the centre of alternate panels, i.e. one yes, one no. If vibrations are propagated considerably, it is possible to mount one every three panels, i.e. one yes and two no.
- **Rigid wire mesh panel:** typical mounting in the centre of alternate panels, i.e. one yes, one no. If vibrations are not propagated very much, mount a sensor on each panel.
- **Non-welded meshing:** typical mounting near the anchoring post, mounting of a sensor on each section for cutting detection.
- **Rigid welded meshing:** typical mounting in the centre of alternate sections, i.e. one yes, one no. If vibrations are propagated considerably, it is possible to mount one every three panels, i.e. one yes and two no.
- **Anti-breach wall:** depending on the structure of the wall, typically mount a sensor every 5m.
- **Windows or internal applications:** mount a sensor every 5m depending on the structure.

11.Connection of sensors to the control unit

The connection of the Gapid SR sensors to the Adbus control unit must be made exclusively with the serial cable («input and output» mode) following the diagram below:



If required, make the same connection for COM2



N.B.: Connect an R of 10k between Ci and power Positive on the first sensor of the line, do not close the ring.



12. First access to the Adebuss G board via IP address 192.168.1.222

Connect the PC to the LAN connector of the ADEBUS G board with Ethernet cable.
The system is accessible via Gapid Explorer software or via the WEB.

N.B.: for the first access:

username: admin,

password: admin.

12.1 Overview via web



Adebuss 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

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.

13. Gapid Explorer installation

Install the supplied Gapid Explorer program using the **WinXP.Ink.exe** file. **The program is compatible with Windows 7 and newer versions.**

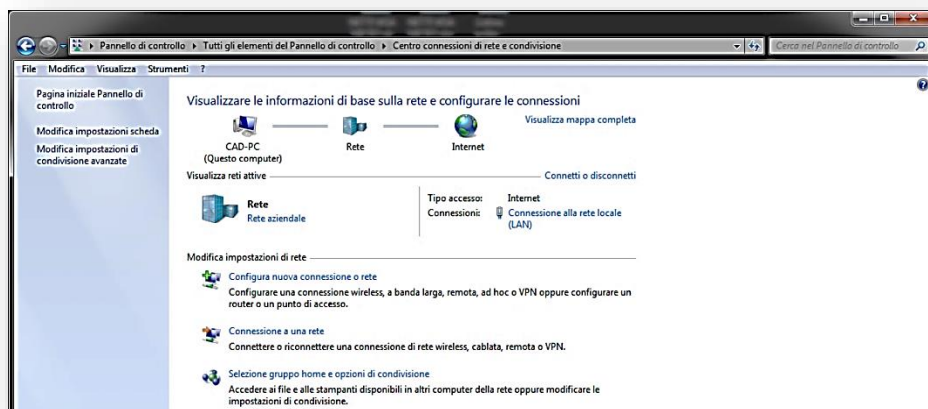
13.1 Gapid Explorer

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

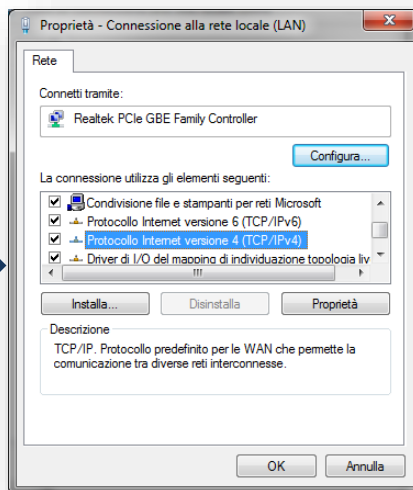
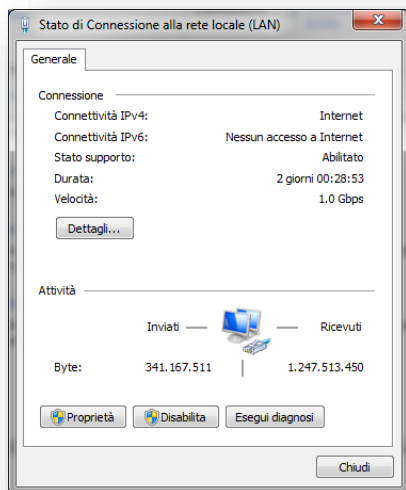
The software can be used in three different languages (English, Italian, French).

13.2 First access: direct PC connection - Adebus G

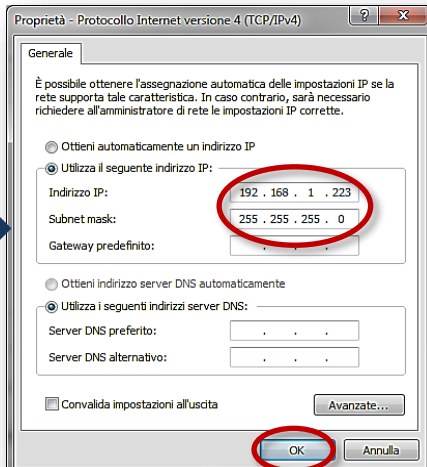
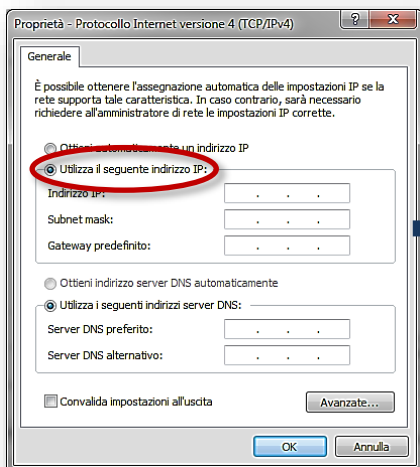
- Make direct connection with Static IP address.
- network connections (e.g. WINDOWS 7);
- with the left button of the mouse choose and click connection to the local network (LAN)



With the left button of the mouse choose and click properties. Once the window is open, with the left button of the mouse choose Internet Protocol and click Properties.



Choose, if not already selected, an IP address different from that of the ADEBUS G board (default is 192.168.1.222) for example the address 192.168.1.223 and click on Subnet mask so that the following appears: 255.255.255.0 Save with OK.



14. First start

AdebusExplorer software requires a PC running Windows 7 or later.

14.1 Main screen

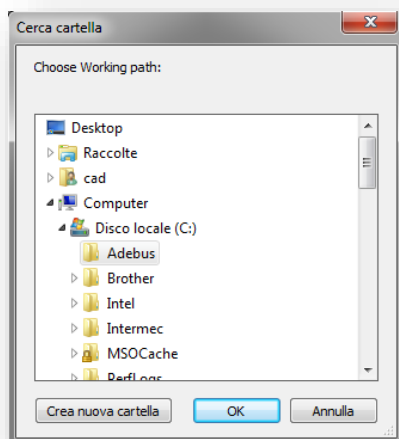
At start-up, the program presents the available functions, the use of which is illustrated below. Proceed in the order listed by the software.



14.2 Working path

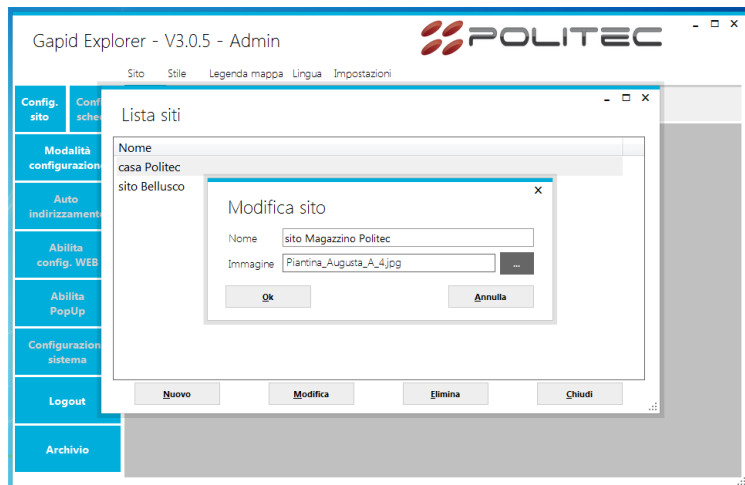
It allows you to modify the work folder of the program where the database of events and sites downloaded in **.db format** is created. These folders can be edited via the Settings menu, Work folders.

By copying the database file and the plant image file it is possible to manage the systems from different PCs.



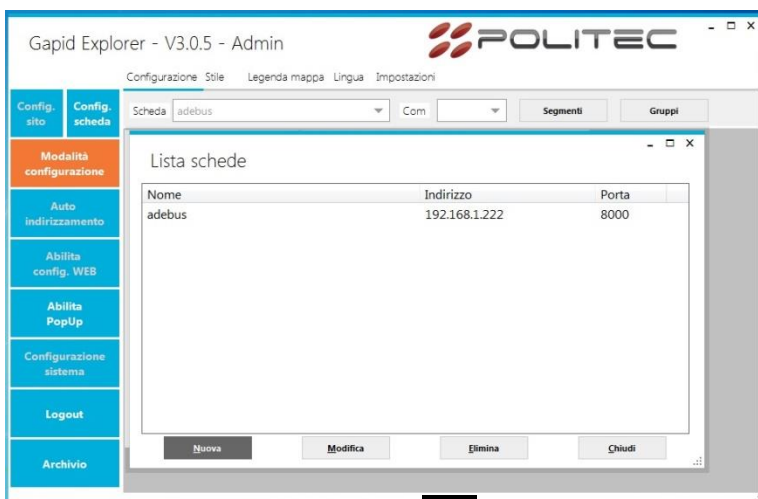
14.3 Site creation

To create and configure a new site, you need to enter the site name and insert an image file that represents the site map.



Select the site created via the drop-down menu and activate the **Configuration mode** function. Select **Board Configuration** and enter the name of the Adebis G board with its IP address and port 8000.

For large systems it is possible to insert an indefinite number of Adebis G boards within the same system and manage them through the only interface.



Connect to the created site and carry out **auto-addressing** using the appropriate button to activate all the Gapid SRs present on the configured COMs.



The system will provide an outcome of the self-addressing operation.

If there are unaddressed sensors check the wiring between the last addressed sensor and the first unaddressed sensor and check the addressing again.

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

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

Using the right button it is possible to 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 (e.g. a single sensor applied to an iron gate between two welded nets).



14.4 Site configuration

By right-clicking with the mouse on the group it is possible to access the *group* configuration. Once the configuration has been made, all the sensors within the Group will present this configuration. It is necessary to send the new configuration to configure a group.

Diagnostica / Configurazione

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

Online

Prima porta: 0

Primo indirizzo: 0

Ultima porta: 0

Ultimo indirizzo: 0

Sensibilità: 0

Modalità: Reset

Gin: 0 min

Copia >>

Locale

Prima porta: 1

Primo indirizzo: 1

Ultima porta: 1

Ultimo indirizzo: 4

Reset structure

Invia struttura

Sensibilità: 1

Modalità: Reset

Gin: 0 (0 - 60 min)

Invia

Uscite

Current configuration

New configuration

SENSITIVITY: Sensitivity of the sensors within the group, the higher it is, the lower the pre-alarm threshold of the individual sensors.

The group alarm is based on the analysis of all the sensors within the group. Once the pre-alarm of a single sensor has been triggered, the concentrator will carry out checks along the whole line of the group to confirm the alarm.

MODE: It is the type of programming of the sensors within the group according to the application.

With the RESET mode, the sensor will reset the new axes and will never go into pre-alarm
Gin:By sending a number different from 0 the group will be inhibited for the equivalent in minutes.

By clicking on Outputs, you can access the menu of the outputs *relating to the Group*.

Diagnostica / Configurazione

Gruppo / Gapid Recinzione Ovest: COM1 g1 - COM1 g4

Online

Prima

Primo

Ultima

Ultimo

Sensitiv

Modali

Gin

Online

Disabilitato 0

Offline 0

Allarme 0

Tamper 0

Risonanza 0

Vin Low 0

Test 0

Autoacquisizione per allarme 0

Autoacquisizione per disqualifica 0

Copia >>

Locale

Disabilitato 0

Offline 101

Allarme 102

Tamper 103

Risonanza 0

Vin Low 0

Test 0

Autoacquisizione per allarme 0

Autoacquisizione per disqualifica 0

Invia

Copia >>

Invia

Uscite

The relay outputs of the Adebuss are managed as follows:

Output numbers	Description
1 ... 3	Master outputs.
101 ... 116	Expansion board 1 outputs.
201 ... 216	Expansion board 2 outputs.
301 ... 316	Expansion board 3 outputs.
401 ... 416	Expansion board 4 outputs.
501 ... 516	Expansion board 5 outputs.

N.B.:The outputs are by default in active safety.It is possible to invert all polarities using the right button of the mouse.



14.5 Single sensor configuration

By right-clicking with the mouse on the group, you can access the configuration of the *single Gapid SR*.

Diagnostica / Configurazione

Gruppo / Gapid: COM1 g1

Online

Disabilitato ☐

Sensività

Modalità

Reset assi ☐

Reset ☐

Beep ☐

Gin min

Test ☐

Risonanza ☐

Autoacq. per allarme ☐

Autoacq. per disq. ☐

Formatta Copia >>

Locale

Disabilitato ☐

Sensività

Modalità

Reset assi ☐

Reset ☐

Beep ☐

Gin (0 - 60 min)

Test ☐

Risonanza ☐

Autoacq. per allarme ☐

Autoacq. per disq. ☐

Resetta alla config. del gruppo Invia

Uscite

SENSITIVITY:Sensitivity of the individual sensors, the higher it is, the lower the pre-alarm threshold of the individual sensors.The group alarm is based on the analysis of all the sensors within the group.Once the pre-alarm of a single sensor has been triggered, the concentrator will carry out checks along the whole line of the group to confirm the alarm.

MODE:It is the type of sensor programming according to the application.

GIN:By sending a number different from 0 the group will be inhibited for the equivalent in minutes.

BEEP:The sensor beeps continuously for 1 minute to be identified.

TEST:If 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, alarm, offline signal.



By clicking on system configuration in the main menu you access the algorithm thresholds and the configuration of the inputs.

The screenshot displays the 'Configurazione di sistema' window in the Gapid Explorer application. The interface includes a sidebar with navigation options and a main configuration area. The 'Online' and 'Locale' sections are identical, showing parameters for COM1, COM2, peak time, and various input channels (Ingresso 1-8). The 'Ingresso 1' checkbox is currently unchecked in both sections.

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 recording" flag so that the system records the events in the archive only if input 1 of the Adebus G board is balanced to ground of 1k Ω .

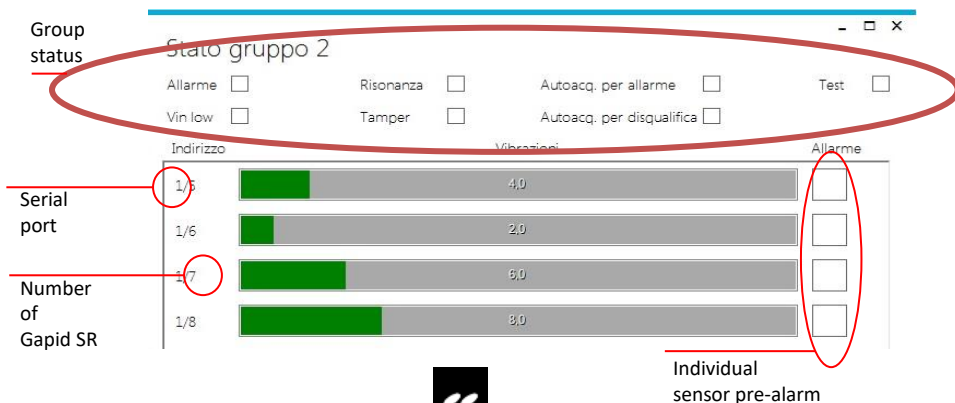
14.6 Operating condition

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

These events will also be associated with Pop Ups, if enabled.



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



15.Configuration and management via web

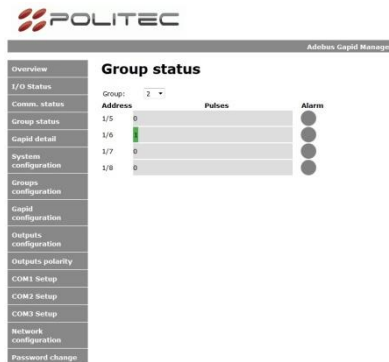
In order to also use the configuration via WEB it is necessary to enable using the appropriate button **Enable config.WEB**

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



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

E.g.Group status:



16.Archive

The **Archive** menu displays the history of the events recorded on the Adebis G board.

Event storage can be enabled or disabled through system configuration.

The Adebis G board maintains a maximum of 32000 events by overwriting the oldest in case of running out of available space. To view a greater number of events, it is necessary to open **.db** database files in the Gapid Explorer work folder using an appropriate program.

Archivio

DateTime	Descrizione	Status	Gapid	Com	Board	EventId
05/12/2018 13:30:13	Allarme	0	2	1	adebus	559
05/12/2018 13:30:13	Allarme	1	1	1	adebus	558
05/12/2018 13:30:13	Allarme gruppo	1	1	0	adebus	557
05/12/2018 13:30:13	Allarme	1	2	1	adebus	556
05/12/2018 08:40:34	Msg. scheda in vita	0	0	0	adebus	555
04/12/2018 08:59:21	Allarme	0	1	1	adebus	554
04/12/2018 08:59:21	Allarme	0	2	1	adebus	553
04/12/2018 08:59:20	Allarme	0	3	1	adebus	552
04/12/2018 08:59:10	Allarme	1	2	1	adebus	551
04/12/2018 08:59:09	Allarme gruppo	0	1	0	adebus	550
04/12/2018 08:59:09	Allarme	1	3	1	adebus	549
04/12/2018 08:59:00	Allarme gruppo	1	1	0	adebus	548
04/12/2018 08:59:00	Allarme	1	1	1	adebus	547

Da data

A data

Scheda

Com

Gapid

Tipo allarme

Max eventi

Esporta

Aggiorna

Chiudi

16.1 Description of events

Group alarm: Alarm recorded on the sensor group after algorithmic analysis on all sensors in the group

Alarm: Pre alarm of the single sensor. This alarm does not imply a Group alarm

Msg. Board in use: In the case of absence of events within 24 hours, a board in use status is recorded

Online: In case of loss of communication on a single sensor, the whole group goes OFFLINE

High BadCom \ Day: In the event that a sensor loses several packets within 24h but not communication, an alert is given. This function can be useful to check if there is a false contact or a slight anomaly on a single sensor.

Tamper: Single sensor tamper: In the event that a sensor within the Group presents a signal, the entire Group goes to Tamper.

Board reboot: In case the Adebis G board is restarted

Board reboot for WatchDog: In case there is an automatic restart of board due to anomaly

Test: Test command on single sensor

Vin Low: In the case of low power supply on a single sensor.

Configurations Reset: In case of complete reset of the configurations

Event reset: In the case of complete reset of events due to anomaly

Status

1: presence of event on Group \ Sensor
0: Group \ Sensor return to rest

COM

1: Serial Line 1
2: Serial Line 2
0: No line, master board

Gapid

1-255: Signalling from the Group \ Sensor
0: Signalling from the Adebis G board

17.Settings

It is possible to change the work folder and the user and admin passwords. The standard user can only view the system status and cannot modify outputs \ configurations.



17.1 Enable pop up

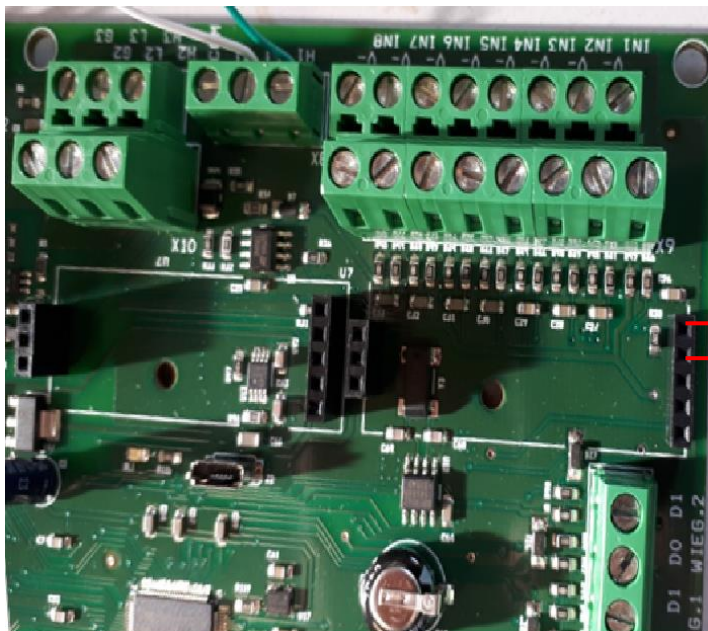
The system allows to use PopUps in case of important system events. During the group configuration phase it is possible to choose which ones to select and enable. These PopUps are linked to the events archive downloaded on PC.



17.2 Reset Adebus G board

It is possible to reset the Adebus G board to the factory settings by performing this procedure:

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



17.3 Advanced configurations - Group

The structure of the Group is shown here. In particular, there is the detail of the address of the first and last sensor in the group. The Online and Local structures must be identical, if a sensor has been inserted or removed from the group, the Structure must be sent using the appropriate button.

The screenshot shows the 'Diagnostica / Configurazione' window with the following elements:

- Gruppo / Gapid:** A dropdown menu showing 'Recinzione Ovest: COM1 g1 - COM1 g4'.
- Online Section:**
 - Prima porta: 0
 - Primo indirizzo: 0
 - Ultima porta: 0
 - Ultimo indirizzo: 0
 - Sensibilità: 0
 - Modalità: Reset
 - Gin: 0 min
- Locale Section:**
 - Prima porta: 1
 - Primo indirizzo: 1
 - Ultima porta: 1
 - Ultimo indirizzo: 4
 - Sensibilità: 1
 - Modalità: Reset
 - Gin: 0 (0 - 60 min)
- Buttons:**
 - 'Reset structure' button between the Online and Locale sections.
 - 'Invia struttura' button to the right of the 'Reset structure' button.
 - 'Invia' button at the bottom right, circled in red.
 - 'Uscite' button below the 'Invia' button.
 - 'Copia >>' button at the bottom left of the Online section.

Diagnostica / Configurazione

Gruppo / Gapid Redinzione Ovest: COM1 g1 - COM1 g4

Online	Locale
Prima porta 0	Prima porta 1
Primo indirizzo 0	Primo indirizzo 1
Ultima porta 0	Ultima porta 1
Ultimo indirizzo 0	Ultimo indirizzo 4
Reset structure Invia struttura	
Sensibilità 0	Sensibilità 1 ☐ Hardware
Modalità Reset	Modalità Reset ☐ Avanzato
Gin 0 min	Gin 0 (0 - 60 min)
Copia >> Invia	
Uscite	

Hardware sensitivity: On board each sensor there is a trimmer that regulates the sensitivity. It is possible to force the sensitivity so that it refers to this trimmer.

Advanced:	Pulse counter	10	(0 - 31)
	Pulse time	10	(0.5 - 25.0 s)
	Event time	0.8	(0.1 - 5.0 s)
	X value	1.40	(1.00 - 2.00)

Pulse Counter: Vibration threshold for pre-alarm of each sensor.

Pulse Time: Vibration reset time

Event Time: Minimum reading time between one vibration and the next

X value: Algorithmic value of group alarm sensitivity: 1.00 Minimum sensitivity

Enable net cut time:

Through this function it is possible to keep the vibration in memory for a timing expressed in days. **N.B.: This function significantly increases the sensitivity of the system.**

Abilita tempo di taglio rete ☒

Tempo di taglio rete (1 - 10 giorni)

During the group reprogramming:

Gapid con configurazione differente rispetto al gruppo:

Nr.	Nome
☒ 1	COM1 g1
☒ 6	COM1 g6

selezionare gli elementi per i quali mantenere le differenze.

Ok

Inverti selezione

Annulla

If there are sensors with a different programming than the group one, this configuration will not be overwritten unless the highlighted flags are deselected. E.g. Gapid SR 1 and Gapid SR 6 have a different configuration than the group, for example less sensitive because the fence is damaged. By rewriting the group programming, you can choose whether to keep the different programming or overwrite it.

Abilita tempo di taglio rete ☒

Tempo di taglio rete

(1 - 10 giorni)

17.4 Advanced configurations - Gapid SR

Enable net cut time:

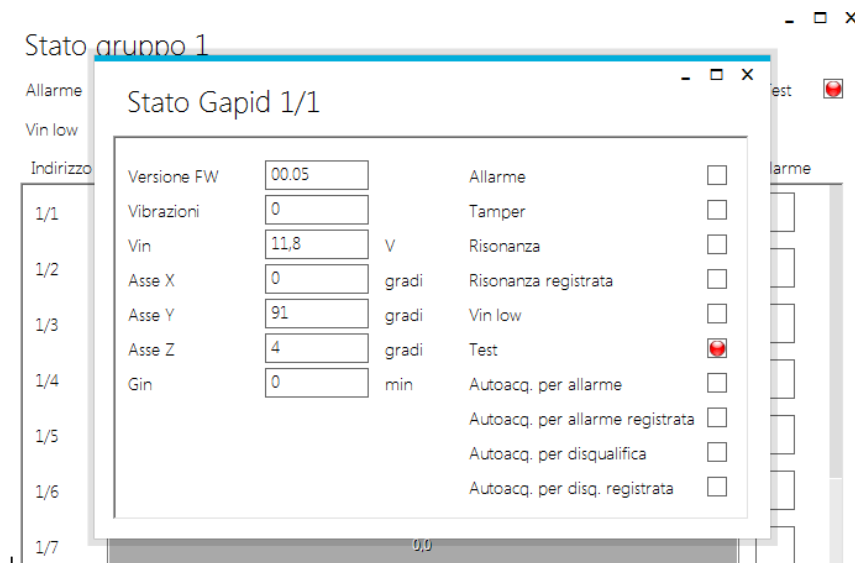
Through this function it is possible to keep the vibration in memory for a timing expressed in days. **N.B.: This function greatly increases the system sensitivity.**

Abilita tempo di taglio rete 

Tempo di taglio rete (1 - 10 giorni)

Resonance:

To use this function, the TEST function must also be activated. With this function it is possible to record the spontaneous vibration of the fence on a single sensor. To register it, it is necessary a single hit to the fence and verify its registration by viewing the status of the single sensor.



Resonance" flag indicates that the sensor has recorded this type of vibration and will be ready to filter it in the future.

Self-acq. For alarm: To use this function, the TEST function must also be activated. With this function it is possible to record a particular vibration of the fence on a single sensor.

To register it, it is necessary a single hit to the fence and verify its registration by viewing the status of the single sensor.

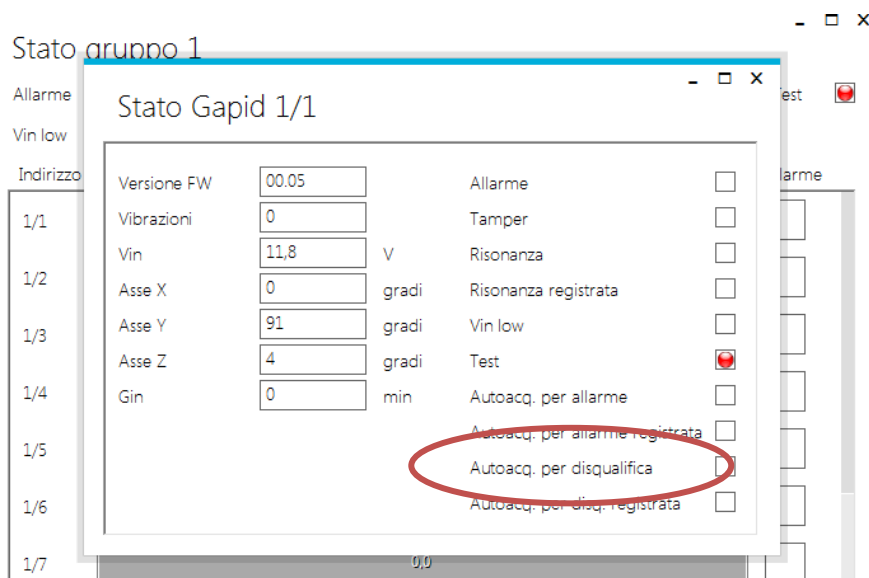
Stato gruppo 1

The screenshot shows a window titled 'Stato Gapid 1/1' with a list of sensors on the left and a detailed status view on the right. The 'Test' checkbox is checked and circled in red.

Indirizzo	Versione FW	Vibrazioni	Vin	Asse X	Asse Y	Asse Z	Gin	Allarme	Tamper	Risonanza	Risonanza registrata	Vin low	Test	Autoacq. per allarme	Autoacq. per allarme registrata	Autoacq. per disqualifica	Autoacq. per disq. registrata
1/1	00.05	0	11,8	0	91	4	0	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐
1/2								☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1/3								☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1/4								☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1/5								☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1/6								☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1/7								☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

The "Self-acq. For registered alarm" flag indicates that the sensor has registered this type of vibration and will send an alarm signal in the future.

Self-acq.By disqualification: To use this function, the TEST function must also be activated. With this function it is possible to record a particular vibration of the fence on a single sensor. To register it, it is necessary a single hit to the fence and verify its registration by viewing the status of the single sensor.



The "Self-acq.by disqualification registered" flag indicates that the sensor has registered this type of vibration and will be ready to filter it in the future.

Reset to group configuration: Retrieve the group configuration and overwrite it with the current configuration

Format: The factory configuration of the sensor is recovered. In this case it is necessary to readdress the sensor.

Configurazione di sistema

Scheda adebus ▼

Online

Gapid su COM1 9

Gapid su COM2 0

Saving time value 30

Percentuale Gapid vicini 20

Massime badcom/giorno 2

Ingresso 1 abilita registrazione ☐

Ingresso 1 0

Ingresso 2 0

Ingresso 3 0

Ingresso 4 0

Ingresso 5 0

Ingresso 6 0

Ingresso 7 0

Ingresso 8 0

Copia >>

Locale

Gapid su COM1 9

Gapid su COM2 0

Saving time value 0

Percentuale Gapid vicini 0

Massime badcom/giorno 0

Ingresso 1 abilita registrazione ☐

Ingresso 1 0

Ingresso 2 0

Ingresso 3 0

Ingresso 4 0

Ingresso 5 0

Ingresso 6 0

Ingresso 7 0

Ingresso 8 0

Invia

Gapid SR on COM1: Number of sensors set on the first serial port

Gapid SR on COM2: Number of sensors set on the second serial port

Saving Time Value: Time interval expressed in seconds to validate the control unit algorithms. The system retains the number of peak vibrations of each sensor for 30s by default.

Close Gapid SR percentage: The system generates a Group alarm if the sensors adjacent to the alarmed sensor have registered a certain number of vibrations. This number is equal to the percentage of the indicated alarm threshold. E.g. If a sensor generates a pre-alarm after 10 vibrations and the percentage is 20%. Adjacent sensors must register at least 2 vibrations.

Max BadCom \ Day: Maximum number of badcoms per day to record an alert

Inputs 2-8: not enabled in the future.



17.6 Advanced configurations - Send group structure

In case of modification of the structures of the groups already configured and programmed, it is necessary to follow the indicated procedure:

- Disconnect from the site
- Modify the desired segments / groups via Configuration Mode
- Connect to the site
- Click the "SEND GROUP STRUCTURE" button
- If necessary, modify the programming \ sensitivity \ outputs of the groups.

17.7 Advanced configurations - Logout

Through software it is possible to access only with one user at a time. It is therefore necessary to log out before exiting the program so that another user can immediately access the site.

18.Gapid SR Technical characteristics

MAXIMUM COVERAGE AREA	5 m in diameter
PROGRAMMING	Adebus with RS485 serial connection
FUNCTIONS	6 Standard Application Functions 3 self-learning functions (1 for alarm and 2 for non-alarm)
POWER SUPPLY	From 7 - 24 Vdc directly from Adebus
ADDRESSING	Automatic
TECHNICAL SIGNALS OUTPUT	Deactivation / Off line
OUTPUTS	Alarm Directly on serial Tamper Directly on serial
Dimensions (WxHxD)	98 x 66 x 25.5mm
MATERIAL	Anti-scratch, UV-resistant black polycarbonate
PROTECTION DEGREE	IP 66
OPERATING TEMPERAURE	-40°C +80°C
SERIAL CABLE	A + B + 2x0.75 mm shielded with removable terminal board suitable for outdoor use
MOUNTING KIT INCLUDED WITH SCREWS AND METAL PLATE	
2 YEAR WARRANTY	

19.Adebus Gapid Technical characteristics

ENABLED FOR PRODUCT COMMUNICATION	256 Gapid SR
MANAGEMENT SOFTWARE	Proprietary software complete with graphic interface with plan for sensor localisation and configuration
SERIAL PORTS	2 RS485 including 1 optional
SERIAL BUS LINE LENGTH	750m for each line with indicated cable
EVENT STORAGE CAPACITY	32000 exportable
COMMUNICATION OUTPUT	LAN
LIVE VIEWING	Status of each sensor or group
INTERFACE OUTPUTS	3 Relays on Adebus SC 16 Relays on Adebus ESP (accessory) up to 4 Adebus ESP
POWER SUPPLY	220V with dedicated 13.8V power supply
BATTERY HOUSING	12V up to 17Ah
IP DEGREE OF PROTECTION	IP 44
Dimensions (HxWxD)	400 x 320 x 135 mm

20.Product Disposal

All components of the product are an integral part of the equipment and must be disposed of together with it.

Just as with installation operations, also at the end of life of these products, the dismantling operations must be carried out by qualified personnel.

These products are made up of various types of materials: some can be recycled and others must be disposed of. Find out about available recycling or disposal systems for this category of products governed by regulations in force in your area.

Warning!- Some parts of the products may contain polluting or dangerous substances which, if dispersed in the environment, could result in harmful effects on the environment itself and on human health.

As indicated by the symbol on the side, it is forbidden to throw these products in domestic waste.

Therefore, carry out "separate collection" for disposal, according to the methods stipulated by the regulations in force in your area or return the products to the seller when purchasing a new equivalent product.

Warning!- Local regulations can impose heavy penalties for incorrect disposal of these products.



For technical support, contact your security
systems distributor