





THE COMPLETE EVSE SOLUTION







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SO YOU'VE BOUGHT AN EV?

HOW ON FARTH DO YOU FILL IT UP?

It's all very new - the idea of charging your car instead of stopping by the gas station on the way home from work, hoping you're not going to get stuck in too much traffic.

How does the idea of never having to visit a gas station again sound? Bliss? Well, we think so. How convenient is it to think that you'll be able to just drive on by and save those five precious minutes for doing things that make you happy?

In the debate over just how convenient Electric Vehicles are people still worry that they will end up stuck somewhere with a flat battery. You could also potentially run out of fuel in a combustion engine vehicle, but once you know how to fill up your EV there are many ways to ensure that never happens!

- 1. The Charge Station this unit is hardwired into your home for overnight charging. On average most people drive only 28km per day, so an overnight charge with these units will give you enough juice to get where you need to go several times over.
- 2. The Portable Charger this unit is designed to remain in the vehicle for occasions where you're



staying at a friend's place or at your bach and you don't have a hard wired charge station available.

3. The Rapid DC Charge Station - these are the public units strategically placed around the country for convenience when you're out and about. The carefully chosen locations ensure an EV can drive from one end of the country to the other with loads of opportunities to charge on the way. Rapid charge stations bypass the vehicle's onboard charger for a super fast charge to get you back on the road quickly.

CHARGE **SMARTER**, CHARGE QUICKER

A dedicated home charging unit can increase your capacity to charge from



1.8kw 8 amps



\$\leq \text{32 amps}



So installing an EV charging station gives you the potential to completely



WHICH UNIT DO YOU NEED?

Selecting the right unit for your application based on the type of EV you have has never been easier.

On-Board Charger - This is what the EV is manufactured with and is used in conjunction with the other AC options. It determines the type and rate of charging that you can undertake.

Portable Charger - This unit remains in the vehicle for emergency charging. One of these is generally supplied with the vehicle when you buy it.

Charge Cable - This is essentially an extension lead, designed for use with untethered charging stations like you may find in public locations. These units don't have their own lead, so you simply plug your lead in to connect the charging station and your EV.

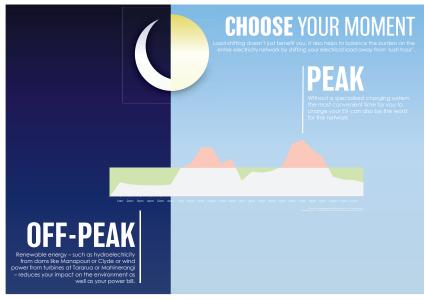
Charge Station - These are the units we advise you install in your home for the most convenience. You can plug your EV in to charge overnight just like you do with your cellphone.



WHEN IS THE BEST TIME TO CHARGE?

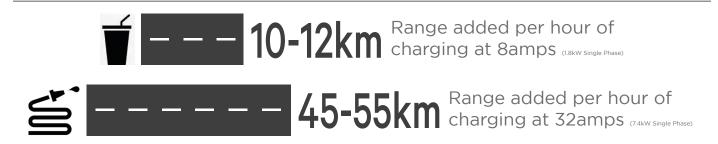
What time of day should you charge? The optimum schedule turns out to be both convenient for you and better for the environment. If you plug your EV in later at night (like you would your cellphone) so it can charge while you're sleeping, it's not only hassle-free but the added bonus is that the overnight period is generally also the off-peak period (lower demand) for energy consumption, and some electricity retailers offer cheaper power prices during these times because it places less strain on the network.

These charge stations are pretty clever and can be set to charge at specific



times, reducing the risk of spiking energy consumption beyond the abilities of our nation's renewable energy generation. If we as a nation draw more energy than our renewable generation is capable of then our electricity suppliers start using fossil fuels to generate electricity – as an EV owner you've made a conscious decision to try and help reduce our environmental impact so let's do even better and charge during off-peak times. Contact your retailer to make sure you're getting the best rates.

Now, how do you determine which charge unit and charger options suit your application and vehicle best? Keep reading, we have outlined the options available for all EV users and how to get the most out of each one.



Below is a table outlining the most common EVs currently in New Zealand and the appropriate charge accessories for each of these vehicles.

Car	On Board Charger	Portable Charger (IC-CPD)	Charge Cable	Charge Station
Hyundai Kona	7.2kW single phase; Type 2	EVC-CPD-8-T2	EVC-CC-4M-T2	EVC-WB-PULSAR-T2-xx
Hyundai loniq	6.6kW single phase; Type 2	EVC-CPD-8-T2	EVC-CC-4M-T2	EVC-WB-PULSAR-T2-xx
Kia Niro	3.5kW single phase: Type 2	EVC-CPD-8-T2	EVC-CC-4M-T216	EVC-WB-PULSAR-T2-xx
Nissan Leaf	3.5kW single phase: Type 1	EVC-CPD-8-T1	EVC-CC-T2-T1-4M	EVC-WB-PULSAR-T1-xx
Nissan Leaf 2018+	6.6kW single phase: Type 1*	EVC-CPD-8-T1 (imports. NZ new T2)	EVC-CC-T2-T1-4M	EVC-WB-PULSAR-T1-xx
Mitsubishi Outlander pre 2017	3.5kW single phase; Type 1	EVC-CPD-8-T1	EVC-CC-T2-T1-4M	EVC-WB-PULSAR-T1-xx
Mitsubishi Outlander 2017 +	6.6kW single phase; Type 1	EVC-CPD-8-T1	EVC-CC-T2-T1-4M	EVC-WB-PULSAR-T1-xx
BMW I3	11kW 3 phase			EVC-WB-PULSAR-T2X3-WH

^{*}Suffix -xx denotes colour, WH = white, BK = Black



WHY CHOOSE WALLBOX?

SHARE THE LOAD

 Every Wallbox comes equipped for Load Sharing – enabling EV integration without expensive upgrades to the electrical supply. Load Sharing distributes the available current (power) to best suit the number of EV plugged in.



Scan for Load Sharing Video

The amount each car receives changes each time a car is added or removed from the charge network.

 Never overload your home or office. Wallbox units can balance loads according to your maximum current.

EASILY SCALABLE

- Wallbox offers flexible and scalable modular products
 without additional costs or fuss. Start with one Pulsar
 and the myWallbox personal app (included) and
 grow to a nationwide multi-site network of chargers
 all reporting back to myWallbox Corporate software
 simply by adding more units.
- Up to 22kW AC charging capability. 7.4kW is the sweet spot when it comes to charging and we have that covered.
- All Wallbox chargers meet the IEC 61851 standards for safety, quality and performance requirements established by the International Electrotechnical Commission. They also comply with the WorkSafe NZ guide to EVSE and have full EMC compliance.
- Suitable for fleet/private/semi-public applications. The same charger can accommodate all these locations.
- Replace company fuel cards with myWallbox Corporate.
 When a company car is taken home, it can be charged overnight, and the charge costs reimbursed to the employee quickly and without fuss.
- Data from unlimited units can be brought together for monitoring and reporting. Each user has a personal login for myWallbox and it will monitor charge session information and costs for all users and all chargers on your network.
- Assign as many users to a charger as necessary or allow many users to access many chargers – the freedom and flexibility is endless.

whywallbox



SIMPLE AND EFFECTIVE

- Wallbox chargers are the smallest and smartest range of EV chargers in the world these units are definitely punching above their weight.
- Wallbox chargers have been tested to guarantee their compatibility with all types of electric vehicles.
- myWallbox software and app is included with every Wallbox unit - free to download from your app store.
 Simple and intuitive, they allow each charger to stay updated with the latest features.
- Wallbox charge stations can be set up to charge at specific times to ensure off-peak charging and reduction in load.
 - Tested at an ILAC & ENAC accredited laboratory to 61851 Standard for electrical safety and electromagnetic compatibility (EMC). EMC compliance ensures compatibility with local standards for electromagnetic interference. This ensures that the tested device will not interfere with other electronic devices such as cell phones, radios, televisions.
- Online backup and support from Wallbox International as well as online and on-site backup and support from TransNet NZ Limited.

One user, multiple chargers

One charger, multiple users







CHARGING AT HOME

A hard wired charging station installed at home is the most convenient and practical option for many people. The Wallbox Pulsar unit constantly monitors safety circuits to ensure safe operation 24/7 and can charge the vehicle batteries overnight while you're sleeping. It gives you the option to make the most of off-peak electricity rates by being programmable.

CONVENIENTLY LOCATED AT YOUR HOME FOR EASE OF USE

ARRANGE EASY REIMBURSEMENT FOR COMPANY CARS

PROGRAMMABLE UNITS ENABLE DELAYED CHARGING UNTIL OFF-PEAK PERIODS

TYPE 1 AND TYPE 2 PLUGS AVAILABLE

FASTER CHARGING FOR BETTER DISTANCE PER HOUR OF CHARGE

SAFE AND EFFICIENT USE OF ELECTRICITY

APP ALLOWS FOR EASY RECORD KEEPING & CHARGE BACK ON COMPANY VEHICLES, OR RECORDING DATA FROM INDIVIDUAL USERS IN AN APARTMENT COMPLEX

Load Sharing – this is built into every Pulsar unit. When correctly set up for your installation Wallbox chargers won't exceed the available current – the current draw to charge will be adjusted to ensure you don't overload your home's supply.

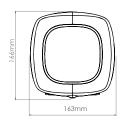
The myWallbox app is available on both the App Store and Google Play store for use with all Wallbox Pulsar units. This app offers you complete control of charge.















Plug Types







TYPE

Charging Stations

(Commander & Copper ranges coming soon)

Cat No.	Plug Type	Housing
EVC-WB-PULSAR-T1-BK	TYPE 1	BLACK
EVC-WB-PULSAR-T1-WH	TYPE 1	WHITE
EVC-WB-PULSAR-T2-BK	TYPE 2	BLACK
EVC-WB-PULSAR-T2-WH	TYPE 2	WHITE
EVC-WB-PULSAR-T2X3-WH	TYPE 2	WHITE



45-5



CHARGING AT WORK

Charging at work or in a semi-public installation is a little bit more complex. We need to be aware of the amount of electricity the facility has to offer and how it can be best allocated. Our commercial charging units are equipped with software to enable load sharing in order to best use the available electricity without putting a strain on the installation.

IN-BUILT LOAD SHARING CAPABILITIES

COMMUNICATION MASTER MODULE SHARES LOAD WITHOUT EXCEEDING CURRENT LIMIT

SOFTWARE ENABLES ENERGY COSTS TO BE RECORDED AND COSTS ALLOCATED IF REQUIRED

TYPE 1 AND TYPE 2 PLUGS AVAILABLE

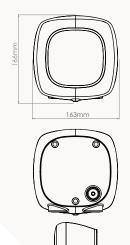
FASTER CHARGING FOR BETTER DISTANCE PER HOUR OF CHARGE

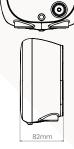
SAFE AND EFFICIENT USE OF ELECTRICITY

APP ALLOWS FOR EASY RECORD KEEPING & CHARGE BACK ON COMPANY VEHICLES

Load Sharing – this is built into every Wallbox charging station. EV use a lot of energy, and managing how they charge with proper connected charging infrastructure is key when introducing EV fleets in New Zealand. To avoid overloading an installation the total available energy must be shared between the number of EV plugged in. As an EV finishes charging or is taken off charge the amount of power (current) available to the remaining EV increases. Load sharing for multiple charging stations is essential.

The myWallbox Corporate app links all chargers back to centralised software no matter where in the world they are located, allowing for easy recording of use and the allocation of chargers to users and vice versa.







Phases	Amps	kW Rating	Suitable for Home Use	Suitable for Commercial Use
1	32	7.4	\checkmark	\checkmark
1	32	7.4	✓	✓
1	32	7.4	√	✓
1	32	7.4	✓	✓
3	32	22		✓

5km

Range added per hour of charging at 32amps (7.4kW Single Phase)





FUTURE PROOF DESIGN

No need to worry about the future with Wallbox, they have thought of everything. These units can be updated as technology changes with a simple software upgrade. Not only can you update the software, these units are designed and tested to work with all types of EV and changing the plug type is easy too (plug changes should be undertaken by a qualified electrician only).

Wallbox charge stations are also scalable, meaning the perfect solution for businesses – start small with just a few chargers, see how EV works for you, then simply scale up by adding up to 75 Pulsar units on a 150amp 3ph supply to make reporting fast and easy. The options are endless.

Smart Controls has been a staple in the Electrical industry for almost 20 years, and in that time we have cemented our place as innovators and leaders in new technologies. EV Charging Solutions is a division of Smart Controls dedicated to the EV and e-Mobility sector. We can offer the complete solution, from a single charger or component right through to testing, compliance, network design and installation, from your switchboard to the plug in the car – we have you covered. Wallbox charger is essentially the start of your charging network.

- Wallbox units have been tested to be compatible with all types of electric vehicle available
- Wallbox software is updated free of charge to ensure the latest advancements in technology are available to all customers
- Wallbox can remotely check, diagnose and in some cases remedy problems with a Wallbox charge station. All other issues will be fixed by a local agent
- Multiple charging stations at a single site require load sharing capabilities in order to utilise excess supply without overloading your installation. All Wallbox units include this function
- No need for costly switchboard upgrades, EV Charging Solutions will survey your site and report back with your potential EV charging capacity
- Wallbox can manage charge load based on the available current to ensure maximum output without overloading your system
- Wallbox can manage users and usage

We can organise a certified Wallbox installer for you,









Data monitoring & system interaction



Build your network without additional devices



Balance load to maximise charging with available power



ACCESSORIES



HANGER BRACKET FOR CHARGE CABLE

Keeping your charge cable tidy and coiled up is going to help reduce the footprint of your charge station as well as maintaining the integrity of the unit. These hanger brackets were designed especially for use with Wallbox charge stations.

Part Number: EVC-BRACKET



C40A TYPE B RCBO

Type B RCBO offer fault protection (against indirect contact of live parts), additional protection (in case of direct contact of live parts $I_{An} \le 30$ mA) and fire protection (for locations exposed to fire hazard). Tested to meet requirements of IEC/EN 61008-1, IEC/EN 62423 & VDE 0664-400 B+. Mode of operation, pure AC & pulsating DC residual current sensitivity, A voltage independent, B Smooth DC current sensitivity.

Minimum operating voltage: 50V

Part Number: EVC-002174538



TERMINATION PIT FOR EV PEDESTAL

Used to make an easy connection point to daisy chain the supply to multiple EV pedestals. Essential for future proofing and a must for any new car park. Don't be caught out by having to do costly re-work when you need to install EV charger pedestals – install this pit wherever there may be a need for EV chargers in the future. Used in conjunction with conduit and either a draw wire or full pre wire, this is the most cost effective way to ensure your carpark is prepared for when more EV charging stations are required.

Part Number: EVC-TERMINATION-PIT



PEDESTAL FOR OPEN INSTALLATION SITE

Not all installations can be against a wall. For situations like open air car parks these pedestals are a perfect solution and offer a sturdy, stylish mounting platform for Wallbox units.

Part Number: EVC-PULSAR-PEDESTAL EVC-CL-xx-CURLY*

*Optional Curly Cord charge lead. Suffix -xx denotes plug type - T1 or T2



DATASHEETS

WALLBOX PULSAR



The latest technology and the most compact design combine in the Pulsar to offer the most unique charging device in the world. And all this at a unique price.

WALLBOX COMMANDER



The future in your hands.

Its advanced technology and many features make Commander one of the most sophisticated load devices on the market.

WALLBOX COPPER



The combination of technology, size, design, functionality and connectivity in the world's most advanced charging station system. Copper has Facial Recognition and Sense technology that allow you to interact with the charger in a more natural way.

MYWALLBOX PORTAL & APP



MyWallbox is a space dedicated exclusively to you, your charger, and your vehicle. In MyWallbox you'll be able to monitor your electricity consumption, charging time of your vehicle, or even control the charging status from your smartphone.



Wallbox Pulsar

Technical Datasheet

Wallbox Pulsar is a revolutionary smart charging system for electric vehicles, equipped with the latest technology and a compact and sophisticated design to deliver the best performance in the daily life of individuals and companies.

Wallbox Pulsar is the most compact design on the market, delivering the maximum domestic power.

Wallbox Pulsar is designed with Bluetooth smart connectivity that allows you to get data on-the-go when you approach the charger.

Features such as charging activation, energy consumption monitoring, charger and house energy reporting, automatic software updates, etc. make the Wallbox Pulsar the smallest and smartest connected charger on the market.

"myWallbox", a personal software system designed specifically for you, allows you to control charging sessions, configure the charger, and gives you access to the consumption history and other services such as Smart Charging.

"myWallbox" also allows the integration of data through OCPP with any backend system from the market.

Wallbox Pulsar and myWallbox can be used by anyone from private domestic users to commercial workplace chargers.

Summary information

general specifications

Model Name	Wallbox Pulsar
Mode	Mode 3 Cables Type 1 or Type 2
Overall Dimensions	160x160x90 mm (w/o cable)
Weight	1.9 Kg. (w/o cable)
Operating temperature	-25°C to 45°C
Storage temperature	-40°C to 70°C
CE Marking	IEC61851-1 - IEC61851-22

electrical specifications

Max Power	7.4kW (1P) / 22 kW (3P)1
Input Voltage	230V AC ± 10% (1P) / 400V AC ± 10% (3P)1
Max Current	32A, cable size up to 5x6mm²
	Charging current configurable from 6A to
Nominal frequency	32A 50Hz/60Hz
Metering	Class B - EN50470
Degree of protection	IP54/IK08
Over voltage Category	CAT III

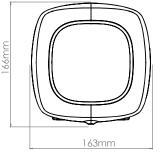
status & user interface

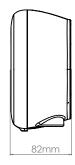
Communications	Bluetooth
User identification	Plug & Play / AUI technology
	9 point matrix for PIN insertion2 myWallbox
User interface	Арр
Communication interface	myWallbox and OCPP
Charging status	Halo RGB LED
	Available/Connected/Charging/Error

(1) 3P only available for Type 2 (2) Only available with the App

Characteristics susceptible to changes without prior notice

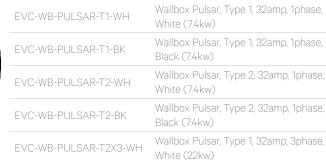
Product dimensions

















Wallbox Commander

Technical Datasheet

Wallbox Commander is a revolutionary smart charging system for electric vehicles, equipped with the latest technology and a compact and sophisticated design to deliver the best performance in the daily life of individuals and companies.

Wallbox Commander is the only product on the market with a Touch-Screen and WiFi connectivity that allows you to obtain automatic software updates to keep your Wallbox up-to-date.

With a customizable user interface, the user can also have access to scheduled charging and is able to see real-time monitoring of the charged mileage to the vehicle.

"myWallbox", a personal software system designed specifically for you, allows you to control charging sessions, configure the charger, and gives you access to the consumption history and other services such as Smart Charging.

"myWallbox" also allows the integration of data through OCPP with any backend system from the market.

Wallbox Commander and myWallbox can be used by anyone from private domestic users to commercial workplace chargers.

Summary information

9	
Model Name	Wallbox Commander
Mode	Mode 3 Cables Type 1 or Type 2
Overall Dimensions	220x150x135mm (w/o cable)
Weight	2.4 Kg. (w/o cable)
Operating temperature	-25°C to 45°C
Storage temperature	-40°C to 70°C
CE Marking	IEC61851-1 - IEC61851-22

The second secon	
Max Power	7.4kW (1P) / 22 kW (3P)1
Input Voltage	230V AC ± 10% (1P) / 400V AC ± 10% (3P)1
Max Current	32A, cable size up to 5x6mm²
	Charging current configurable from 6A to 32A
Nominal frequency	50Hz/60Hz
Metering	Class B - EN50470
Degree of protection	IP54/IK08
Over voltage Category	CAT III



Communications	Wi-Fi / Ethernet
User identification	Plug & Play / 9 point matrix for PIN insertion
User interface	Touchscreen 7"
	myWallbox App
Communication interface	myWallbox and OCPP
Charging status	Customized vehicle selection

Screen information (Available/Connected/Charging/Error) Schedule Charging

Charged Mileage

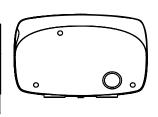
Energy Monitoring Reporting Capacitive / Resolution 800x480px



Touchscreen Model







EVC-WB-COMMANDER-T2-WH

Wallbox Commander, Type 2, 32amp, 1phase, White (7.4kw)

EVC-WB-COMMANDER-T2X3-WH

Wallbox Commander, Type 2, 32amp, 3phase, White (22kw)

^{*}Type 1 Commander on special order



Available Q4 2018

Wallbox Copper

Technical Datasheet

Wallbox Copper is the ultimate intelligent charging system for electric vehicles, equipped with the latest technology and a compact and sophisticated design to deliver the best performance in the daily life of individuals and companies.

Wallbox Copper is the smallest and most compact design on the market, delivering the maximum power with gesture identification. Wallbox Copper is designed with Bluetooth/Wi-Fi/Ethernet smart connectivity that allows you to get data on-the-go either in real time or on demand based on your needs. Ensure future proof compatibility thanks to ISO 15118 ready hardware.

Features such as charging activation, charging schedules, energy consumption monitoring, charger and house energy reporting, automatic software updates, etc. make the Wallbox Copper the smallest and smartest connected charger on the market.

"myWallbox", a personal software system designed specifically for you, allows you to control charging sessions, configure the charger, and gives you access to the consumption history and other services such as Smart Charging.

"myWallbox" also allows the integration of data through OCPP with any backend system from the market.

Summary information

general specifications

Model Name	Wallbox Copper
Mode	Socket Type 2
	Cables Type 2 or Type 1 (5m length) (10m length optional)
Overall Dimensions	254x163x52mm (socket) 163x163x52mm (cable)
Weight	3 Kg. (w/o cable)
Operating temperature	-25°C to 45°C
Storage temperature	-40°C to 70°C
CE Marking	IEC61851-1 - IEC61851-22

electrical specifications

Max Power	7.4kW (1P) / 22 kW (3P)
Input Voltage	110/230V AC ± 10% (1P) / 400VAC ± 10% (3P)
Max Current	32A, cable size up to 5x6mm²
	Charging current configurable from 6A to 32A
Nominal frequency	50Hz/60Hz
Metering	Class B - EN50470
Degree of protection	IP55/IK08
Over voltage Category	CAT III
Protections	(GFCI / DC 6mA detection)1

status & user interface

Status & user interrace	
Communications	Bluetooth / Wi-Fi / Ethernet
	LTE1 / ISO15118 Ready ¹
User identification	Visual / Plug & Play / myWallbox App / (RFID/NFC) ¹
User interface	wallbox Sense / myWallbox App
Communication interface	myWallbox and OCPP
Charging status	Intelligent responsive Screen 4.3"

(1) Optional Characteristics susceptible to changes without prior notice











EVC-WB-COPPER-T2-C	Wallbox Copper, Type 2, 32amp, 1phase, copper (7.4kw)
EVC-WB-COPPER-T2X3-C	Wallbox Copper, Type 2, 32amp, 3phase, copper (22kw)
EVC-WB-COPPER-T2-S	Wallbox Copper, Type 2, 32amp, 1phase, Silver (7.4kw)
EVC-WB-COPPER-T2X3-S	Wallbox Copper, Type 2, 32amp, 3phase, Silver (22kw)

^{*}Type 1 Copper available on special order

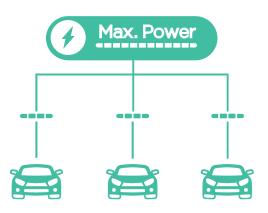




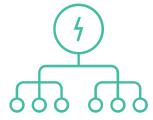
plug & drive

Load Sharing

The innovative software system loaded on all Wallbox chargers controls the distribution of available power between multiple charging devices, and is suitable for private use as well as fleet management. Wallbox allows you to log energy usage and costs easily with the myWallbox app.



A world of advantages



Build your own Network, Connect multiple charging points



Maximum performance for charging with available power



Simultaneous charging



Reduce up to 68% of your infrastructure costs



Manage your entire network from a single device



Increase the number of charge points on your existing grid connection by up to 73%



One system, multiple functionalities.





Automatic dynamic power distribution



Convert your charging points into a Power Sharing network, without additional services



Data monitoring and system interaction



Maximum guaranteed charging efficiency for each electrical installation

Technical specifications

- Master-Slave connection by safety and robustness of CAN bus.
- Single-phase or Three-phase with up to 22kW for each charger.
- Mains distribution of 63A or 150A upgradable (setting with internal selector).
- Wi-Fi/Ethernet connectivity through Master controller.
- Updates to improve management.

(Static Load Management*/Dynamic Load Management/Priority Management)





Pulsar



Pulsar Pedestal



myWallbox Portal

Technical Datasheet

"myWallbox", a personal software system designed specifically for you, allows you to control charging sessions, configure the charger, and gives you access to the consumption history and other services such as Smart Charging.

"myWallbox" also allows the integration of data through OCPP with any backend system from the market.

"myWallbox" can be used by anyone from private domestic users to commercial workplace chargers.

- Single or Multiple charger connectivity
- Identification of sessions ID: Charger / User / Registration number
- Real-time monitoring and Reporting

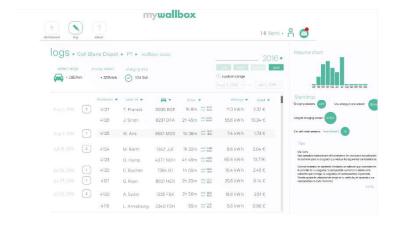
Consumption

Charging time

Charging cost

Charging usage

- Charging profiles
- Charging report (day/week/month/year)
- Charging status (available, charging, online, offline, error...)
- Encrypted data communication
- OCPP integration



mywallbox

myWallbox App

Get the "myWallbox" experience on your mobile device and more:

- Access to AUI Technology (Automated User Identification)
- House Energy Consumption real-time monitoring
- Smart charging schedules
- Download updates to your charger

