

GSN-KEY

FOR REPROGRAMMABLE ELECTRONIC LOCK E-PRL

ACCESS CONTROL KIT

User manual





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0	01.09.2017	First issue
1	02.10.2017	Add "Incorrect POD recognition"



Congratulations on choosing the E-PRL reprogrammable electronic lock system.

WE RECOMMEND YOU READ THIS USER MANUAL BEFORE USING THE SYSTEM

GENERAL DESCRIPTION AND "ACCESS CONTROL KIT" CONTENTS

- ✓ The "ACCESS CONTROL KIT" contains:
 - No. 1 POD with stainless steel interface for key reading
 - No. 1 USB data key containing the GSN-KEY software, POD recognition drivers, user manuals, and SQL database configuration script, required for the multi-user version
 - No. 1 DOWNLOAD key (blue)

HOW TO USE THE SOFTWARE

- ✓ The GSN-KEY software is the software used for managing access control of the E-PRL system and can be used in the following modes:
 - Mono-user: The database containing the registry and access history is saved on a single PC. Therefore, you will need to
 always log on to this computer to update the master data and events from time to time. To make this configuration,
 you need to follow the instructions in the chapter "Installing Software on a Local PC"
 - Multi-User: The database containing the registry and access history is saved on a Microsoft SQL Server and shared with all computers connected to it over the network. This way, any changes made by a single computer are automatically shared with everyone else. To do this, you must follow the instructions in the chapters "Installing Software on Local a PC" and "Client-Server Configuration"

INSTALLING SOFTWARE ON A LOCAL PC

- ✓ MINIMUM PC REQUIREMENTS
 - Microsoft Windows XP or superior operating systems
 - 500 MB of free hard disk space
 - No. 1 USB port
- ✓ Copy the "Driver POD FTDI CDM21210 Setup" and "GSN_KEY Installer EN" folders to a local folder on the USB stick supplied with the kit.

✓ INSTALLING DRIVERS FOR POD RECOGNITION

Perform installation of the necessary files for POD recognition as the first step: launch the executable file
 (.exe) inside the "Pod Driver - FTDI CDM21210 Setup" folder and click on the EXTRACT button

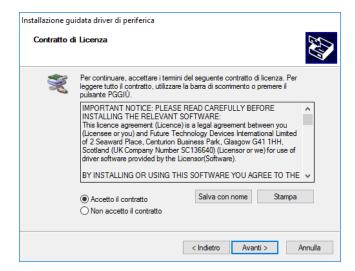




Click AVANTI



• Please read carefully, then select "Accetto il contratto" and click AVANTI



• Wait for the installation to end, it may take up to 1 minute and then, click FINE



• Driver installation is complete. The POD can now be recognized by the GSN-KEY access control software

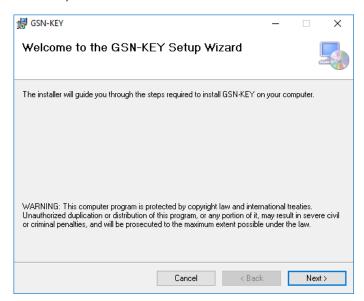


✓ INSTALLING GSN-KEY SOFTWARE

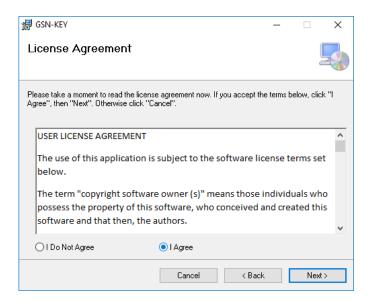
- Launch the SETUP.EXE file in the "GSN_KEY Installer EN" folder
- If you do not have the following packages on your computer:
 - o .NET Framework 3.5 SP1
 - SQL Compact 3.5 Service Pack 2
 - o Visual Studio 2010 Report Viewer

The installer will propose their installation. Click "I Accept" to confirm the installation

Once the GSN-KEY Setup Wizard starts, click "NEXT"

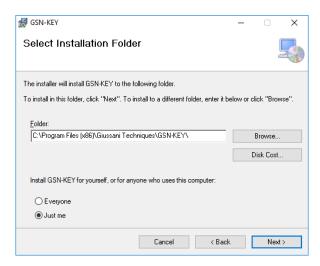


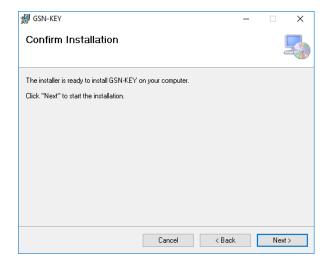
• Please read carefully, select "I accept" the license agreement and click "NEXT"



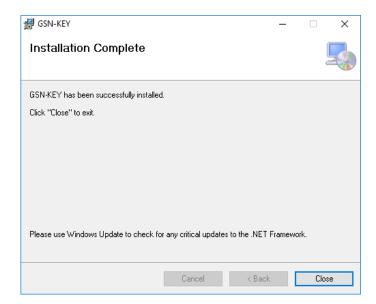


• If necessary modify the path where the software will be installed and select the installation that can be used for all PC users. Click "NEXT" and again "NEXT" also in the next window.





Wait for the installation of the program to take place in a few seconds and click "CLOSE"



- The software is now installed and ready for use. The GSN_KEY icon (link to the program's executable file) will be visible on the PC desktop, use this to launch the program.
- Delete the installation files copied to a local folder, as indicated in the first step of this procedure
- At the first run of the program, the folder will automatically be created, which will later contain the database with access records and logs. The exact path, useful for backing up the data, is as follows:
 C: \Users \"USER NAME \" \ Documents \ GSN-KEY \ GSN-KEY.sdf



CLIENT-SERVER CONFIGURATION

✓ Perform "Install Software on a Local PC" on page 2 on all PCs (clients) that should be enabled to use GSN-KEY software with server-to-server sharing.

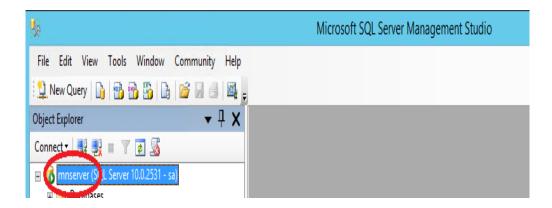
✓ SERVER REQUIREMENTS

- Microsoft Windows Server operating system
- Database Microsoft SQL Server

✓ DATABASE CREATION

- Manually create a database in SQL Server using the "Sql Server Management Studio" tool: the database name (catalogue) must be "GSN-KEY"
- Always within the "Sql Server Management Studio" tool, select the database and run the "create GSK-KEY DB.sql"
 configuration script on the USB data key provided with the kit. This script will create all tables needed to initialize the
 database.

Note the name of the SQL Server instance (e.g. "SERVER\ MSSQLSERVER" or "SERVER") as it will be used to configure the clients. To identify the instance, open the "SQL Server Management Studio" program and, after logging in, check the text of the first line. In the example below, the instance is "mnserver".



✓ CLIENT CONFIGURATION

- There is a file named "GSN_KEY.EXE.config" in the client folder where the program was installed. Open the file with a text editor (you can also use "Notepad").
- Identify the line <add key = "MultiUser" value = "False" /> and change the "False" value to "True" for the line to become <add key = "MultiUser" value = "True" />
- Identify the **line <add key = "DBConnectionString" value = "" />** and enter the connection data to the Sql server as shown below. For example, the full line might be:

<add key="DBConnectionString" value="Provider=SQLOLEDB; Data Source=mnserver; Password=sa;User ID=sa;
Initial Catalog=GSN-KEY" />

In this line, **Data Source** is the name of the instance of the Sql Server (in this case **mnserver**) and User and Password must only be entered if the database has been password protected.



- Repeat this operation on all clients that you want to enable database sharing on the SQL Server.
- Once this procedure is complete, any entry or modification of the registry and any update of the event history that occurrs on one of the connected PCs will automatically be available to all other clients connected to the same server.

ATTENTION: In multi-version mode, all workstations accessing the same SQL database must be configured with the same language.

LANGUAGE SELECTION

- ✓ The GSN-KEY software allows you to choose the reference language
 - 1. Click on the "SETTINGS" menu
 - 2. Choose your desired language
 - 3. Confirm by clicking "OK"
- ✓ The software will restart automatically and start up with the language chosen

CONNECTION AND CORRECT POD RECOGNITION

- ✓ After installing the software, connect the POD to your PC via the supplied USB cable.
- ✓ Wait for the BLUE colour LED to blink
- ✓ Launch the GSN-KEY software
- ✓ The item on the "POD" menu must change from red to green. The POD in this case has been properly recognized. If it is not recognized and then remains in the red menu item, contact technical support.

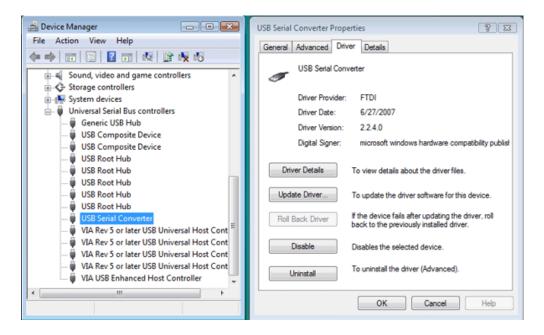




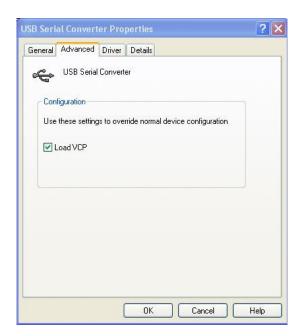


INCORRECT POD RECOGNITION

- If the POD is not properly recognized (due to Windows protections) and the light on the "POD" menu do not pass from red to green, close the GSN-KEY software and follow the procedure below.
 - 1. Right-click on the "Computer" icon (Note: Depending on the version of Windows, the icon name may change) and select "Properties"
 - 2. Select "Device Manager"
 - 3. In the window with device list select "Universal Serial Bus Controller" and then "USB Serial Converter". Right-click and select "Properties"



4. Select "Advanced", place flags in the "Load VCP" box and click on "OK"





- 5. Remove the USB connector of the POD from the PC and re-insert it.
- 6. Launch the GSN-KEY program again. The POD will now be recognized and the light on the "POD" menu will have to change from red to green.

MENU ITEMS

✓ POD - indicates the presence and correct connection of the POD to the software

✓ ACCESSES - database of all logged and downloaded accesses to the software

✓ COMPANIES - name and location records of companies stored in the system

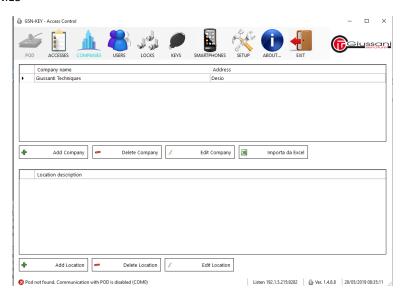
✓ OWNERS - record of all users stored in the system
 ✓ LOCKS - record of all locks stored in the system

✓ KEYS - record of all keys stored in the system

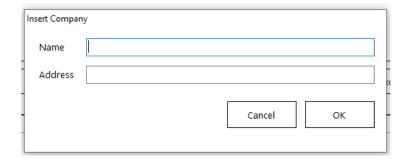
✓ SETTINGS - language selection
✓ EXIT - quit the program

INSERTING COMPANY DETAILS

- As a first step, we recommend you enter the companies and their locations where the locks will be installed, and of which you want to check the access data.
 - Click on "COMPANIES"



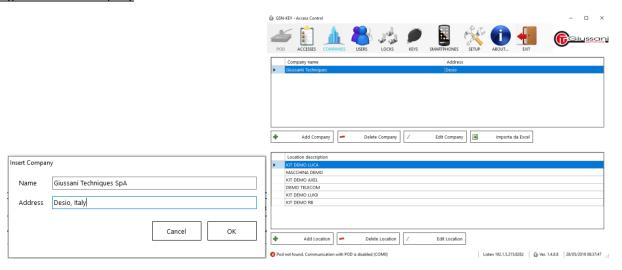
• Click on "ADD COMPANY"





• Enter the company name and address and click "OK"

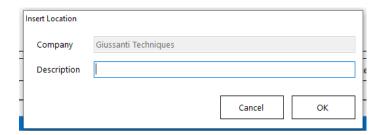
ATTENTION: The company's address is not mandatory and if you desire you can enter any reference for the user's recognition of the company



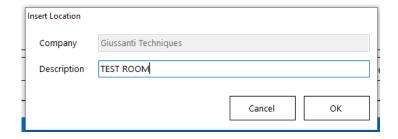
 Once the company data has been saved, repeat the operation for all companies that will be managed by the GSN-KEY software

Attention: Companies can be added or deleted at any time

- ✓ After inserting the companies, insert their location: rooms machines places where the locks will be installed that will require access control
 - Select by clicking on, the company's location that you want to save
 - Click "Add Location"

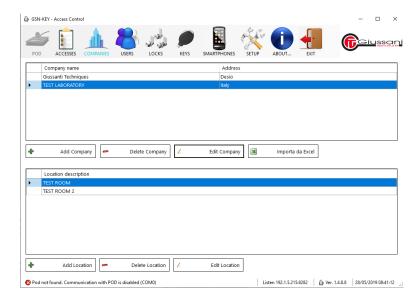


• Enter references in the "Description" field that can clearly and uniquely indicate the location and then click on "OK"





Repeat the above described operation for all locations of all previously saved companies



- ✓ At any time, you can delete a company or location from the database or edit the data already entered using the menu items that are present in both the part dedicated to the companies (top part) and the part dedicated to the locations (lower part)
- ✓ In the case of users authorized to open the locks of multiple customers (e.g. vending machine maintenance located in the territory) it is advisable to save the data of the company that is responsible for opening the locks (operator). You can use the location field to identify the position of the locks at the customers' sites.

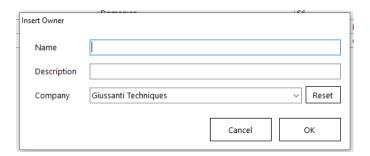
INSERIMENTO ANAGRAFICHE UTILIZZATORI

- ✓ After registering companies' data, it is recommended to save also users' data. Users are operators or people who have occasional or permanent access to a key enabled to program, open or download data from the locks that you want to control access of.
 - Click on "USERS"

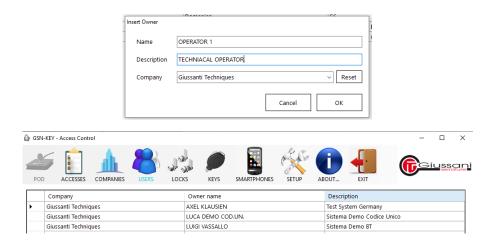




Click on "ADD USER"



- Fill in the fields and then click on "OK"
 - o Indicate the user's name or reference
 - Indicate a description that may facilitate the identification of the user
 - o Choose from the drop-down menu "Company" the company belonging to the user between those coded above.



 Once the company has been loaded, repeat the operation for all companies that will be managed by the GSN-KEY software

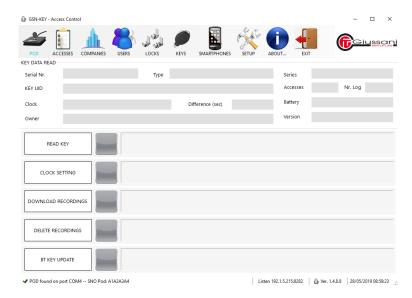
Attention: Companies can be added or deleted at any time

KEY PAIRING

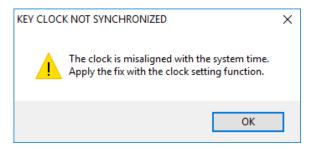
- ✓ For correct access management, all keys (MASTER, USER, and DOWNLOAD) must be registered in the software database and the USER key (black) clock must also be synchronized with the first recording.
 - Insert the key into the lock on the POD and turn it clockwise until the end of travel; The key will remain in this way inserted without having to be held manually



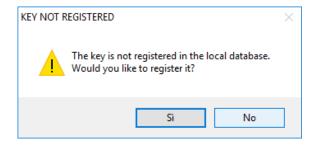
• Click on "POD" in the GSN-KEY software



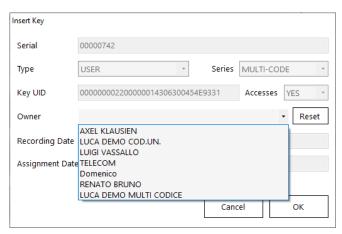
• Click on "KEY READING". For USER keys (black) a window will appear indicating the need to set the clock on the key. Click on "OK"



• A window will appear that will signal the unpaired key and ask if you want to pair it. Click "Yes"

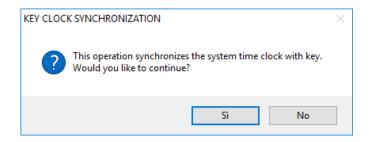


• A window will appear showing the main key data and from here you will have to select the "USER" drop-down menu the user to whom the key is to be paired. Select the user and click "OK"

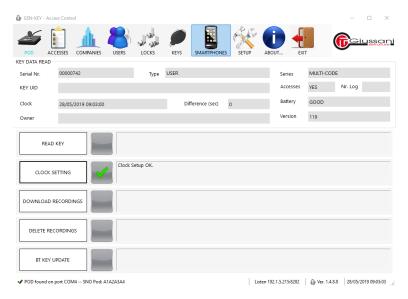




- The system will automatically return to the POD menu.
- Attention: only for USER keys (black) click on "CLOCK SETTINGS" and click "YES" on the window that will appear



The correct setting of the key clock is indicated by "clock setting ok " next to the "CLOCK SETTING" menu item



Attention: We recommend, if possible, to repeat the clock synchronization operation as described in this chapter once a month on USER keys (black).

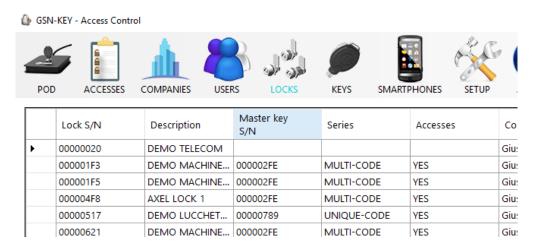
• In order to verify that the key is correctly paired, it is recommended that you launch the "Key Reading" command before extracting from the POD. In the key data the USER will now appear and only for the USER Key (black) the "Difference (sec)" entry should be equal to 0 (zero) or with a difference between -100 and +100 (sec)



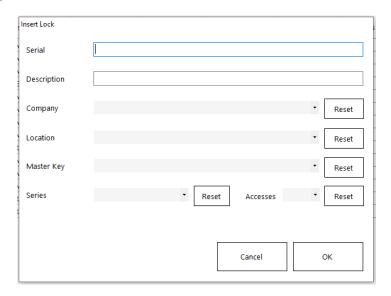


INSERTING LOCK DETAILS

- ✓ For proper access control, the locks must be registered in the software database. Locking can be performed both before installation and after installation. The IDENTITY LOCK CARD delivered together with the lock at the time of purchase is required for registering the lock.
- ✓ To register the lock, the only field in the menu to be filled in is the SERIAL number. All other fields are optional and can be filled in or modified later by selecting the lock and clicking on "Modify Lock"
- ✓ To enter the details:
 - Click on "LOCKS"



Click "ADD LOCK"

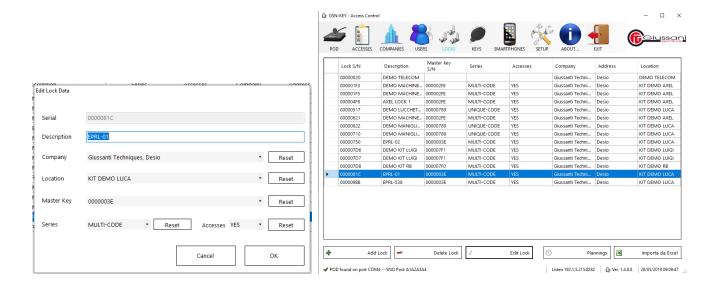


• Insert the Serial Number (S/N) present on the label included with the lock at the time of purchase





- Fill out the remaining fields (OPTIONAL) and then click on "OK"
 - o Include a description that may facilitate the identification of the lock
 - o Choose from the drop-down menu "Company" the company where the lock is / will be installed
 - o Choose from the drop-down menu "Location" where the lock will be installed in the company
 - Choose from the drop-down menu "Master Key" the MASTER key (red) that you have chosen to pair the lock between the previously registered MASTER keys



Once the lock is registered, repeat the operation for all the locks that must be managed by the GSN-KEY software
 <u>Attention: locks can be added or removed at any time</u>

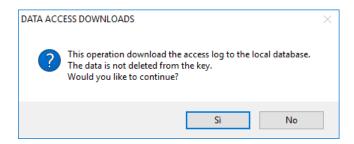
DOWNLOAD LOG OF ACCESS EVENTS WITH DOWNLOAD KEY

- ✓ The following operation is to be performed after downloading the access logs present on the locks. It is assumed that the data download process has been done using the DOWNLOAD key (blue) described in the "E-PRL MULTI-CODE" and "E-PRL MONO-CODE"
 - Insert the DOWNLOAD key (blue) into the stainless-steel interface of the POD and rotate it clockwise until the end of travel; The key will remain in this way retained in the interface and you will not have to keep it manually inserted
 - Click on "KEY READING" in the GSN-KEY software. "No. Log "indicates how many access logs are present on the key.





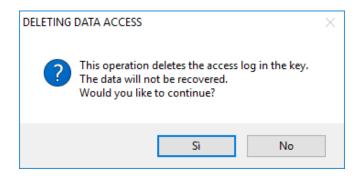
• Click on "DOWNLOAD RECORDINGS" and click on "YES", the window that will appear informs you that the data on the DOWNLOAD key will not be deleted automatically but will have to be deleted later with a different procedure.



• The data has been downloaded to the database and the software will show how many access logs exactly were transferred. The data in the DOWNLOAD key memory that was previously downloaded and not deleted from the key memory will not be copied back to the database but ignored as the following screenshot shows

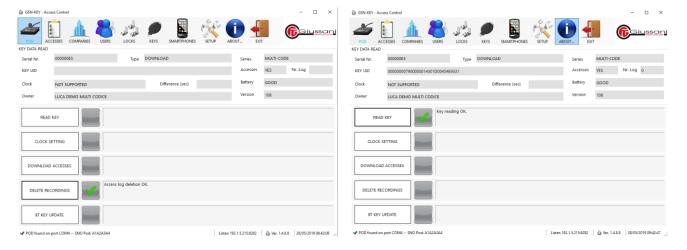


• Data is copied to the database and it is now advisable to delete the data stored on the DOWNLOAD key. Click on "DELETE RECORDS" and click "YES" on the next warning window that reminds you that all the data on the key will be deleted.





• The data is deleted from the key. To confirm, click on "READ KEY" and verify that the "No. Log "is equal to 0. Now you can remove the DOWNLOAD key from POD



ACCESSES

✓ AVAILABLE FILTERS AND PRINT REPORTS

- By clicking on the "ACCESSES" menu, you can access the database with all the access logs transferred to the GSN-KEY software.
- The filters on the left side of the window can be used for easier access consulting. To activate filters, tick the box "Active Filters". If not checked, filters will not be active.

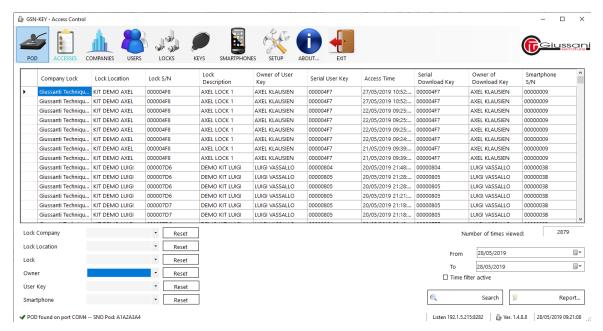
Company Lock
 Lock Location
 Allows you to view all accesses performed on the locks of a specific company
 Allows you to view all accesses performed on the lock in a specific location

Lock
 Allows you to view all accesses performed on a specific lock

o User Allows you to view all accesses performed by a specific operator / user

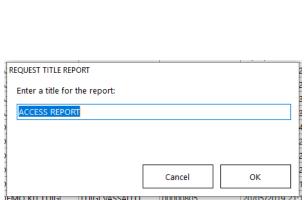
User Key
 Allows you to view all accesses by a specific user key

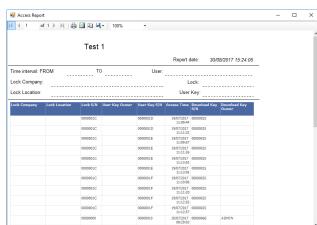
- The "Reset" button at the side of the individual filters allows you to cancel the previously selected item
- The time filter on the right side of the window allows you to view all accesses made within a defined period of time. The filter is activated by ticking the "Active Time Filter"





- Other items in the "ACCESSES" window
 - "Report": Allows you to generate an access report that was displayed at that time. The generated report can be printed or exported to PDF, WORD, and EXCEL file formats.





"Number of accesses displayed": indicates the number of accesses in the "ACCESS" window

✓ MESSAGES VISIBLE IN THE ACCESSES WINDOW

• List of visible messages in the "Access" window

o Company Lock indicates the company where the lock installed has been accessed

Lock Location indicates the location of the lock that has been accessed
 Lock Serial indicates the serial number of the lock that has been accessed

o USER key user indicates the USER key used to open the lock

 $\circ \quad \text{USER key Serial} \qquad \qquad \text{indicates the serial number of the USER key used to open the lock} \\$

Access time indicates the day, month, year and time the lock was opened

DOWNLOAD key serial indicates the serial number of the DOWNLOAD key used to download the data

for an the dealer

from the lock

o DOWNLOAD key user indicates the owner of the DOWNLOAD key





DECLARATION OF CONFORMITY'

Giussani Techniques S.p.A. Declares that the E-PRL system meets all the requirements applicable to the type of product and required by telecommunications regulations in accordance with Directive 2014 / 30UE and 2011/65 / EC, using the rules published in the Official Journal of the European Community.



The CE Certificate of Conformity can be downloaded from www.giussanilocks.it