

Battery Support Unit

Smart GYSFLASH PRO chargers



Partners





















ABARTI

Jeep



















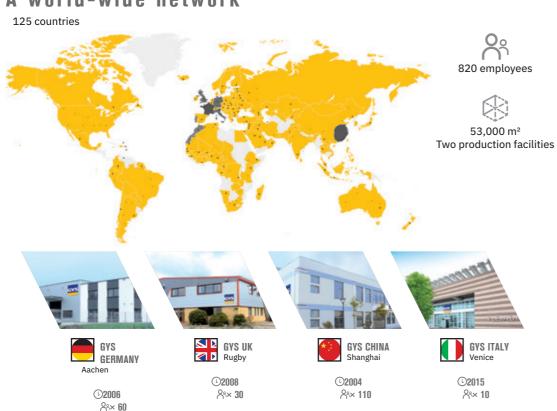
Founded in 1964, GYS is a French industrial group with more than 820 employees worldwide. With a market-leading R&D centre, GYS is a major player in designing and manufacturing welding equipment, battery chargers and body-repair systems.

\\The new realities of the market are constantly changing and the size of our family business means that we have to adapt quickly to new contexts and their challenges.

We strongly believe that our future is closely linked to that of our customers. This is why we do everything we can to understand what our distributors and users expect from us, what challenges they face and how much we can support them in order to become, and remain, their privileged partner.

Bruno Bouygues, CEO

A world-wide network



OUR RESEARCH AND DEVELOPMENT DEPARTMENT, A CENTRE OF EXCELLENCE AND EXPERTISE

The design office is GYS' central nerve centre. Our engineers spend every day dreaming of ever-more innovative products, responding to permanent changes in our dynamic markets.

We take all our customers' suggestions into consideration in order to custom-design our products to their specific needs.



90

Specialist experts



4

Centres of expertise

- Electronics
- Machinery
- On-board computing
- Robotics



+ 50

innovative products

designed each year











The BSU*, your workshop's bare necessity.

A vehicle has a long way to go before it reaches the workshop. From the assembly line to its delivery, from its transport to the final customer's garage, passing through a showroom. At each stage, the battery is faced with discharge risks that must be anticipated to minimise any long-term damage.

Because the battery's role is no longer just to start the vehicle. It is the focal point of all the electrical components in your vehicle that are essential for both safety and comfort. The Battery Support Unit (BSU) provides an invaluable service. It guarantees a stable voltage and instantaneously supplies the necessary current, particularly during diagnostic phases or vehicle exhibitions in showrooms.

* Battery Support Unit [BSU]

In the automotive world, in dealerships and in workshops.

A charger that maintains a vehicle's battery at a perfectly stabilised voltage. It compensates the energy demand during all 'ignition on/engine off' work. As daily servicing is not an option, it ensures that the battery performance and the vehicle's on-board electronics are fully functional.

The battery is, in some ways, the vehicle's only living organ.

An essential part of any modern vehicle, the battery is the backbone of all the properly performing electronic components found in a vehicle. The proliferation of computers and other sensors that respond to the on-going challenges of on-board electronics make the demand for energy more and more important for:

- Imiting a vehicle's fuel consumption
- **⊘** limiting CO₂ emissions
- Improving safety performance (airbags and driver assistance systems, etc.).
- ✓ Improving user comfort (heated seats and an on-board computer, etc.)

Maintenance that requires the full power of a suitable BSU

Increasing energy needs coupled with demanding daily usage (short journeys) require a healthy battery. Good maintenance involves paying special attention to all operations that take place with the **ignition on and the engine off.**

These situations demand a lot of energy and cause strong discharges. The BSU has the role of taking over from the battery in order to preserve it.





It's vital to have fully operational vehicles in professional showrooms.

Exhibiting different car models, especially in dealerships, allows customers to imagine themselves in their potential new purchase. The alternator is unable to act as a source of power when the engine is switched off. Simply leaving the headlights on will severely drain the battery.

A GYSFLASH PRO battery support unit will slip easily and discreetly under the vehicle. It will compensate for all the vehicle's electrical needs without having to worry about battery consumption, it will also prevent the vehicle from going into Eco mode.

The electricity consumption of various car components

| Hardware | Consumption (A) |
|--|--|
| Electric window | 10 - 13 A per window |
| In the descending phase | 10 A |
| In the rising phase | 6 A |
| Sunroof | 15 A |
| The engine's motor-driven fan | 30 - 60 A depending on the model |
| ECU wake-up / ignition key ON | Between 12 - 17 A |
| Door locking | 22 A at its peak |
| Opening the wing mirrors | 1 A |
| Dipped-beam headlamps / LED dipped-beam headlamps | 11 A / 6 A (LED) |
| Main-beam headlamps / LED main-beam headlamps | 16 - 25 A / 8 - 10 A (LED) |
| Windscreen wipers (down/up) | Between 11 - 16 A |
| Windscreen washer pump | 8 A |
| Heated seat | 15 A |
| Electric seat | 3 A |
| Door opening in standby mode | 6 A |
| Ventilating the vehicle's interior | 30 A |
| Electric tailgate (peak/close/open) | 3.5 A / 3 A / 2 A |
| Operating the tailgate In the descending phase In the rising phase | 130 A between 50 - 72 A depending on the load |
| CISCOS STREET | |

There are huge challenges facing battery maintenance in modern workshops.



Maintaining a modern vehicle in the workshop involves two actions that have a significant impact on the battery:

- diagnostic phase. This can often slow down repairs and take a long time (several minutes/hours).
- very reprogramming numerous computers.

These two ignition-on/engine-off actions consume energy and, therefore, require a BSU.

Diagnostic work with a BSU allows the user to:

- → Respect the manufacturer's recommendations
- Carry out a fault-free update of the vehicle's computer system
- Maintain all of the vehicle's electrical systems at a stable voltage, regardless of which part of the vehicle is being tested.

The GYSFLASH PRO, capable of supplying a continuous 150 A, is essential to keep a vehicle's battery at a perfectly stabilised voltage during the diagnostic phases, such as computer reprogramming, ADAS calibration or GPS map updates, etc.



Energy resources requested by reprogramming

| Donrogramming | Operating | Consumption (A) | | | | | | |
|--------------------------------------|------------------------------|-----------------|-----------|--|--|--|--|--|
| Reprogramming | time | Average | Peak | | | | | |
| Engine Control Unit (ECU) | 30 - 60 min | 30 - 50 A | 70 - 80 A | | | | | |
| HDI ECU | 30 - 60 min | 60 A | 100 A | | | | | |
| Gearbox ECU | 30 - 60 min | 20 - 40 A | 60 - 70 A | | | | | |
| Controlling and adjusting the lights | 30 - 60 min | 10 A | 25 A | | | | | |
| Adjusting the ADAS system | 30 - 60 min | 20 A | 40 A | | | | | |
| Manufacturer's update | 35 - 40 min | 15 - 35 A | 60 A | | | | | |
| Updating the map | 45 min (European version) | 15 A | 40 A | | | | | |

Chip-tuning and reprogramming, increasingly soughtafter services

Chip-tuning (or eco-tuning) consists of reprogramming a vehicle ECU's original software in order to considerably improve the engine's efficiency and power without altering its reliability.

This type of operation may strain the vehicle's battery and may require maintaining the battery at a stabilised voltage.





A BSU world leader with our Gysflash Pro, a battery-charging solution.

Keep your batteries fully charged in any situation!

The jewel in the crown of GYS' battery-maintenance range is our cutting-edge GYSFLASH PRO (standard and CNT models). These high-power, smart BSUs are fitted with inverter technology and can maintain all battery types (lead, lithium and traction, etc.) at a perfectly stabilised voltage, which can strongly impact their performance.

Entirely designed and manufactured in France, these machines offer a range of advanced functions that are essential to automotive and industry professionals. Whether vertical or horizontal, they offer outstanding charging performance for all battery types from 6 - 48 V. GYS' battery-chargers offer **5 operating modes** which have made our BSUs incredibly popular on the market.





1 Keep your showroom cars' batteries at 100%.

- · Compensates energy requirements up to 150 A.
- Cables can be disconnected for easy access to the engine compartment.
- Can be used on a vehicle without a battery using the 'No Battery' feature.
- Automatically restarts the vehicle in the event of a power failure.
- The 'Lock Showroom' feature allows users to lock the charger to prevent anyone from tampering with the equipment.

2 Conserve the vehicle's power source during the diagnostic phase.

- Compensates energy requirements up to 150 A
- The voltage can be set anywhere between 12 14.8 V in increments of 0.1 V according to the manufacturers' recommendations.
- Automatic overconsumption warning

3 Recharge your batteries.

- Automatic lead load curves in nine distinct stages
- GYS' very own market-leading, nine-stage, lithium charging curve that offers both 'UVP' (Under Voltage Protection) and 'EBS' (Equalising Battery System) technologies
- Automatic 'SOS Recovery" desulphation
- Charges 50% faster than traditional chargers
- · Real-time display of the charging process

4 Connecting to the power supply.

- Transforms the GYSFLASH PRO into a continuous, stabilised power supply (DC)
- Voltage can be set in increments of 0.1 V and the current can be adjusted in increments of 1 A:

| | voltage regulation (in 0.1 V increments) | current setting (in 1 A increments) |
|---------------|---|--|
| GYSFLASH 12 V | 2 > 16 V | 2 x Imov |
| GYSFLASH 24 V | 2 > 30 V | 2 > Imax |

5 Saving the vehicle's data when changing the battery.

Maintaining the vehicle's energy requirement without the risk of losing the vehicle's stored history when changing the battery.



A professional must-have!

Both powerful and ultra-precise, the GYSFLASH PRO range has mainly been designed for automotive professionals. They are the perfect tools for stabilising a power supply or maintaining a vehicle's state of charge. Their scalability also makes them very effective in industrial environments where they are integrated into the manufacturing process. These are the ideal tools for maintaining a vehicle's high-performance, internally fitted batteries throughout its entire lifespan.

Car sales, repair and maintenance professionals.



Industry **professionals.**



Maximum protection

The GYSFLASH PRO's range's electronic systems are calibrated and programmed to continuously monitor the current and the voltage delivered by the cables. These inputs can be interrupted at any time and, therefore, this feature can preserve the on-board electronics of the vehicle, the charger and the user. They have **6** safeguards:



Irregular under-voltage protection



This safeguard can be accessed in BSU mode. It aims to limit a faulty battery's overheating risk by stopping the charging process if the battery's voltage becomes unusually low. How this safeguard works: if the battery's voltage level remains below 10 V for more than 10 minutes whilst in use, despite the current supplied by the charger, this will stop the charging process and an error message will be shown on the display screen.

The charger's thermal protection



This protection protects the charger from any internal overheating. How this safeguard works: In order to protect the charger from overheating, the charger's power levels are monitored according to the device's internal temperature. If the charger's internal temperature exceeds a certain level, the charger will immediately shut down to protect itself.

Reverse-polarity protection



This protection prevents the reverse-polarity risk in the battery. How this safeguard works: if a polarity inversion is detected at the charger's clamp's terminals, the charger will automatically stop the charging process and show an error on the display screen.

Battery over-voltage protection



This protective safeguard protects the charger in the event of an over-voltage from the battery.

How this safeguard works: if a voltage greater than 16 V is detected on the charger's clamps, the charger will immediately stop and will show an error on the screen.

Battery-disconnect protection This protective safeguard makes it po



This protective safeguard makes it possible to stop the charger from working if the battery becomes disconnected from the charger. This is to prevent an electrical voltage from remaining present on the charger clamps.

Charging-time protection This safety feature identifies uni



This safety feature identifies unrecoverable batteries and stops the charger to prevent explosions. How to use: if a battery fails, it will not charge. The GYSFLASH PRO will identify this anomaly and shut down the charging process. It will display an error that states 'battery out of order'.

GYS

CNT Perfection: GYSFLASH PRO, connected.

Today's best equipment, ready for tomorrow.

Designed to solve the problems of tomorrow, the internet-connected GYSFLASH PRO (CNT) combines the connectivity and scalability that automotive professionals are looking for. These chargers offer a solution to current and future charging challenges. Their onboard technologies make them highly configurable. They can integrate fully customised load curves as well as a full range of connected modules designed specifically for an individual field of action, such as traceability, diagnostics or industrialisation.



SMC and USB ports SMC

Unlike the standard GYSFLASH PRO, the connected versions come equipped with two USB and SMC ports. This advanced connectivity makes the GYSFLASH PRO CNT model scalable, fully configurable and customisable.

keep track of each intervention.

- Store over 1,000 load-data records, which can be exported to a USB stick and used in a simple spreadsheet thanks to its Flash memory.
- The associated modules and accessories (printer, keypad and bar-code reader, etc.) allow data to be recovered and load reports to be printed out.

Answer all your charging problems.

The CNT range offers the same benefits as the GYSFLASH PRO as well as:

- Twelve specific lead / lithium load curves according to the battery profile and six predefined configurations tailored to each individual application.
- A tester mode to assess the state of the vehicle's starting system.
- Advanced connectivity (SMC and USB) combining multiple modules and accessories.

Connect and personalise your GYSFLASH device.

- Configure your GYSFLASH PRO according to your own needs.
- Integrate specific load curves.
- Combine additional modules to expand the functions or the power of your equipment (see photo).
- Carry out the latest software updates thanks to its USB connection.

Integrate it into your manufacturing process.

- The GYSFLASH PRO CNT assimilates the manufacturer-designed load curves thanks to its USB connection.
- Intelligent and able to communicate via an SMC link, the machine sends charging data and alerts the user to any anomalies.

| + | | velve specific lead / lithium | | | | | CH | IAR | SING | МС | DDE | | | | PC | OWE | 10DE | (VARI- OUS) | | | |
|---|----|--|----------|-----|----------|----------|----------|-----------|-------------|-----------------|-----------|--------------|----------|----------|----------|----------|--------------|----------------|---------------|------------------|-----------|
| | | ad curves | | | Pb-L | OAD |) | | Li | -CH | ARG | E | HAUI | _AGE | | | ery | | | | |
| | de | pending on the battery profile. | | | | | | | | L | | | | | | | battery | | | nc | |
| | de | r predefined configurations signed specifically for ferent purposes. | normal | AGM | liquid | Easy | Boost | Recovery+ | LFP/LiFeP04 | Standard Li-ion | LFP cell+ | Li-ion cell+ | liquid | gel | Showroom | Diag+ | Changing the | Power supply | Li-Supply/LFP | Li-Supply/Li-ion | Test mode |
| | 1 | Initial charger setup | V | ~ | ~ | ~ | | | ~ | | | | | | ~ | ~ | | | | | ✓ |
| | 2 | Extended functionality for the mechanic | V | ~ | ~ | V | V | V | ~ | | | | | | ~ | V | V | ~ | | | ✓ |
| | 3 | Simplified version for dealerships and demonstration vehicles | | | | | | | | | | | | | ~ | | | | | | |
| | 4 | Lithium-battery specialist | | | | | | | ~ | ~ | ~ | ~ | | | | | | ~ | ~ | V | |
| | 5 | Forklifts, electric pallet trucks and stackers, etc. | | | | | | | | | | | ~ | ~ | | | | | | | |
| | 6 | 100% complete version | V | ~ | V | ~ | ~ | ~ | ~ | ~ | V | ~ | V | V | ~ | ~ | ~ | ~ | V | V | V |

Integrated starting support.

In addition to its charging capabilities, the connected models also offer a dedicated Starter Mode. The GYSFLASH PRO CNT can provide a starting current as strong as its maximum current level (between 25 - 120 A depending on the model).

Keep track of traceability data

A vehicle's batteries require special maintenance having become one of the main causes of a mechanical intervention. The GYSFLASH PRO CNT's internal memory saves each charging cycle's data and guarantees the batteries are rigorously maintained. The charger's connectivity and the associated modules make it possible to retrieve, save or print all the data as a report; this report indicates the quality of the operations carried out as well as the proper functioning of the battery.





One thousand load-data records

The internal flash memory makes it possible to keep a record of all the charges carried out. Can be exported onto a USB key as a'CSV' file, this increases the data-storage possibilities and provides useful data that can be processed on a simple spreadsheet. The monitoring of each intervention and its traceability represent a real guarantee of quality for any professional wishing to offer total transparency.

CRIT'AIr

Crit'Air thumbnail

Anti-pollution disc

Each country has adopted its own system for classifying vehicles according to their polluting emissions. This information is displayed on the vehicle's windscreen using an anti-pollution disc. In France, the Crit'Air sticker shows a QR code containing information about the vehicle (license plate, model, date of first registration, Euro standard, etc.). The GYSFLASH PRO can quickly accesses this data using the bar-code reader; this saves a considerable amount of time compared to collecting this information from the load report.



SPM - Smart Printer Module (PN. 026919)

026919

Connected to the SMC port (DB9 type), the SPM thermal printer displays all the charging data and, in particular, provides proof of the vehicle's or battery's proper maintenance.



Smart Printer Module



Bar-code reader 027718

By scanning the battery's bar code, the reader makes it easy to collect information and allows the charger to quickly identify the type of charge being carried out.



Mini USB keypad 027725 (AZERTY) 027770 (QWERTY)

When plugged into the SPM printer's USB port, it supports data entry when the power supply or the charging process is initiated.

4 GYSFLASH PRO CNT packs for developing traceability

| 4 | | N. B. | | | I | | | > | | 0 |
|---|--------|------------|------------|-----------------|---------|-------------------|----------|-------------|-------------|------------|
| | | GYSF | LASH | SPM (Smart | Support | Reader 1D / 2D | Mini USI | 3 keypad | Trolley | Paper reel |
| | | 101.12 CNT | 121.12 CNT | Printer Module) | SLM/SPM | bar codes | AZERTY | QWERTY | GYSFLASH XL | (x2) |
| | | 026988 | 026971 | 026919 | 025745 | 027718 | 027725 | 027770 | 028890 | 056633 |
| 1 | 068117 | • | - | • | • | • | - | • | • | • |
| 2 | 068124 | • | - | • | • | • | • | - | • | • |
| 3 | 068131 | - | • | • | • | • | | • | • | • |
| 4 | 068148 | - | • | • | • | • | • | - | • | • |

Multiply your GYSFLASH machine's potential

Each charging issue requires a specific set-up that may require more functions to be integrated into the charger or more power to be provided. The Smart Hub Module (SHM) and Power Hub Module (PHM) have been designed to expand the standard uses of a GYSFLASH appliance. They offer infinite possibilities to respond to any situation that might occur, particularly in the workshop.

The SHM is a hub that is capable of coupling up to four modules to a GYSFLASH starter. Combined with the PHM, which allows charging cables to be coupled to the unit, the SHM also allows up to four GYSFLASH devices to be connected together to increase the power output.

SHM - Smart Hub Module 025981







GYSFLAS CNT Technol

PHM - Power Hub Module 056589

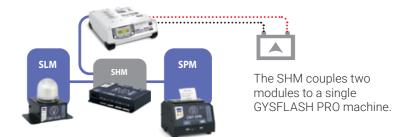


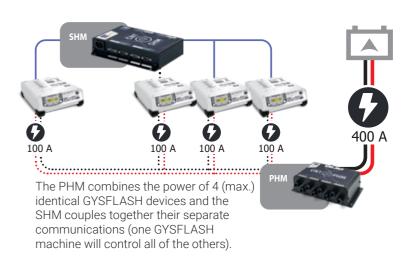


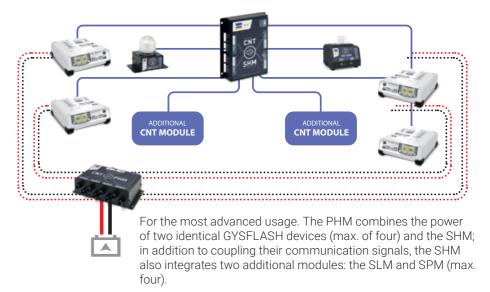


A few combinations out of an infinite number of options









Customise your setup with our parallelisation kit.

| | 2323 | 000 | |
|------------|------------------|------------------|------------------------------------|
| | Smart Hub Module | Power Hub Module | Cable kit for paral- lelisation |
| | 025981 | 056589 | 072954 |
| PN. 072961 | • | • | • |

Connect and personalise your GYSFLASH appliance

The idea behind the internet-connected range is to offer a charger that can be configured without any limitations. The built-in USB connection allows users to configure and customise their GYSFLASH PRO CNT to meet their own needs. Integrating specific load curves or programing the GYSFLASH PRO CNT's precise responses to deal with battery-related issues are the main advantages of a charger that is guaranteed to satisfy your current and future business demands.





SUM - Smart USB Module 025974

An internet-connected module enabling a GYSFLASH PRO CNT device to be controlled from any USB device capable of sending or receiving data (PCs, tablets and PLCs, etc.).





SWM - Smart Wireless Module 070837

An internet-connected module enabling a GYSFLASH PRO CNT unit to be controlled from any wireless device capable of sending or receiving data (PCs, tablets and PLCs, etc.).







Coordinate the GYSFLASH PRO's power supply with the charging requirements.

The GYSFLASH PRO CNT can be programed to respond to signals from any wireless or USB-enabled device (PCs, tablets and PLCs, etc.). Using a Smart Module and a very simple computer language, the charger will provide a response to any query from a diagnostic tool. The charger reacts precisely to the energy needs necessary for each test, thus avoiding consumers having to draw on the battery's resources for long periods of time.



Programing the device with a USB key

Using the charger's USB connection, download the latest version of the software available on the web (www.gys. fr). Then, add load curves designed by our engineers, or by yourself, and easily configure a whole range of chargers according to your own specific requirements.











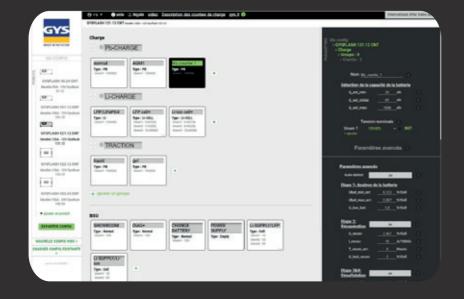
CNT configurator

Don't settle for anything less than perfect load curves.

The two SUM / SWM modules make it possible to add specific load curves to a GYSFLASH PRO appliance specifically for its own batteries. With this in mind, GYS has developed the first internet-connected configurator. Accessible from the GYS Extranet, this tool allows you to create personalised load curves, manage each individual GYSFLASH device and configure each of them very precisely. It offers the chance to control the load curve and provide the battery with the most advanced charging process.

CNT MANAGER

- · GYSFLASH settings.
- Customised curves.
- Manage all your chargers.
- Import / Export your own settings.





A tribute to our partners

Thank you to the following car manufacturers for placing their trust in us.





































































You too, Embrace our GYSFLASH PRO.

The clearest evidence of our chargers' performance and reliability is that the GYSFLASH PRO has been approved and adopted by many leading car manufacturers, such as PSA, Renault, Volkswagen, Mercedes-Benz and BMW.

Our equipment means that you too can choose the solution that best suits your charging issues. By selecting an existing charger or by developing your own personalised battery-charging solution, you will be embarking on your very own GYSFLASH PRO adventure. Collaborate with our in-house, GYS engineers to develop a resolution designed specifically for your individual requirements.

A tool that responds to industrial issues.

Today, we're only scratching the surface of our chargers' capabilities. The fields of application are countless. Providing a stable voltage and a precise current can prove to be particularly useful in industrial settings for: integrating chargers onto a vehicle's assembly line, checking battery and ECU (electronic control unit) performance before delivery, optimising the recharging process for handling equipment or meeting the highly specific charging requirements of certain industrial sectors, such as aeronautics.

The numerous applications to be explored will require highly adaptable and customisable chargers that will have to be both robust and waterproof to withstand demanding environments. The technology developed for our GYSFLASH PRO means that it can be easily adapted for various industrial processes and also offers maximum reliability. These machines boast all the necessary capabilities and scalability requirements to integrate seamlessly into today's industrial processes.

Intra-logistics Ideal for charging and maintena

Ideal for charging and maintenance work on traction batteries for pallet trucks, stackers and forklifts



Charging station Maintaining the battery charge of vehice

Maintaining the battery charge of vehicles in transit on importing platforms.



Production line

Integrates every step in the manufacturing of a vehicle, from the assembly line to final assembly





Integrate it into your manufacturing process

A car manufacturer has in-depth knowledge of the batteries in its vehicles. On the production line, each of them requires a precise charging cycle according to the battery type, its capacity and future use. Thanks to its USB connection, the GYSFLASH PRO CNT is able to assimilate load curves designed by the manufacturer to meet precise specifications. This smart device communicates via its SMC connection, sending out charging data and detecting anomalies. Its presence on the production line ensures the best possible conditions for testing the batteries during the battery-fitting process.

SLM - Smart Light Module 027978

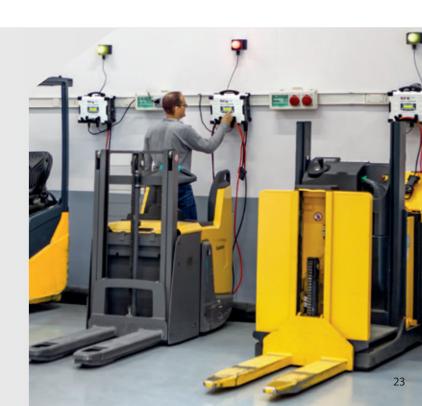
This light-assisted module is powered and controlled by the charger. It indicates the equipment's operating status using a multicoloured indicator light as well as an audible warning buzzer. It is the ideal accessory for anyone working far away from their GYSFLASH PRO CNT on a production line or a traction-battery charging station











2 ranges offering 20 cutting-edge products

The largest range of load-holding products in the world.

Ranging between 30 - 150 A and split into two distinct product ranges, 'Standard' and 'Connected' (CNT), our GYSFLASH PRO devices are designed to maintain **any battery**'s maximum efficiency. Select whichever GYSFLASH PRO out of our twenty-piece range that best suits your individual battery needs.

| Type | Lead-starting batteries (compatible with liquid, gel, AGM, EFB and stop-start batteries) Lithium-ion (LiFePO₄, NMC, LCO, LMO and NCA) Traction batteries |
|----------|---|
| Voltage | 6, 12, 24, 36 and 48 V |
| Current | Between 30 - 150 A |
| Capacity | Between 10 - 1,600 Ah |

Gysflash Pro horizontal



The GYSFLASH range is designed to efficiently handle energy-supply requirements in exhibition centres or during diagnostic phases. Small in size, they can be discreetly slipped underneath a vehicle with a gap of at least 10.5 cm or they can be stored in a diagnostic trolley. Without an external ventilation system, these chargers ranging between 30 - 100 A are ultra-quiet making them ideal for car showrooms.

Fanless technology



vertical



A real workshop asset for battery maintenance, the vertical GYSFLASH PRO model can be easily attached to any wall using a bracket, especially metal ones thanks to its magnetic supports. As well as being completely FANLESS, they are also hermetically sealed against dust.

Wall brackets

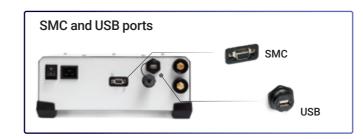
Gysflash Pro CNT horizontal



vertical



Fitted with the most powerful BSUs, the horizontal GYSFLASH PRO CNT machines are custom-built for maintaining the most advanced batteries on the market. These starters offer full internet connectivity as well as being able to meet the latest demands of industry-leading automotive professionals. The GYSFLASH range is ready to support any vehicle's energy needs during the diagnostic phases or during a showroom presentation. Their advanced internet connectivity, featuring both SMC and USB ports, allows completely customisable set-up configurations and the coupling of connected modules multiplies their functionality and power. Their key focus is traceability.



They have all the benefits of a vertical GYSFLASH PRO and a GYSFLASH PRO CNT. Robust and designed to be easily mounted onto a wall bracket, these appliances are the ultimate choice for both workshop and charging-station battery maintenance. These chargers have the power to handle all lead-acid and lithium batteries from 6 - 48 V. By incorporating advanced connectivity technology, including SMC and USB ports, these starters are 100% customisable and suitable for use with connected modules.



manufacturers

These latest products are entirely focused on industrial applications. Fitted with all of our in-house, GYS, connected technology, these devices are set apart by their IP54 protection class as well as their high power ratings of up to 150 A. Single- or three-phase models with a wide range of possible settings, these robust and hermetically sealed chargers are ideal for use on production lines.

Selection guide

A complete range tailored to each and every application.



10 20 200 400 600 800 1,000 1,200 1,400 1,600



8 x 25 x 20 cm

12 x 34.5 x 29.5 cm 9.1 kg



Showroom

Diagnostic

*

Industry

Intra-logistics

Protection Smart class Cooling

IP21

| | | | | IP21 | • | ** | * | * | _ | 25.5 x 10.5 x 23 cm | 4.9 kg |
|----------------|--|--|--|------|---|------|-----|---|----|---------------------|------------------|
| | | | | IP21 | • | *** | ** | * | _ | 30 x 10.5 x 29 cm | 6.6 kg |
| | | | | IP21 | • | **** | *** | * | _ | 30 x 10.5 x 29.2 cm | 7.4 kg 8.3 kg |
| 6/12 V 24 V | | | | IP21 | • | ** | * | * | * | 25.5 x 10.5 x 23 cm | 4.9 kg |
| 6/12/24V | | | | IP21 | • | *** | ** | * | ** | 30 x 10.5 x 29.2 cm | 6.6 kg 7.9 kg |

| | | | | | IP41 | • | *** | ** | *** | * | 30 x 10.5 x 29 cm | 6.8 kg |
|----------------|--|--|--|------|--------|------|-----|------|-----|---------------------|-------------------|---------|
| | | | | | IP21 • | | | | | _ | 22 × 10 5 × 20 2 | 7.5 kg |
| | | | | IPZI | • | **** | *** | *** | * | 32 x 10.5 x 29.2 cm | 8.3 kg | |
| | | | | | IP20 | | *** | **** | ** | * | 31 x 13 x 26 cm | 10.4 kg |
| | | | | | IP40 | | *** | **** | *** | * | 31 x 13 x 26 cm | 10.9 kg |
| 6/12/24V | | | | | IP21 | | ** | *** | ** | *** | 31 x 13 x 26 cm | 10.6 kg |
| :/12/24/36/48V | | | | | IP20 | | ** | ** | *** | **** | 31 x 13 x 26 cm | TBD |

| | | | | IP21 | • | * | *** | *** | * | 34.5 x 29.5 x 12 cm | TBD |
|----------------|--|--|--|------|---|---|------|-----|------|---------------------|--------|
| | | | | IP30 | | * | **** | *** | * | 34 x 25 x 15 cm | 11 kg |
| 6/12/24V | | | | IP30 | | * | *** | *** | *** | 34 x 25 x 15 cm | 11 kg |
| 6/12/24/36/48V | | | | IP21 | • | * | * | *** | **** | 32 x 29.2 x 10.5 cm | TBD |
| 6/12/24/36/48V | | | | IP30 | | * | ** | *** | **** | 34 x 25 x 15 cm | 9.5 kg |

| IP54 | • | * | **** | **** | * | 29.6 x 37.6 x 14.5 cm | TBD |
|------|---|---|------|------|---|-----------------------|---------|
| IP54 | • | * | **** | **** | * | 38 x 37.6 x 14.5 cm | 13.3 kg |

| | | | | | | | | | | | | | | | | ı | .oad | curi | rent | (|) | | | | |
|-------------------|--------|-------------|----------|------------|------|---------------|----------|-----|------|------|------|------|----|----|----|---|------|------|------|---|---|-----|-----|-----|-----|
| | PN. | 50 / 60 Hz | ■ | e ⊕ mm² | | | | | | | | | 10 | 20 | 30 | | 50 | | | | | 100 | 110 | 120 | 150 |
| | | | | | Lead | LFP Li-ion | Traction | 6 V | 12 V | 24 V | 36 V | 48 V | | | | | | | | | | | | | |
| Gysflash Pro | | | | | | | | | | | | | | | | | | | | | | | | | |
| horizontal | | | | | | | | | | | | | | | | | | | | | | | | | |
| GYSFLASH 30.12 | 029224 | 230 V | 2.5 | 6 | • | • | | | • | | | | | | | | | | | | | | | | |
| GYSFLASH 50.12 FV | 026056 | 110 / 230 V | 2.5 | 10 | • | • | | | • | | | | | | | | | | | | | | | | |
| GYSFLASH 100.12 | 029071 | 230 V | 2.5 | 16 | • | • | | | | | | | | | | | | | | | | | | | |

| horizontal | | | | | | | | | | | | | | | | | | |
|-------------------|--------|-------------|-----|----|---|---|---|---|---|---|--|--|---|--|---|--|--|--|
| GYSFLASH 30.12 | 029224 | 230 V | 2.5 | 6 | • | • | | | • | | | | | | | | | |
| GYSFLASH 50.12 FV | 026056 | 110 / 230 V | 2.5 | 10 | • | • | | | • | | | | | | | | | |
| CVCFI ACII 100 10 | 029071 | 220.1/ | 2.5 | 16 | | | | | | | | | | | Т | | | |
| GYSFLASH 100.12 | 029415 | 230 V | 5 | 10 | | • | | | • | | | | | | П | | | |
| | | | | | | | | | | | | | | | | | | |
| GYSFLASH 30.24 | 029231 | 230 V | 2.5 | 6 | • | • | • | • | • | • | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | 029095 | | 2.5 | 10 | | | | | | | | | | | | | | |
| GYSFLASH 50.24 | | 230 V | | | • | • | • | • | • | • | | | | | | | | |
| | 029620 | | 5 | 16 | | | | | | | | | T | | | | | |
| | | | | | | | | | | | | | | | | | | |

| ve ve | ertical | | | | | | | | | | | | | | | |
|-------|-----------------|--------|-------|-----|----|---|---|--|---|--|--|--|---|--|--|--|
| GY | SFLASH 32.12 PL | 027381 | 230 V | 2.5 | 6 | • | • | | • | | | | | | | |
| GY | 'SFLASH 102.12 | 029606 | 230 V | 5 | 16 | • | | | • | | | | Τ | | | |

| | | | _ | . • | | | | | | | i | | |
|--------------------------------|--------|-------------|-----|-----|---|---|---|---|--|-------|---|--|---|
| Gysflash Pro CNT horizontal | | | | | | | | | | | | | |
| GYSFLASH 51.12 CNT FV | 068179 | 110 / 230 V | 2.5 | 10 | • | • | • | • | | | | | |
| GYSFLASH 101.12 CNT | 025790 | 230 V | 2.5 | 16 | | | | | | | | | |
| GYSFLASH TUT. 12 CNT | 026988 | 230 V | 5 | 10 | • | • | • | • | | | | | |
| GYSFLASH 121.12 CNT FV | 026971 | 110 / 230 V | 5 | 25 | • | • | • | • | | | | | |
| GYSFLASH 125.12 CNT FV | 028883 | 110 / 230 V | 5 | 25 | • | • | • | • | | | | | H |
| | | | | | | | | | | 6/12V | | | |

| GYSFLASH 125.12 CN1 🔣 | 020003 | 110 / 230 V | 5 | 25 | • | • | • | | • | | | | | | | |
|----------------------------|--------|--------------|---|----|---|---|---|---|---|---|--|----------|--|--|--|--|
| 0.4021 1.011 1.01 0.1 0.11 | 025967 | 110 / 230 V | 5 | 25 | | | | | | | | 6/12V | | | | |
| GYSFLASH 101.24 CNT FV | 023907 | 110 / 230 V | 5 | 25 | • | | | • | ľ | Ů | | 24 V | | | | |
| OVOEL A OLL E1 40 ONT | 072015 | 110 / 230 V | 5 | 25 | | | | | | | | 6/12/24V | | | | |
| GYSFLASH 51.48 CNT FV | 0/2013 | 110 / 230 V | 3 | 23 | | _ | _ | | Ů | Ů | | 36/48V | | | | |
| vertical | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| GYSFLASH 103.12 CNT | 072008 | 230 V | | | • | • | • | | • | | | | | | | |
| GYSFLASH 123.12 CNT FV | 025677 | 110 / 230 V | 5 | 25 | • | • | • | | • | | | | | | | |
| OVER LOW ASS OF ONE | 025604 | 110 / 220 \/ | 5 | 25 | | | | | | | | 6/12V | | | | |
| GYSFLASH 103.24 CNT FV | 025684 | 110 / 230 V | 5 | 25 | • | · | • | • | • | • | | 24 V | | | | |
| | | | | | | | | | | | | | | | | |

| | vertical | | | | | | | | | | | | | |
|---|-----------------------------|--------|-------------|---|----|---|---|---|---|---|---|---|---|-----------|
| | GYSFLASH 103.12 CNT | 072008 | 230 V | | | • | • | • | | • | | | | |
| 1 | GYSFLASH 123.12 CNT FV | 025677 | 110 / 230 V | 5 | 25 | • | • | • | | • | | | | |
| - | 0.0051 4.011 4.00 0.4 0.017 | 025684 | 110 / 230 V | 5 | 25 | | | | | | | | | 6/12V |
| 0 | GYSFLASH 103.24 CNT FV | 023004 | 110 / 230 V | 3 | 23 | • | • | | ľ | Ů | Ů | | | 24V |
| | GYSFLASH 23.48 CNT | _ | 230 V | | | | | | | | | | | 6/12/24V |
| | 013FLA31123.40 GN1 | _ | 230 V | | | | | | | | Ů | | Ĭ | 36 / 48 V |
| | 0.0051 4.011 50 40 0.017 | 025998 | 110 / 230 V | 5 | 25 | | | | | | | | | 6/12/24V |
| - | GYSFLASH 53.48 CNT FV | 023990 | 110 / 230 V | 3 | 23 | • | • | | ľ | Ů | Ů | Ů | ľ | 36 / 48 V |
| | | | | | | | | | | | | | | |

| manufacturers | | | | | | | | | | |
|------------------------|--------|-------------|---|----|---|---|---|---|--|---------------------------------|
| GYSFLASH 128.12 CNT FV | 069916 | 110 / 230 V | 5 | 25 | • | • | • | • | | |
| GYSFLASH 158.12 CNT FV | 069909 | 110 / 230 V | 5 | 25 | • | • | • | • | | |
| | | | | | | | | | | Duty evole at 100% (2E C) 220 V |

Flexible Voltage (FV) technology extends the supply voltage range from 85 - 265 V. The GYSFLASH PRO and PRO CNT FV chargers can, therefore, be used on 110 V or 230 V (50 / 60 Hz) power supplies and provide a perfectly stable voltage for optimal battery charging.

Duty cycle at 100% (40°C) - 230 V



Accessories and Consumables

VERTICAL









ATTACHMENTS (FOR THE GYSFLASH 32.12 PL / 102.12 / 123.12 CNT / 103.24 CNT)

Attachments



OPTIONAL EXTRAS

MAGNETFIX 50 029637





ANDERSON CABLES Anderson<>Anderson 175 A Anderson / NATO Anderson<>Rema 160 A Anderson<>Texas For 5 m - 16 mm² 069107 GYSFLASH 5 m - 16 mm 30.24 / 50.24















GYSFLASH 30 for the GYSFLASH 40, 50 054646 054653

for the GYSFLASH 100, 101, 102 054585

> 150 A for the GYSFLASH 121, 123, 103 027930

EXTERNAL FUSES











CNT - SPM Smart Printer Module 026919 ↓ 140 × 105 × 133 mm / å 1.4 kg

OPTIONAL EXTRAS



1D / 2D bar codes 027718

QWERTZ-compatible USB

HUB MODULES

CNT - PHM 056589



CNT - SHM Smart Hub Modul 025981 220 × 180 × 45 mm /1 kg





SMC CABLE



056596 025691



GYSFLASH CNT PACKS





YouTube

PLAYLIST

CNT TECHNOLOGY





Start-up support

· Precharges the battery of internal combustion vehicles and sends the maximum charger current during the engine starting phase.



Load



- Lead
- Automatic charging curve in nine distinct stages. · Automatic 'SOS Recovery' desulphation
- Charges 50% faster than traditional chargers
- Real-time display of the charging process



internal flash memory Simplifies data collection

with connected modules (keypad and bar-code reader)

• Can save recorded load data onto a computer (USB connection) or on paper (SPM module)

Test



Diagnostic

- Compensates energy requirements up to 120 A
- The voltage can be set anywhere between 12 - 14.8 V in increments of 0.1 V according to the manufacturers' recommendations
- Automatic overconsumption warning



Showroom

- Compensates energy requirements up to 120 A
- · Cables can be disconnected for easy access to the engine compartment
- Can be used on a vehicle without a battery using the 'No Battery' feature
- Automatically restarts the vehicle in the event of a power failure
- The 'Lock Showroom' feature allows users to lock the charger to prevent anyone from tampering with the equipment



Measures battery voltage (voltmeter)

Evaluates the condition of a vehicle's starting

• Determines the status of the vehicle's alternator

system (starter and battery) when the engine is

- · Transforms the GYSFLASH PRO into a continuous, stabilised power supply (DC)
- · Voltage can be set in increments of 0.1 V and the current can be adjusted in increments of 1 A:

| | voltage regulation (in 0.1 V increments) | current setting (in 1 A increments) |
|---------------|---|--|
| GYSFLASH 12 V | 2 > 16 V | 2 > lmax |
| GYSFLASH 24 V | 2 > 30 V | 2 > Imax |



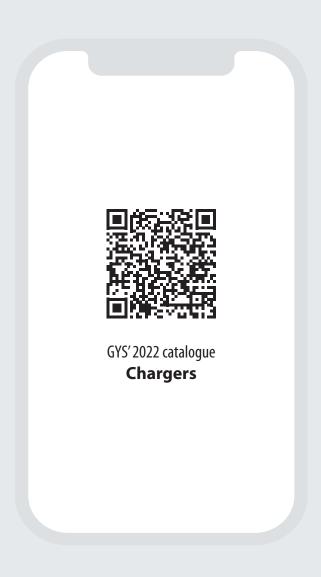
Maintaining the vehicle's energy requirement without the risk of losing the vehicle's stored history when changing the battery.

Changing the Battery*

*GYSFLASH 50.12 FV and Gysflash Pro CNT 51.12 / 121.12 / 125.12 / 101.24 / 123.12 / 103.24 / 53.48 CNT VF







GYS FRANCE

1, rue de la Croix des Landes 53941 SAINT-BERTHEVIN

Tel.: +33 2 43 01 23 60

www.gys.fr | service.client@gys.fr











Made in France since 1964

