

ACADEMY

ALIENTECH

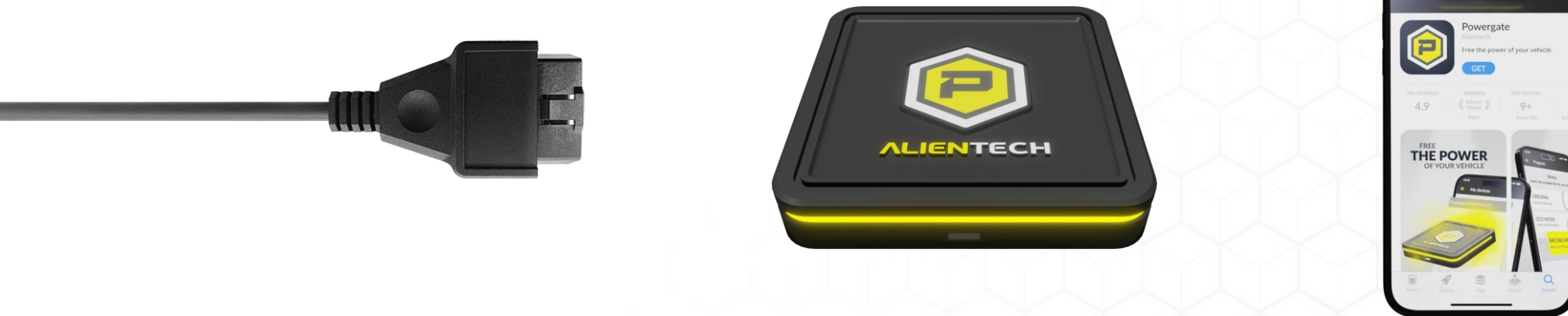
POWERGATE



What is Powergate?

Powergate is the next-generation portable ECU programmer for automobiles and motorcycles, created to provide every driver with a personalized driving experience for their vehicle. It only takes a few simple steps to follow on the Powergate App, which is compatible with most common smartphones.

Powergate allows you to read and write an ECU, TCM and/or UDM with unique simplicity and intuitiveness—a generational leap from the previous Powergate3+ version, with a compatibility way larger over its predecessors.



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Technical Specifications



Dimensions:

10 x 10 x 2 cm;

Weight:

135 g.

Features:

GPS, Accelerometer, Bluetooth and Wi-Fi

Compatibility:

Android version 7.0 and higher;

EMUI version 7.0 and higher;

iOS version 12.0 and higher.

OBD DB25 connection:

Powergate is compatible with both car and motorcycle OBD cables.

Powergate RGB

A distinctive detail of Powergate is its integrated opal LED light guide. This element provides visual feedback to the User through the use of colors. Each color corresponds to a Powergate status.

Yellow: Powergate is ready to operate;

Blue: Bluetooth/Wi-Fi pairing;

Red: Operations in progress;

White: Firmware update in progress;

Green: Notice of operation completed;

Violet: Wi-Fi Module update in progress.



Powergate App

The Powergate App is the User's interface. Compatible with the most popular smartphone operating systems (iOS, Android and EMUI), it offers an intuitive tuning experience by customizing vehicle performance.

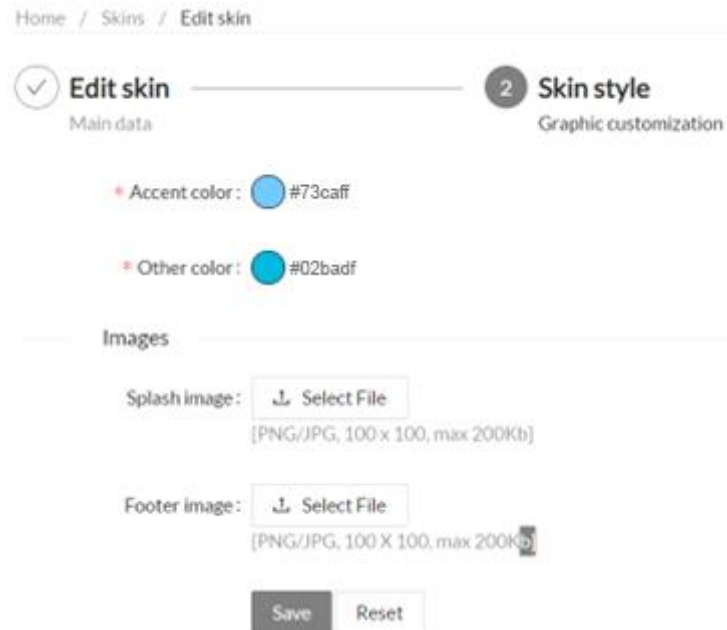
It is also possible to customize the skin: an effective tool for the Powergate Manager to create a distinctive visual identity, transcending geographic boundaries and differentiating from the competition.



Custom Skin

On the Dashboard you can edit the «Template», starting with the «Skin».

You can then choose a primary and secondary color as well as a "Splash" image (image shown at application startup) and the "Footer Image" (image at the foot of the screen).

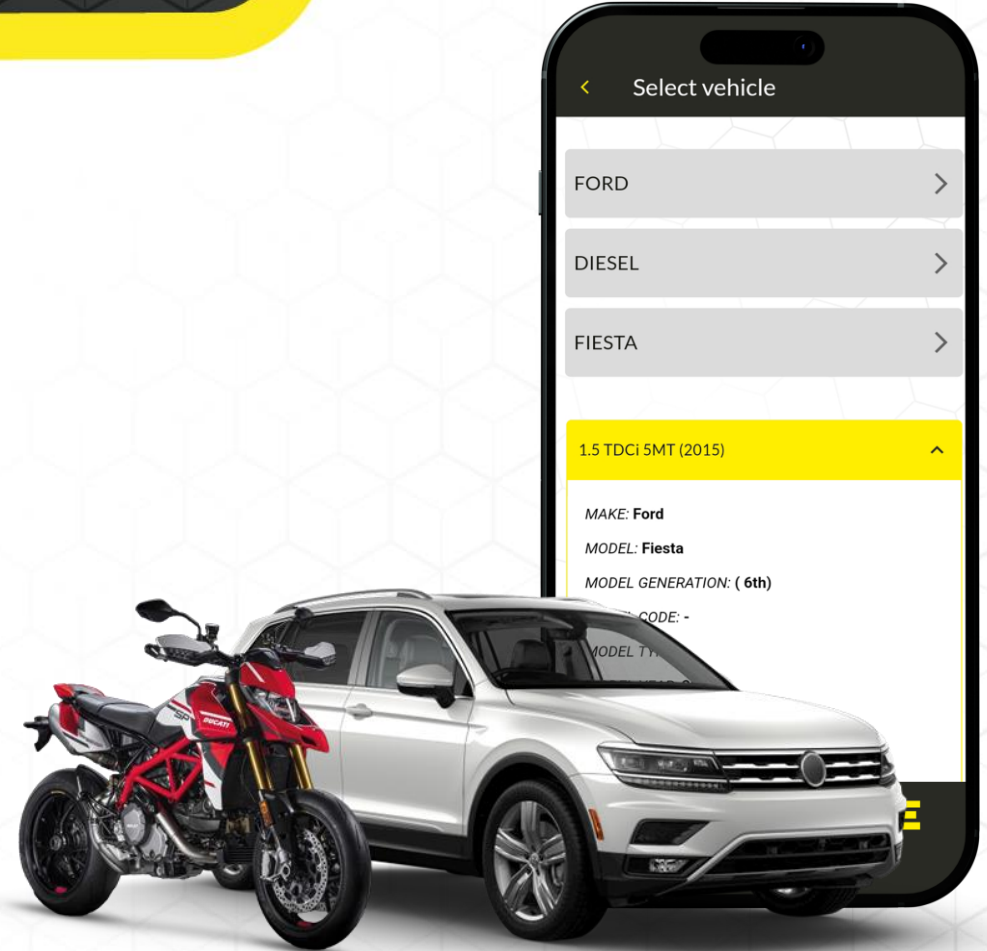


Vehicle List

The Powergate Manager can operate on hundreds of thousands of vehicles, providing comprehensive, fast, and effective service to a wide range of customers worldwide.

In addition to customizing the appearance of the application, it is also possible to modify which vehicles are accessible by the User.

It is then possible to filter the list down to a single vehicle, even before the User's association with the ECU itself.



File access level

For each Powergate, up to 4 modified files can be uploaded. The User can access the level set in Dashboard from the Powergate Manager.

In this example, two files have been uploaded but the User will only have Level 1 available for writing. This happens because of the setting that restricts its use of the second uploaded file.

Level 1	Level 2	Level 3	Level 3+
<p>Available for writing</p> <p>10/17/23 10:22:33 AM Name: 03L906018BC_9979 Stage1 Mod_NoCS.mod Description: 420Nm/3600RPM (Dyno 426Nm) ↗ Calibration code: 03L906018BC_9979 🗑 MD5: C90F539FAD58F2EB02589115 389FB808</p>	<p>Not available for writing</p> <p>10/17/23 10:23:44 AM Name: GTD_Livello2.MOD Description: 420Nm/4400RPM +InjectionTime ↗ Calibration code: 03L906018BC_9979 🗑 MD5: A5EEEEBE48AD75A744DCB664 3125CE25C</p>	<p>📁 Select File</p> <p>Validate</p>	<p>📁 Select File</p> <p>Validate</p>

File access level [?](#)

1 2 3 3+

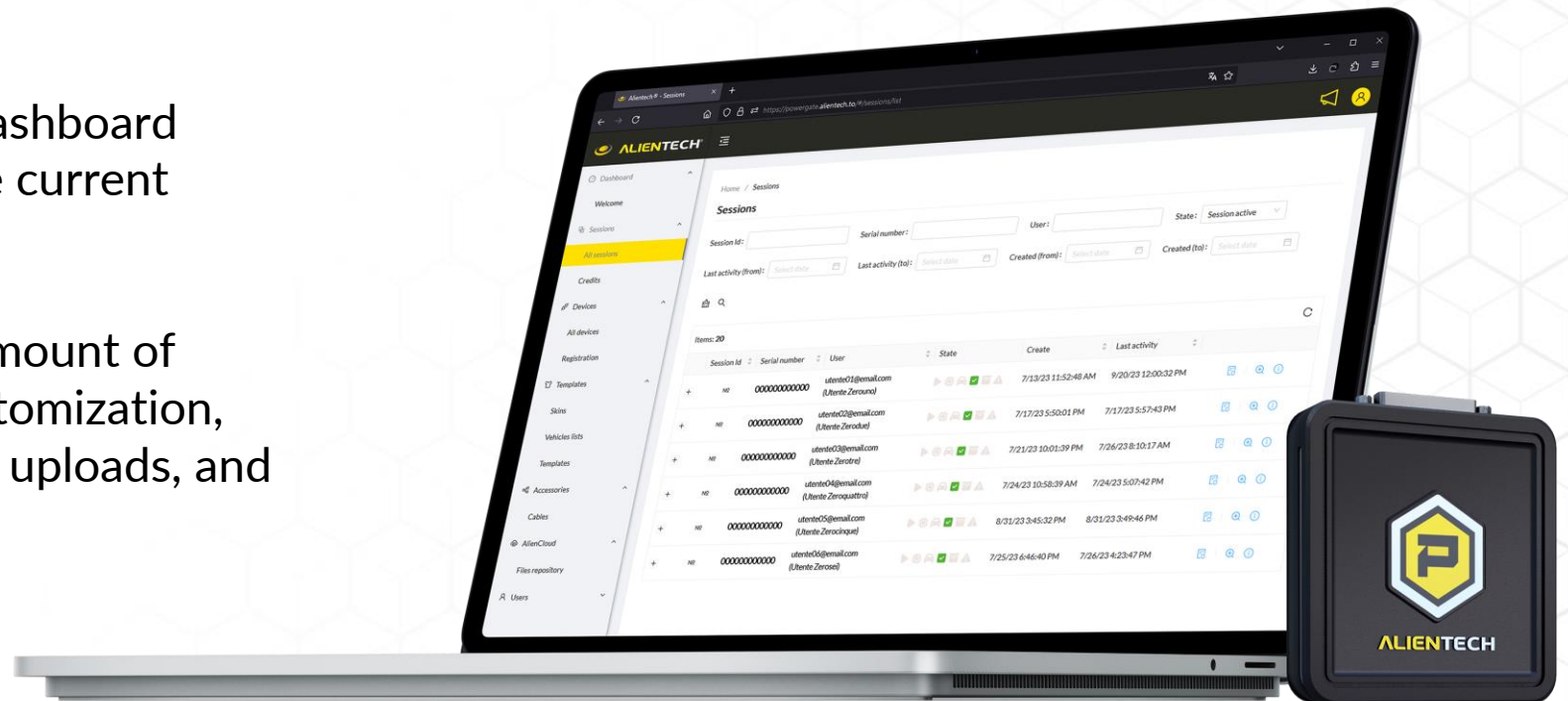
Powergate Dashboard

The Dashboard is the control panel dedicated to the Powergate Manager, who can access it using his or her credentials.

With cross-search capabilities, the Dashboard allows you to monitor in real time the current activities on your active device fleet.

On the Dashboard you can see the amount of sessions, number of devices, skin customization, vehicle list and template, User profile uploads, and modified files.

For ease of navigation, the Dashboard is divided into 5 macro blocks.



Powergate Dashboard

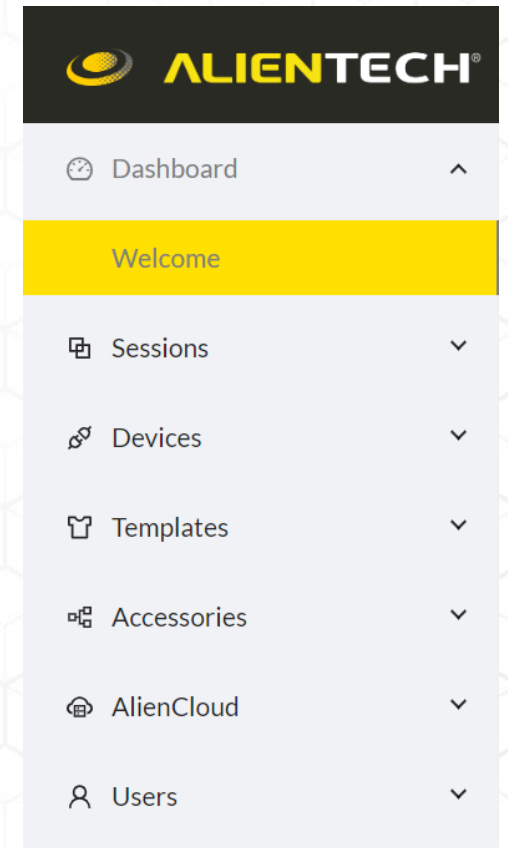
Sessions: from this section it is possible to keep track in real time of the status and number of active, archived, or ongoing sessions on the associated Powergates.

Tools: this section allows autonomous management and editing of the associated Powergates.

Templates: the templates allow the Powergate Manager to assign a Powergate to each User. They include the custom skin for the application, the list of compatible vehicles and their original and modified files, which can be associated in Cloud or manual mode.

User Profile: in this section it is possible to upload User profiles by managing the list of associated vehicles, customizing it or limiting it to a single vehicle if necessary.

Status Bar: the status bar on the Dashboard is the real-time monitoring tool of the sessions and all the operations performed by the User and the tool.



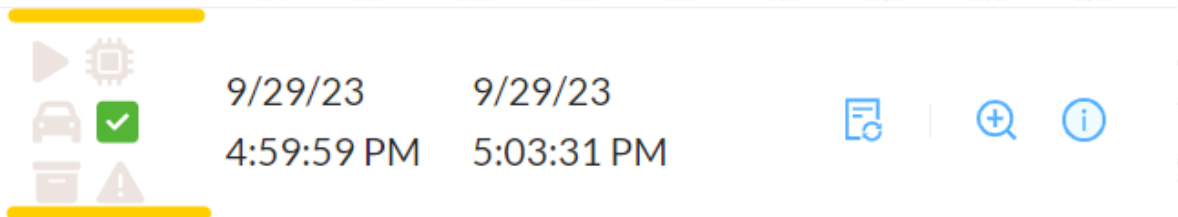
Powergate Monitoring

Under the status bar in the Dashboard, it is possible to monitor in real time all current activities and results obtained.

Six key statuses are represented on the bar with dedicated icons indicating the current operation.

- **NEW:** start of a session.
- **DEVICE ASSIGNED:** assignment of a device to Powergate.
- **VEHICLE ASSIGNED:** association of a vehicle to Powergate.
- **SESSION ACTIVE:** the User or the system is working on dat - or operations.
- **SESSION ARCHIVED:** session ended and results recorded.
- **ERROR:** warning of problems during an operation.

Each session begins when a vehicle is selected from the vehicle list by the User. From this moment, Powergate establishes a connection, specific to the chosen vehicle, allowing operations such as identification, reading and writing of the ECU.

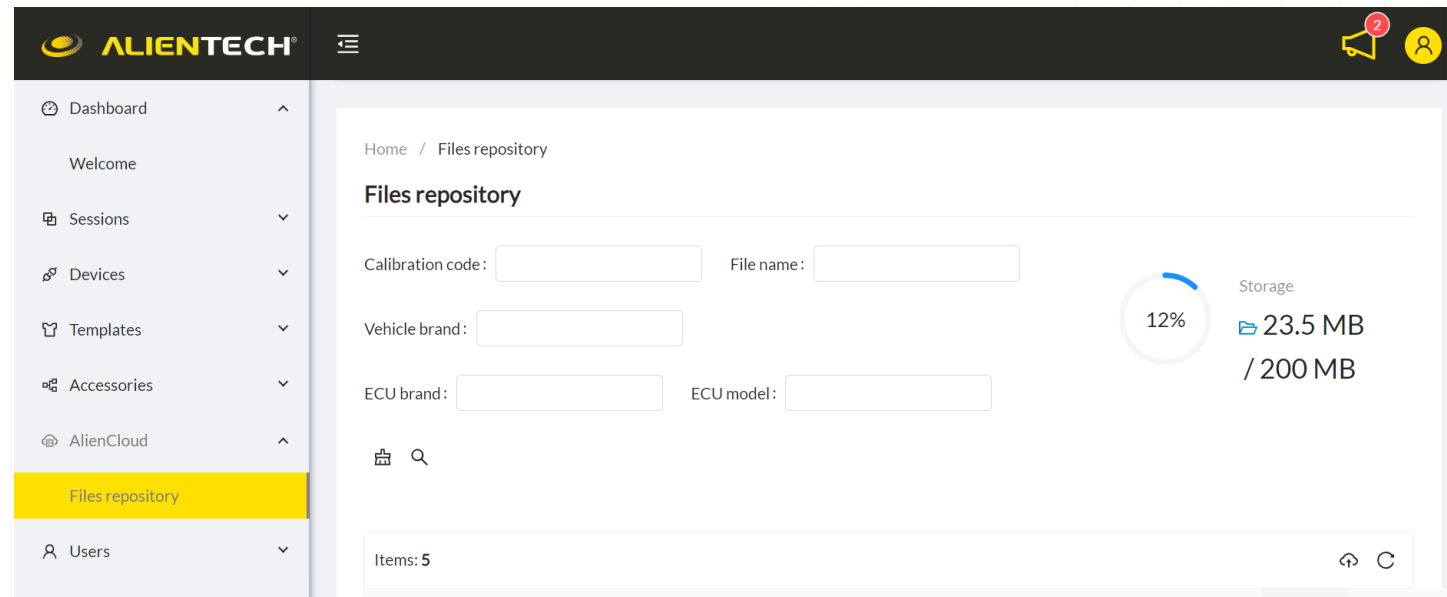


Powergate Cloud

Thanks to the Cloud, the Powergate Manager manages files with great ease.

The Powergate Manager can associate the same modified (encrypted) file with multiple Users as long

as the original file matches the one already in the Alientech database. This means that several Users can benefit from a single modification.



The screenshot shows the Alientech Powergate Manager interface. The top navigation bar includes the Alientech logo, a menu icon, a notification bell with a '2' badge, and a user profile icon. The left sidebar contains a navigation menu with items: Dashboard, Welcome, Sessions, Devices, Templates, Accessories, AlienCloud, Files repository (highlighted), and Users. The main content area is titled 'Files repository' and features a breadcrumb 'Home / Files repository'. Below this, there are several input fields for file metadata: Calibration code, File name, Vehicle brand, ECU brand, and ECU model. On the right side of the main area, there is a storage usage indicator showing a 12% progress bar and the text 'Storage 23.5 MB / 200 MB'. At the bottom of the main area, it displays 'Items: 5' and a refresh icon.

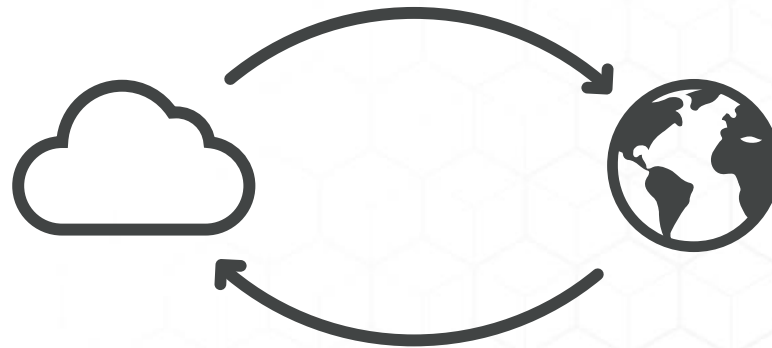
Powergate Cloud

The Cloud also provides a large online storage space (200 MB) where all the details of the modified files and associations with the original files are stored.

If automatic file association is enabled, the Cloud automatically matches the modified files to the originals read or downloaded from the Alientech Database.

This allows the User to receive the modified files on his or her Powergate without any intervention.

Finally, an additional benefit of the Cloud mode is the ability to add and sell new files at a later time, making the system extremely flexible and customizable to the customer's specific needs.



Comparative



	Powergate3+	Powergate
Interface	Touch screen	Smartphone
File management	Dedicated SW	Online Dashboard
Vehicle List	10.000 +	18.000 +
Virtual Decoder	NO	YES
Virtual Reading	NO	YES
Cloud	NO	YES
Powergate App	NO	YES
Dimensions	13,5 x 9 x 2 cm	10 x 10 x 2 cm
Weight	158g	135g
GPS	NO	YES
Bluetooth 6.0	NO	YES
Accelerometer	NO	YES

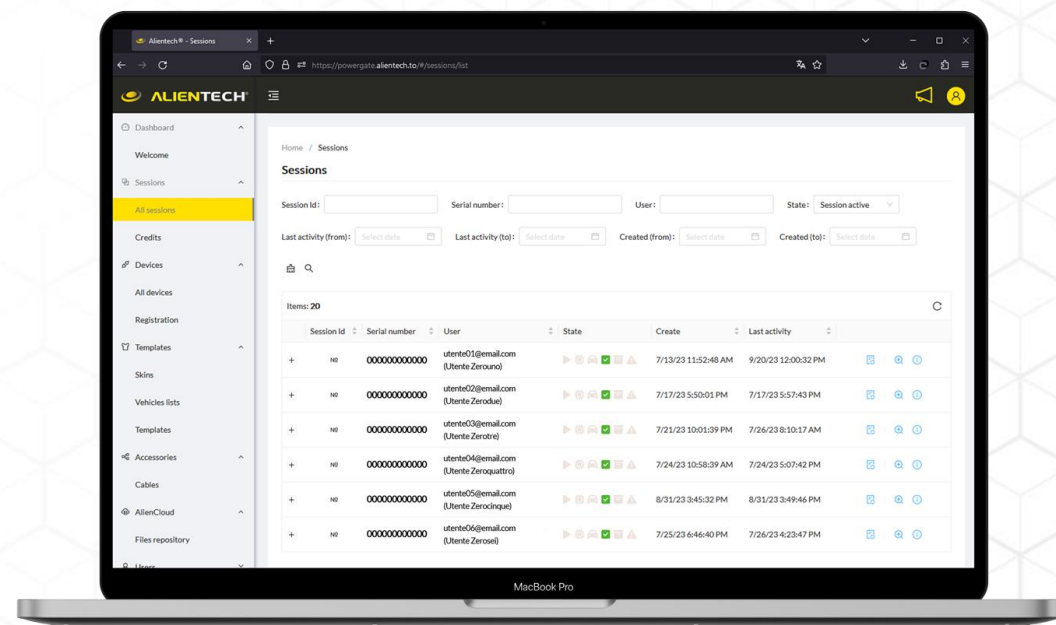
Operation

Powergate Manager

- Step #1 Dashboard

User

- Step #2 Initialization
- Step #3 Tuning

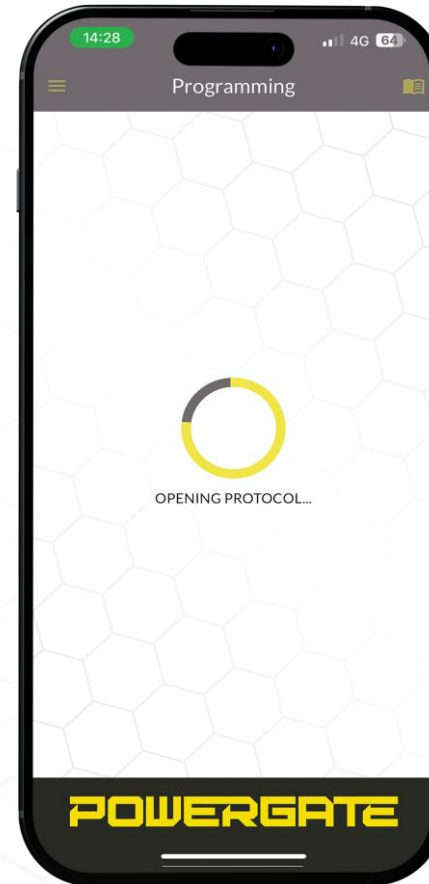
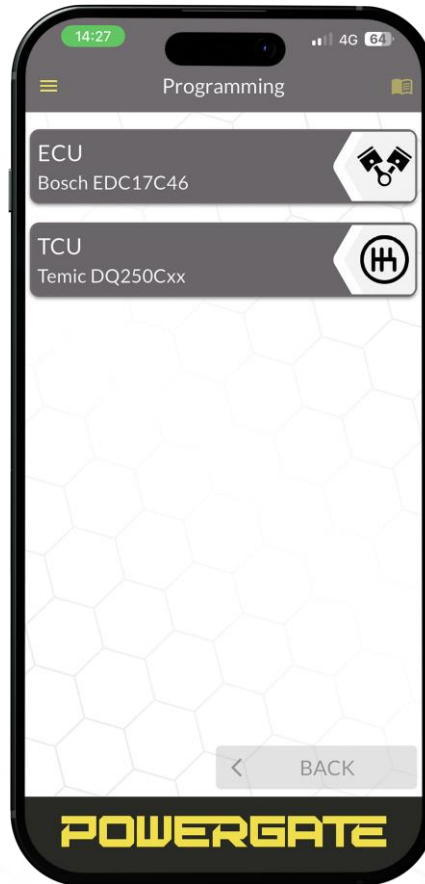


Step #1

Once initialization is complete, the customization assigned by the Powergate Manager will be downloaded to the Powergate App.

This feature also allows the User to limit the Vehicle List, for the User, to only one vehicle selected by their Powergate Manager.

At this point, to associate Powergate with the vehicle, it will be necessary to proceed with the User's ECU identification (ID) by selecting their vehicle from the list.



Step #1

Once a custom Skin has been created and the vehicle list that the User will have access to has been established, it will be possible to create the Template.

The Template includes all the customizations made and some additional display options.

This can all be assigned to a device on the relevant Powergate device list page under your organization.

Home / Templates / Add template

Add template

* Name:

* Skin: C

* Vehicles list: C

Advanced

- * Vehicle data visibility:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Brand | <input checked="" type="checkbox"/> CM3 |
| <input type="checkbox"/> CUI | <input type="checkbox"/> Emissions Euro |
| <input type="checkbox"/> Emissions Tier | <input checked="" type="checkbox"/> Engine Code |
| <input type="checkbox"/> Engine Manufacturer | <input type="checkbox"/> Engine Model |
| <input type="checkbox"/> FTLB | <input checked="" type="checkbox"/> Fuel |
| <input type="checkbox"/> HP | <input checked="" type="checkbox"/> KW |
| <input checked="" type="checkbox"/> Model | <input type="checkbox"/> Model Code |
| <input type="checkbox"/> Model Generation | <input type="checkbox"/> Model Type |
| <input type="checkbox"/> Model Year | <input type="checkbox"/> NM |
| <input type="checkbox"/> Ordered Columns | <input checked="" type="checkbox"/> PS |
| <input checked="" type="checkbox"/> Vehicle Type | <input checked="" type="checkbox"/> Version |

Save

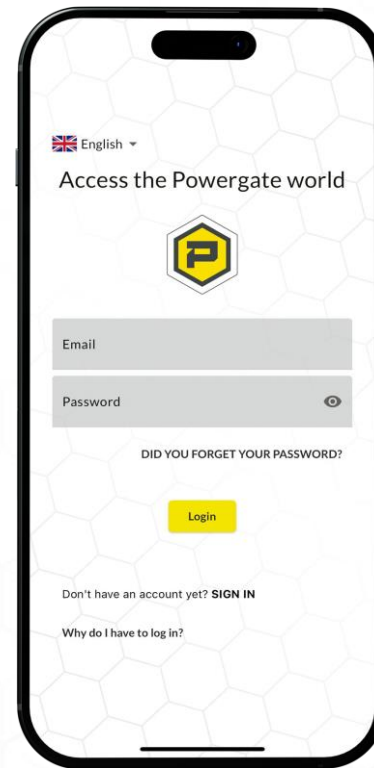
Reset

Step #2

The first step in associating Powergate with the vehicle is to connect it to the OBD port using the supplied connection cable.

At this point, it will be necessary to activate the Bluetooth mode of one's smartphone and open the pairing application.

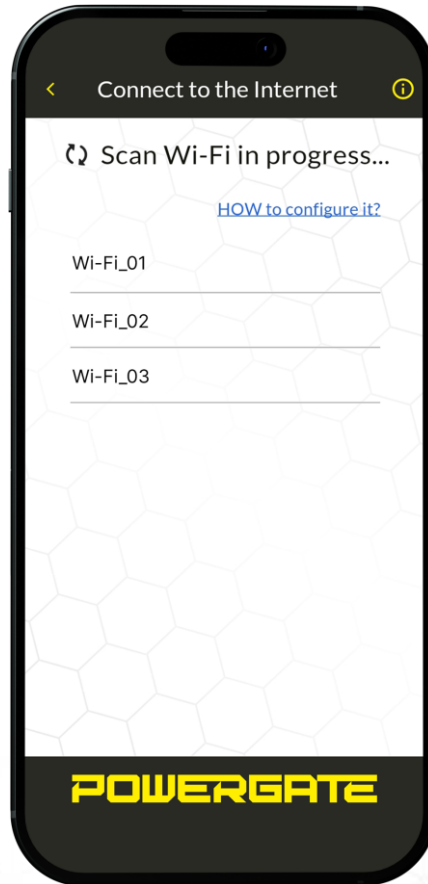
To make the first connection to Powergate, the User will need to enter his or her ALIEN_id credentials and proceed with establishing an Internet connection to access Alientech online services.



Step #2

The User will have the option of using a Wi-Fi network or their own network.

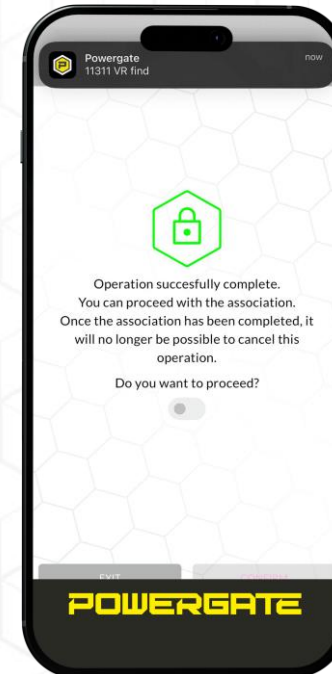
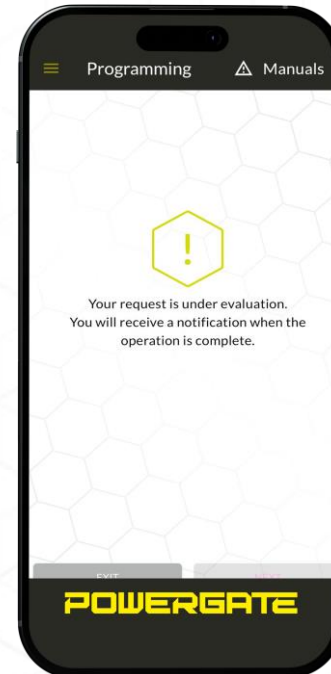
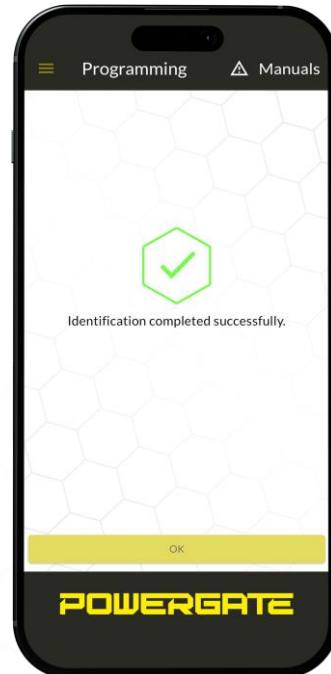
For the latter, it will be necessary to activate the personal hotspot and follow the instructions to connect Powergate to the mobile network.



Step #3

The editing process starts with the ID or Virtual Reading of the ECU.

At the end of this step, Powergate will ask for permission to complete the association and will notify you of the availability of any compatible original files. In case a Virtual Reading is possible, Powergate will automatically download the compatible VR file.











Step #3

During this operation, it is a good idea to take all the normal precautions for safe OBD reading/writing, such as stabilizing and maintaining vehicle battery power.

When the first read is complete, the Powergate application will ask for

confirmation for the association between Powergate and the ECU (via the VIN chassis code).

Once associated, it will be accessible on the Powergate Manager Dashboard, and at this point it will be possible to proceed with editing the read file.

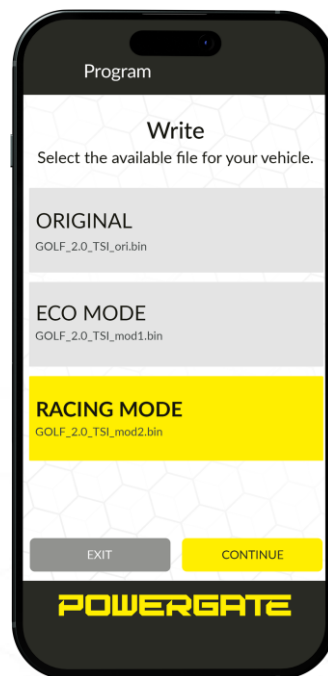
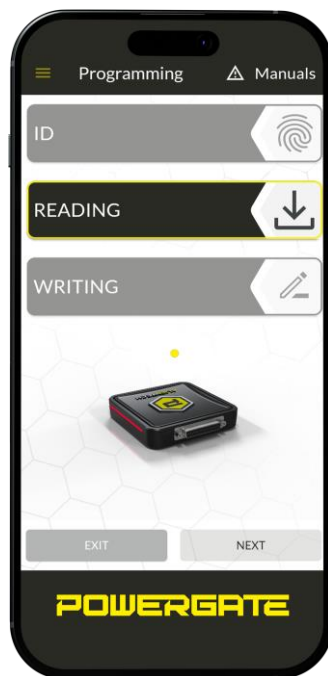
Level 1 	Level 2 	Level 3	Level 3+
<p>Available for writing</p> <p>10/17/23 10:22:33 AM</p> <p>Name: 03L906018BC_9979</p> <p>Stage1 Mod_NoCS.mod</p> <p>Description: 420Nm/3600RPM</p> <p>(Dyno 426Nm) </p> <p>Calibration code:</p> <p>03L906018BC_9979 </p> <p>MD5:</p> <p>C90F539FAD58F2EB02589115</p> <p>389FB808</p>	<p>Available for writing</p> <p>10/17/23 10:23:44 AM</p> <p>Name: GTD_Livello2.MOD</p> <p>Description: 420Nm/4400RPM</p> <p>+InjectionTime </p> <p>Calibration code:</p> <p>03L906018BC_9979 </p> <p>MD5:</p> <p>A5EEEEBE48AD75A744DCB664</p> <p>3125CE25C</p>	<p> Select File</p> <p>Validate</p>	<p> Select File</p> <p>Validate</p>

Tuning - User

Step #3

With Powergate's association with the User's vehicle, it will be possible to proceed with the selection of the modified file to be written.

Just like KESS3, before beginning this process Powergate will do a connection check and perform the identification again.

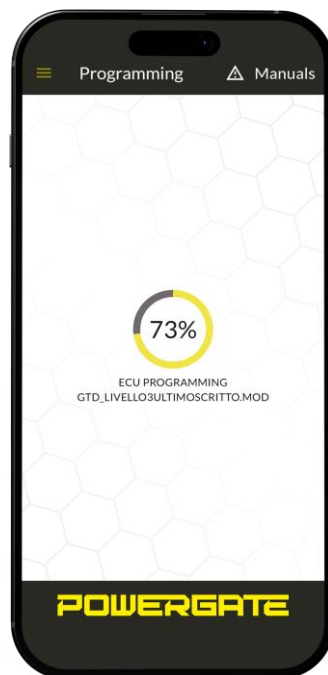
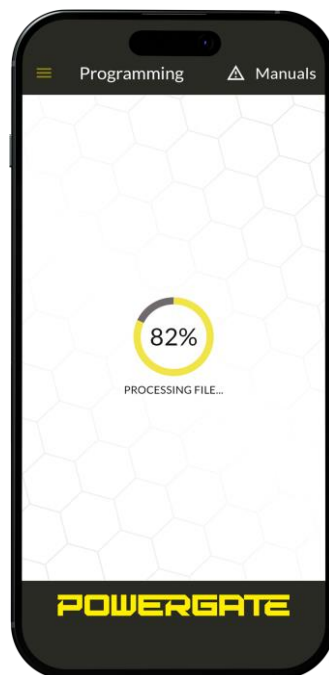
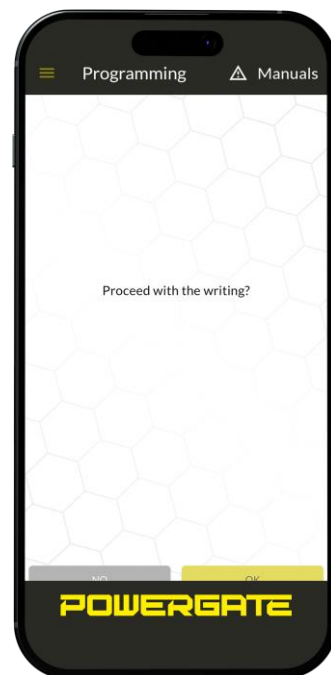


Tuning - User

Step #3

During writing Powergate will download the selected modified to be written. As a final step, LOGs will be extracted as per the standard.

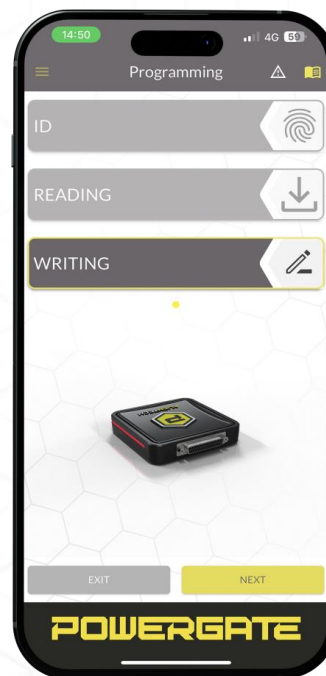
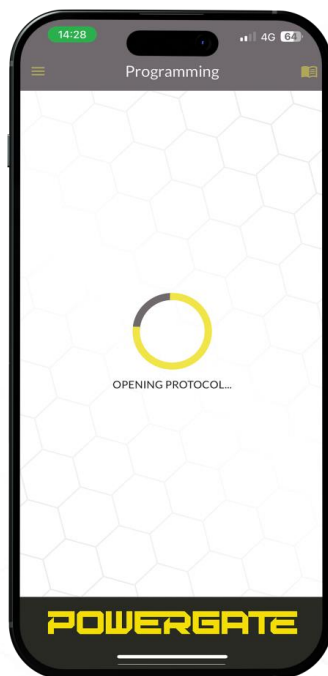
A message will also be displayed indicating the end of the process.



Step #3

Once you have identified the engine ECU and associated the Powergate with your vehicle you will be able to work on the automatic transmission ECU.

The ECU/TCU selection screen ensures that you can work on both ECUs quickly and easily.



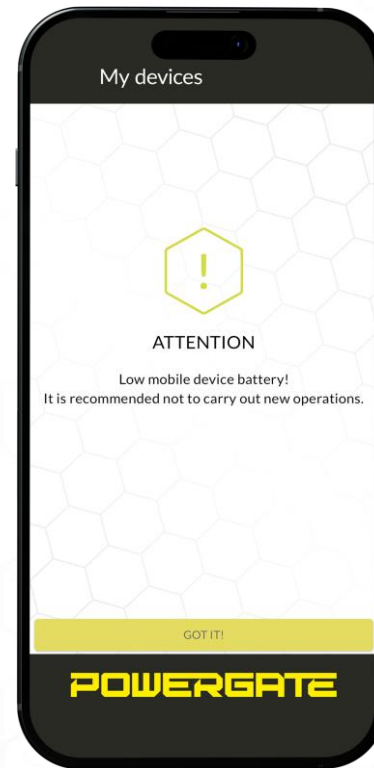
Precautions

It is possible that the Powergate application will show warning messages to make sure that the User is in the best condition to proceed with the writing of the file.

Some warnings may also concern the status of the mobile device on which the application was installed, such as the battery level being too low.

It is advisable to proceed only if the smartphone battery level is enough to ensure complete control over Powergate operations, which may take several minutes.

Other warnings could concern the battery level of the vehicle and the temperature of the Powergate device.



Errors and Recovery

If the Internet connection is interrupted during writing or loading LOGs, some errors may arise

In case there is a connection problem, the application will show the relevant error code and proceed to attempt reconnection up to three times. If reconnection is successful in a short time then it will be possible to continue, recovering the interrupted operation.

Instead, with other types of errors during writing, the application will ask for approval to proceed with the Recovery operation.

If this attempt also fails, a notification will be sent to the Powergate Manager which will have to send a new Recovery file.



Useful informations

- Among the special functions, depending on the selected protocol, “DTC Display” can be found. This option can help the User to find out the existence of errors recorded in ECU before and after modification. The function is not customizable.
- The functions of the ECU connection protocols are the same as in KESS3.
- Checksum is calculated on the Cloud. The operation cannot be deactivated.
- The Powergate Cloud is reserved for Powergate Managers based on the calibration code, sold as an additional service. The size of the repository is determined at the time of sale.
- Supported Wi-Fi networks must have a bandwidth frequency of 2.4GHz.

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