FIMER

Charging solutions for electric vehicles

"We are committed to providing our contribution in order to achieve the global community's world, as the creation of a sustainable future."

In a global scenario where the demand for renewable energy is constantly growing, we are among the leaders concerning the manufacturing of energy conversion solutions worldwide.
We are committed to make our customers able to provide greener and smarter energy.
The focus of our goal is based on our experience as the world's leading manufacturer of solar inverters. Therefore our wish is to foster the materialization of an era marked by clean and sustainable energy, through innovative new concepts in both energy production and consumption.
Our headquarters in Vimercate (Italy) are designed to be an example of sustainability, with a 1 MW photovoltaic system and the best technologies in the field of geothermal energy.
Thanks to these characteristics, today we are one of the few Zero impact companies in the world.

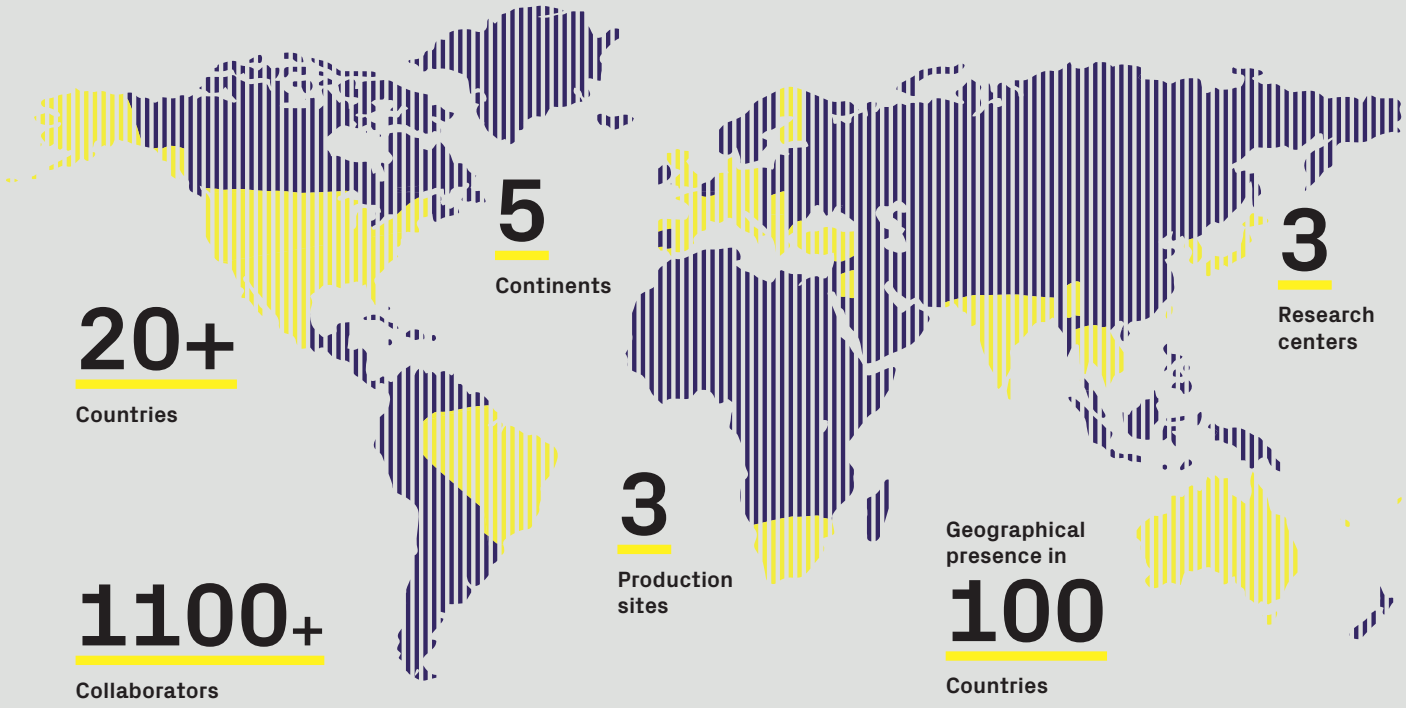
Filippo Carzaniga
Chairman

Contents

A Global reality, Made in Italy

Operating in more than 20 countries, with over than 1,100 collaborators and one of the broadest solutions portfolio, we are now one of the leading manufacturers of energy conversion systems, ready to listen and face every challenge in every corner of the world.

Research & Development, the main production plants and all the main decision-making processes take place in Italy. We have a common goal that goes beyond all borders: to expand Italian technological excellence to the whole world.



Our solutions are based on over 80 years of experience and continuous technological advances.
Standardized, certified and expandable: the production processes applied and the plants in which the inverters are manufactured play a key role in ensuring the high quality of our offer. Engineering excellence, rigorous quality and testing standards are corroborated by our global certifications; we strive to achieve the highest levels of quality in every aspect of our business.

Certified Partners to ensure high quality and a reliable service at a global level.
The excellence of the Made in Italy concept also extends to our Service Partner Network. We select the Partners according to their professionalism and reliability criteria and we offer pre-and post-sales services, Customer support, webinars and constant education. We have a network of certified and trained partners, who know the market inside out and are available to propose our solar and e-mobility solutions, tailored to local regulations and specific needs.

Our charging solutions

We are shaking up the future of mobility as we lead the way in the electric era.

The electric mobility's global market continues its unstoppable growth, both in terms of registrations of "hybrid" (PHEV) and "full-electric" (BEV) vehicles and, at the same time, the need to offer charging infrastructures is increasing. Since 2017, we have been working with the main players in electric mobility, developing and manufacturing charging solutions for electrically powered vehicles, and we do so by listening to the needs of future generations of vehicles. We have developed platforms, both in DC and in AC, designed to meet the diverse needs of users, who are seeking solutions for private, public and commercial use.
Our FIMER FLEXA AC Wallbox, FIMER FLEXA AC Station and FIMER ELECTRA (Fast) DC Station, all easy to install, certified and customizable, cover today the different needs of the market.

As yet, we have supplied more than 35,000 charging stations, both AC and DC, developed on specific needs of our Customers.

We are also working on innovative new platforms that will provide the level of service, technology, and innovation expected in a rapidly evolving market.
We are ready to take on the demands of this dynamic sector as protagonists, to confirm our vision of a sustainable future that sees us at the forefront of a New Age of mobility.

+35,000

EV charging stations installed

A complete portfolio of EVI solutions for a super-charged e-mobility

We lead the creation of a sustainable future with flexible and innovative electric vehicle charging solutions: a complete range, both in AC and in DC, suitable for different types of applications and Customer needs, in residential, commercial & public context.

Solutions for residential applications

The best EV charging solution to be installed on a wall in a private (domestic and/or business) context is **FIMER FLEXA Wallbox**, the AC charging device, available in three versions**: Stand Alone, Future Net** and **Inverter Net**.

FLEXA AC Wallbox offers different configurations, it can be easily installed in any residential context, indoors or outdoors, and maintains high safety standards. Installed on its **FIMER FLEXA Stand**, available in both single and double-charging-point mode, the AC Wallbox is suitable for any positioning need**.**

Solutions for commercial and public applications

Ideal for commercial and public installations, **FIMER FLEXA AC Station** can charge in alternating current one or two electric vehicles at the same time, each at a power up to 22 kW. It is designed to withstand different weather conditions and to ensure ease of use, both for the user and for maintenance workers**.**

FIMER FLEXA Station AC is available in three versions**: Stand Alone, Local Controller, Future Net**.

Fast charging solutions

FIMER ELECTRA is the next generation fast charger for electric vehicles, both in DC and AC**.** It is a real conversion station, whose power can be sized according to the Customer's needs and the availability of the electricity grid.

FIMER ELECTRA DC Station is specifically designed with a modular architecture to ensure maximum flexibility and possibility of upgrades, even after installation, to have an extremely flexible and customizable solution**.**

Charging solutions for residential applications

FIMER FLEXA AC Wallbox

FIMER FLEXA AC Wallbox is the wall-mounted charging device designed for residential applications.

FIMER FLEXA AC Wallbox offers different configurations, depending on the type of charging required by the user: it can be set up with a fixed charging cable (T2) or with a socket (T2 or T3A) connected to an external cable, and is available in different versions depending on the power (from 3.7 kW to 22 kW), the type of connection to the vehicle (T2 cable, T2 socket or T3A socket) and the type of connectivity (Stand Alone, Inverter Net or Future Net).

The FIMER FLEXA AC Wallbox is ideal for private use: installed in the garage or in the common courtyard, it allows to charge the car or the scooter in a simple and convenient way, making it faster, safer and more convenient than a traditional domestic socket.

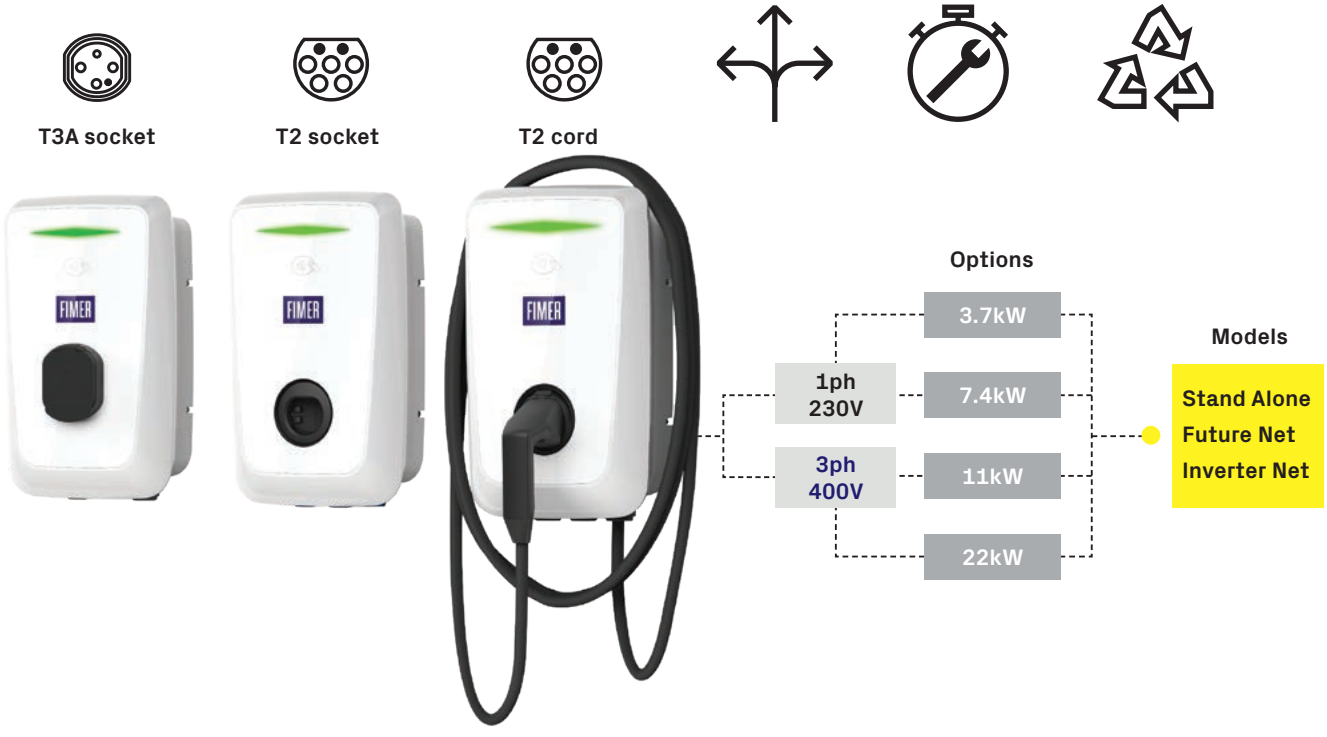
It is equipped with RFiD reader, whose main feature is local access management and control. This function allows the programming of RFiD cards in full autonomy and without the aid of external tools or connections. Thanks to the RFiD functionality, when a master card is passed, the Wallbox switches from "reading" mode to "programming" mode, and from that moment on it will enable all the reader cards passed in front of the reader; the procedure will be ended by passing the master card again (and the Wallbox returns to normal use mode).

Thanks to the MyFIMERWallbox App, the end user who has the Wallbox installed, can start the charging process, monitor it and check its status in a simple and intuitive way.

Maximum flexibility
Each FIMER FLEXA AC Wallbox is available in different powers and configurations to meet different charging needs.

Easy installation and maintenance
It is simple to install and maintain as well. Therefore can the device also be easily removed and moved thanks to its fast assembly (and disassembly) function.

Sustainable
The FLEXA AC Wallbox is not only a functional, reliable, safe and flexible solution, but also environmentally friendly. Its casing and packaging are made from 100% recycled materials.



Each version of FIMER FLEXA AC Wallbox has the following main features:
• Type 2 socket (Cable version) and Type 2 and 3A socket (Socket version)
- Charging in Mode 3
- Load manager, master/slave and RFiD reader functions
- Locking of the socket during charging (Socket version)
- Bluetooth and Wi-Fi connectivity
- 100% recycled material
- Internal flash memory for storing and saving data
- Antitamper system
- RCD differential release type A
- Current transformer and MID meter for energy reading
- Assembly on a stand and management of its internal electrical protections (HCB + RCD type A)
- Easy assembly

Signals and control
- Local LED signals for indications of the Wallbox charging status or any faults
- Authentication and unlocking systems via RFiD cards, mobile application or through a centralized management system
- OCPP 1.6 Json protocol

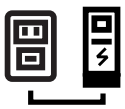
FIMER FLEXA AC Wallbox is available in three models: Stand Alone, Future Net and Inverter Net.

FIMER FLEXA AC Wallbox - Stand Alone
The Stand Alone version offers basic features that guarantee easy use at an affordable price. Its functionalities are limited to interaction with the electric vehicle, activating its charging process and ensuring its safe operation:
- Available in Cord (T2) or Socket (T2 or T3A) versions
- Statuses signaling via local LEDs and local RS485 communication for configuration and monitoring
- Communication interface with MID counter or TA meter
- Bluetooth communication and RFiD reader for local access management

FIMER FLEXA AC Wallbox - Future Net
The Future Net version includes great connectivity features that enable remote monitoring and control of the device. It offers the following features in addition to those of the Stand Alone version:
- 3G/4G connectivity, Wi-Fi, Ethernet
- OCPP, 1.6 Json communication protocol
- Master/slave management
- Remote monitoring and control system: thanks to the use of a mobile app for the user and a centralized system for the operator, it allows the remote the monitoring of the device status, the creation of use and energy reports, the access management and the error analysis

FIMER FLEXA AC Wallbox - Inverter Net
The features of the Inverter Net version are similar to those of the Stand Alone version; even though it is also able to communicate with REACT 2 photovoltaic inverters with storage.
Compared to the Stand Alone version, the Inverter Net version offers the following advantages:
- Data sharing and storage through interaction with REACT 2 photovoltaic inverters with integrated storage
- Load optimization and integration with storage systems
- Shared management portal (Aurora Vision®) for data monitoring and management

Installation type



Load management

Master/slave

T2 cord 3.7 - 22 kW

T2 socket 3.7 - 22 kW

T3A socket

RFiD reader

App

OCCP 1.6 Json protocol

Wi-Fi

BLE

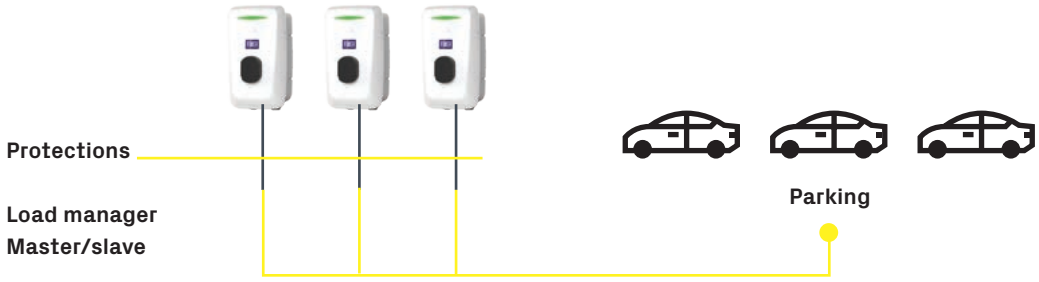
Master/slave and load management for optimal management of multiple charging stations
Load management is a function that allows to distribute the available power at the installation site proportionally to all connected charging stations. This way, it is possible to charge the vehicle, and the house at the same time, even though the plant has been working with other equipment. This function is combined with the master/slave function; the simplest and most economical version uses the RS485 connection and makes it possible to use a "smart" Wallbox (FIMER FLEXA Future Net) and others (FIMER FLEXA Stand Alone) connected to it. This sequential charging mode is ideal for commercial vehicles parking lots with night-time charging, and in those situations where alternate charging solutions are to be applied at limited costs.

With dynamic load management, on the other hand, each Wallbox is "smart" (FIMER FLEXA Future Net) and able to modulate the instantaneous power according to the available loads or system settings, which can be customized as desired. With this simultaneous charging mode on all vehicles, the system is performing at its best and allows the full management of the charging vehicle fleet.

Bluetooth monitoring
The FIMER FLEXA AC Wallbox can be locally monitored via the free app

Back-up via SuperCap,
In case of a power loss, the operation is interrupted and the cable is unlocked by SuperCap, the advanced electronic devices that, unlike traditional batteries, do not require maintenance or replacement, with obvious advantages in terms of costs and management

Robustness and safety
High levels of protection (IK08, IP 55 and Antitamper) make FIMER FLEXA Wallbox a resistant product suitable in outdoor areas, as well



Different configuration possibilities: Cable version has integrated cable and charging connector

Simple and intuitive interface: the LED color identifies the status of the device:
- Green: ready to recharge
- Blue: charging

FIMER FLEXA Stand for AC Wallbox

FIMER FLEXA AC Wallbox can also be used in the absence of a wall and for commercial and public applications: the application on the special FLEXA Stand, available in both single and double charging mode and equipped with LED light to illuminate the charging point, makes it suitable for all positioning needs.

In this way, it becomes the ideal solution in private or public, covered or outdoor spaces and parkings lots, thanks both to its high IP55 protection degree, and to the load management function, optimizing the management of loads, and the Master/slave one, to create charging networks with more Wallboxes connected together and managed simultaneously.

From now on you can charge your electric car with the energy generated by the photovoltaic system

Charging the electric car thanks to the energy produced by the photovoltaic system is now possible and very convenient, thanks to the integration of EV charging stations and solar inverters, thus offering even more efficient and complete solutions.
FIMER FLEXA Wallbox Inverter Net and REACT 2, FIMER's hybrid inverter with energy storage capability, offer an integrated, efficient and complete solution for converting and storing solar energy to be used for charging electric vehicles.

The integration between the two devices brings significant benefits:

- Charging takes place directly with the inverter's storage system; in this way the electric vehicle is charged entirely with the stored solar energy.
- The integration allows the management of loads' priority, distinguishing between domestic loads and electric vehicle charging load, and setting all the parameters according to the energy produced and personal needs

With the Energy Viewer app, the user can easily monitor and control different parameters through a single platform. In fact, the software allows to view the information related to the photovoltaic system and to monitor flows, status and charging time.

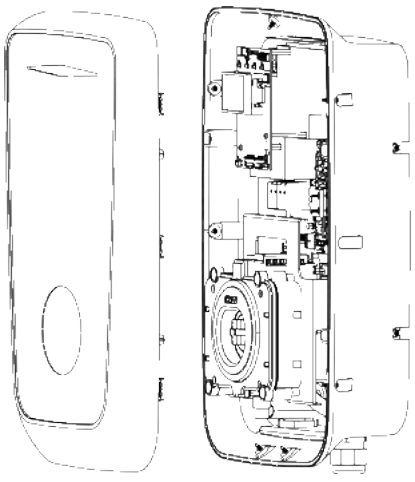
FIMER REACT 2 - String Inverter
The REACT 2 storage system includes a long-life lithium-ion battery and has a storage capacity up to 12 kWh. Its modular design makes it easily adaptable to the needs of individual dwellings, optimizing energy production and increasing energy self-sufficiency rates by up to 90%. REACT 2 is available in 3.6 and 5.0 kW power sizes and has one of the highest efficiencies on the market, providing up to 10% more than other low-voltage alternatives. With the opportunity to install it on the AC or DC side of the system, REACT 2 is the ideal solution for both new installations and as a retrofit for existing systems, allowing users to increase their self-consumption and save on their utility bills.

Main features

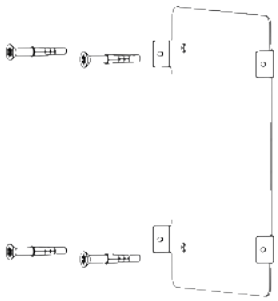
- Lithium-ion battery for energy storage (4 to 12 kWh max)
- Up to 10% more efficient than low-voltage systems
- Installable on new or existing installations
- Possibility to integrate batteries at any time
- Quick and easy installation thanks to "plug and play" connection
- System monitoring via dedicated mobile app
- Native Modbus SunSpec (TCP/RTU) communication protocol

Technical data

Model FIMER FLEXA AC Wallbox	Stand Alone / Inverter Net / Future Net			
Maximum power	3.7kW	7.4kW	11kW	22kW
Standard	IEC61851-1			
Charging method	Mode 3			
Available outlets	5m cord (Type 2) or socket (Type 2 or Type 3A)			
Power system	1P + N + PE	1P + N + PE	3P + N + PE	3P + N + PE
Rated voltage	230V AC ± 10%	230V AC ± 10%	230/400V AC ± 10%	230/400V AC ± 10%
Frequency	50-60 Hz			
Rated current	16A	32A	16A	32A
Rated impulse withstand voltage (Uimp)	4kV			
Rated conditional short-circuit current of an assembly (icc)"	10kA			
Rated diversity factor (RDF)	1			
Degree of pollution	2			
EMC classification	Class B emissions			
Protective measures against electric shock	Class I			
Connection to the mains	Permanently connected to the mains			
Grounding system type	TT or TN (both with PE)			
Indoor/outdoor installation	Indoor/outdoor			
Fixed or removable installation	Fixed			
Overvoltage category	III			
IP protection rating	IP 55			
IK protection rating	IK08			
Case material	100% recycled plastic			
Dimensions	275 mm x 480 mm x 140 mm			
Weight	7 kg (Socket), 8.5 kg (Cord)			
Operating temperature	-25....+50°C			
Storage temperature	-25...+70°C			
Humidity	0...95% (non-condensing)			
Altitude	Up to 2000m			
Product intended for use by	Unskilled persons			
Positioning in area with	Unlimited access			
Magnetothermal protection	Not included			
Differential protection	Not included (6mA DC RCM only included)			
Energy meter	Compatible with external MID meters or TA meters			
Certification	CE, AUX, UL			



Front cover **Back body**



Fixing plate

Charging solutions for commercial and public applications

FIMER FLEXA Stand
the support for any positioning need

With an innovative design, the FIMER FLEXA Stand increases the flexibility of use of FLEXA Wallbox, which can thus be installed even without the support of a wall to meet all positioning requirements, not only in residential but also in commercial and public applications.

Developed with extremely strong and resistant materials (IP55 and IK10 protection class), it is available in single and double charging modes, allowing the charging of two electric vehicles simultaneously.
It features its own LED lighting to illuminate the charging point and ensure a smooth integration in an urban setting.
It has a built-in solution for internal electromechanical protections, consisting of magnetothermic, type A differential and MID meter. Protection devices are included in the solution, sized according to the version of FLEXA Wallbox chosen.
The electromechanical protections are located inside, easily accessible to allow and simplify maintenance.

Single charging point

Double charging point

Technical data

Model	FIMER FLEXA AC Stand - Single / Double			
Maximum power	3.7kW	7.4kW	11kW	22kW
Standard	IEC61851-1			
Usage compatibility	FIMER FLEXA AC Wallbox			
Available layouts	Single sided (Single) / Double sided (Double)			
Power system	1P + N + PE		3P + N + PE	
Rated voltage	230V AC ± 10%		230/400V AC ± 10%	
Frequency	50-60 Hz			
Rated current	16A	32A	16A	32A
Rated impulse withstand voltage (Uimp)	4kV			
“Rated conditional short-circuit current of an assembly (icc)"	10kA			
Rated diversity factor (RDF)	1			
Degree of pollution	2			
EMC classification	Class B emissions			
Protective measures against electric shock	Class I			
Connection to the mains	Permanently connected to the mains			
Grounding system type	TT or TN (both with PE)			
Indoor/outdoor installation	External			
Fixed or removable installation	Fixed			
Overvoltage category	III			
IP protection rating	IP55			
IK protection rating	IK10			
Case material	AISI 304 stainless steel and 100% recycled plastic			
Dimensions	490 mm x 574 mm x 2072 mm			
Weight	46 kg (Single) / 48.5 kg (Double)			
Operating temperature	-25....+50°C			
Storage temperature	-25...+70°C			
Humidity	0...95% (non-condensing)			
Altitude	Up to 2000m			
Product intended for use by	Unskilled persons			
Positioning in area with	Unlimited access			
Magnetothermal protection	Included MCB 2P D20 10kA (Single) 2xMCB 2P D20 10kA (Double)	Included MCB 2P D40 10kA (Single) 2xMCB 2P D40 10kA(Double)	Included MCB 4P D20 10kA (Single) 2xMCB 4P D20 10kA(Double)	Included MCB 4P D20 10kA (Single) 2xMCB 4P D20 10kA(Double)
Differential protection	RCD 2P Type A 25A 30mA & RCM 6mA DC	RCD 2P Type A 40A 30mA & RCM 6mA DC	RCD 4P Type A 25A 30mA & RCM 6mA DC	RCD 4P Type A 40A 30mA & RCM 6mA DC
Energy meter	MID meter included			
LED lighting	•	•	•	•
Certification	CE, AUX, UL			

FIMER FLEXA AC Station

The solution for commercial and public applications.

FIMER FLEXA AC Station meets different needs: in fact, it represents the best solution to be installed in private parkings, such as at home, in a condominium or in a company parking lot, or in public use parking lots, such as hotel, hospitals, gyms, restaurants, shopping centers and public parking lots. It is a reliable charging solution, with low installation and management costs and extreme ease of use and maintenance.

FLEXA AC STATION offers a combination of attractive design, user-friendliness and ease of operation.

It allows charging two electric vehicles simultaneously (in Mode 3) and is available in two power configurations: the first one equipped with two Type 2 sockets at a power up to 22 kW for each (max total power 44 kW); the second one equipped with a Type 2 socket and a Type 3A socket at a power up to 22 kW and 3.7 kW respectively (max total power 25.7 kW). Both configurations are available in three different models, depending on their connectivity features: Stand Alone, Local Controller, and Future Net, all with the following characteristics:

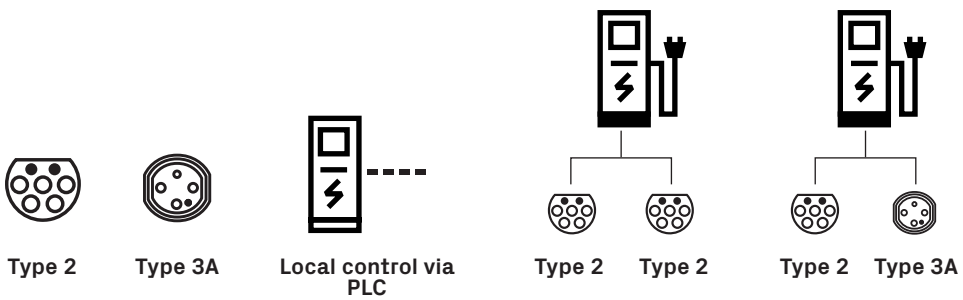
- **Robustness**: thanks to the stainless steel casing and the degree of mechanical robustness in impact tests (IK 10) contribute to making it withstand any weather conditions, even the worst
- **Safety**: automatic cable retention during charging, diagnostics and internal protection coordination systems, status monitoring and internal voltage measurement systems ensure safe charging activity
- **Flexibility**: available models are all customizable on request, to ensure efficient management and cover every kind of use

T2 shutter socket

FIMER FLEXA AC Station
Stand Alone

It has basic features that guarantee easy use at an affordable price. Its functionalities are limited to interaction with the electric vehicle, activating its charging process and ensuring safe operation. It is equipped with Modbus TCP/IP connectivity and it is provided with:

- **Security and safety systems**:
  - It includes inside both differential and magnetothermic protection and MID meter
  - During the charging phases, it can lock the charging cord and release it only when charging is completed
  - During the charging phases, the station communicates with the vehicle in order to properly adjust the amount of current and verify the correct connection with the vehicle
  - The station is equipped with internal temperature sensors
  - The T2 sockets are provided with an anti-vandal system and a shutter; the T3A sockets are equipped with a protective door
- **Local indication**: The status LEDs near each socket light up in different colors depending on the charging status
- **Fault verification system and backup**: the station can verify the presence of any faults through internal diagnostics, and can automatically reset the internal differential switches. In case of power failure, thanks to the presence of super capacitors, any charging session still in progress is closed
- **Power supply**: the station features the internal Load Management system, dedicated to optimally distributing the power available between the two sockets
- **Connectivity**: Modbus TCP/IP



FIMER FLEXA AC Station
Local Controller

Its main feature is the management and local control of access, thanks to its function that allows the programming of RFiD cards in full autonomy and without the aid of external tools or connections. When a master card is passed, the station switches from "reading" mode to "programming" mode; from that moment on it will enable all the reader cards passed in front of the reader. Passing the master card again makes the procedure stop and consequently the station will return to the standard mode.

It offers the following additional features compared to the Stand Alone version:

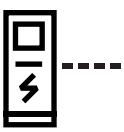
- **2x22 characters OLED display**, offering various information including charging status, energy, power, time, errors
- **RFiD reader** to securely manage access to charging points, with the possibility of locally managing the list of enabled RFiD cards (local white list)

Type 2

Type 3A

OLED display

RFiD



Local control via PLC

FIMER FLEXA AC Station
Future Net

This version includes important connectivity features, thanks to the 3G/4G connection. The station can communicate via an OCPP 1.5/1.6 Json protocol with a centralized management system, which allows the remote management of parameters, accesses, payments and errors.

It offers the following additional features compared to the Stand Alone version:

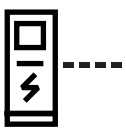
- **Intelligent remote monitoring and control system**. Thanks to the use of a mobile app for the user and a centralized system for the operator, it allows remote monitoring of the device status, the creation of use and energy reports, the access management and the error analysis
- **4.3" TFT display** providing multiple local operating indications
- OCPP 1.5 or 1.6 Json **communication protocol**


Type 2


Type 3A

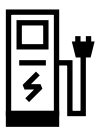
TFT display


RFiD


Local control via PLC

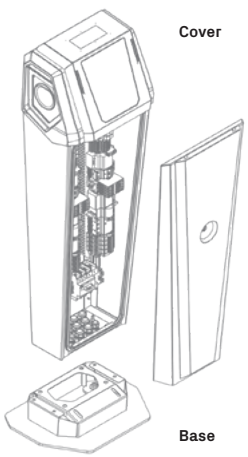

App


OCPP


Customizations

Technical data

Model	FIMER FLEXA AC Station - Stand Alone		FIMER FLEXA AC Station - Local Controller		FIMER FLEXA AC Station - Future Net	
Socket type	**T2-T2**	**T2-T3A**	**T2-T2**	**T2-T3A**	**T2-T2**	**T2-T3A**
Standard	IEC61851-1					
Charging method	Mode 3					
Maximum power per socket	22kW	22kW for T2 and 3.7kW for T3A	22kW	22kW for T2 and 3.7kW for T3A	22kW	22kW for T2 and 3.7kW for T3A
Power system	3P + N + PE					
Rated voltage	230/400V AC ± 10%					
Frequency	50 Hz - 60 Hz					
Rated current	64A	48A	64A	48A	64A	48A
Rated impulse withstand voltage (uimp)	4kV					
Rated conditional short-circuit current of an assembly (icc)*	10kA					
Rated diversity factor (rdf)	1					
Degree of pollution	2					
EMC classification	Class B emissions					
Protective measures against electric shock	Class I					
Connection to the mains	Permanently connected to the mains					
Grounding system type	TT or TN (both with PE)					
Indoor/outdoor installation	External					
Fixed or removable installation	Fixed					
Overvoltage category	III					
IP protection rating	IP 54					
IK protection rating	IK10					
Case material	Stainless steel AISI 304					
Dimensions	1315 mm x 437 mm x 293 mm					
Weight	48kg					
Operating temperature	-25....+50°C					
Storage temperature	-25...+70°C					
Humidity	0...95% (non-condensing)					
Altitude	Up to 2000m					
Product intended for use by	Unskilled persons					
Positioning in area with	Unlimited access					
Magnetothermal protection	Included (2 x MCB 4P D40 10kA)	Included (MCB 4P D40 10kA + MCB 2P D20 10kA)	Included (2 x MCB 4P D40 10kA)	Included (MCB 4P D40 10kA + MCB 2P D20 10kA)	Included (2 x MCB 4P D40 10kA)	Included (MCB 4P D40 10kA + MCB 2P D20 10kA)
Differential protection	Included (2 x RCD 4P Type A 40A 30mA & RCM 6mA DC)	Included (RCD 4P Type A 40A 30mA & RCM 6mA DC + RCD 2P Type A 25A 30mA & RCM 6mA DC)	Included (2 x RCD 4P Type A 40A 30mA & RCM 6mA DC)	Included (RCD 4P Type A 40A 30mA & RCM 6mA DC + RCD 2P Type A 25A 30mA & RCM 6mA DC)	Included (2 x RCD 4P Type A 40A 30mA & RCM 6mA DC)	Included (RCD 4P Type A 40A 30mA & RCM 6mA DC + RCD 2P Type A 25A 30mA & RCM 6mA DC)
Energy meter	MID Certificate					
Remote control	2xNo/4xNO 40A, AC-1 @40°C					
OCPP	-	-	-	-	OCPP 1.5 or 1.6 Json	OCPP 1.5 or 1.6 Json
Internal Load Manager	•	•	•	•	•	•
Connectivity	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP + OCPP	Modbus TCP/IP + OCPP
3G/4G connection	-	-	-	-	•	•
RFiD	-	-	RFiD local management	RFiD local management	RFiD remote management	RFiD remote management
Status LED	•	•	•	•	•	•
OLED Monitor	-	-	•	•	-	-
TFT 4.3" Monitor	-	-	-	-	•	•
Certification	CE, RCM (Australia Certification)					



Optional base plate

Fast charging solutions for commercial and public applications

FIMER ELECTRA DC Station, for a FAST charging

FIMER ELECTRA DC Station is the new generation station for both AC and DC charging of electric vehicles;
the best solution when fast charging is required.

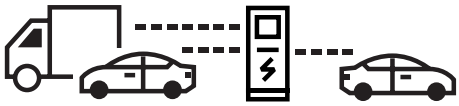
Easy to install and maintain, customizable on request, FIMER ELECTRA DC Station ensures high power output and maximum efficiency.

The FIMER ELECTRA station is the ideal solution in public use areas (service stations, highway network, distributors, large-retail chains, railway stations, airports) where charging speed is important. It is in fact a new generation device for fast charging of electric vehicles and allows to charge up to three vehicles simultaneously.

The main features of the FIMER ELECTRA DC station are:

- Different power configurations (60 kW - 90 kW - 120 kW - 150 kW)
- Dynamic switch of output power
- Modular architecture, with the possibility to upgrade even after installation
- 3 simultaneous charging sessions (2 DC + 1 AC)
- Configurable DC outputs (2 CCS or 2 CHAdeMO or 1 CCS+ 1CHAdeMO)
- Dynamic power load distribution
- IP54
- 96% energy efficiency for energy saving

Up to 3 simultaneous charging sessions



Modular power upgrade

Depending on the number of vehicles connected to the DC outputs, the charging station dynamically distributes the total power to be delivered and can charge (in DC mode) an electric vehicle in less than 15 minutes.
In the event of a power outage, an UPS allows the charging to be finished and the cables to be unplugged.
In an effort to provide greater flexibility, each station can be upgraded in power by simply adding extra modules to increase its charging capacity.

Robustness
Protection class IP54 and IK10

Flexibility
DC power is scalable (from 60 to 150 kW) and it is possible to add power modules of 30 kW each in their own side slot, even after installation, to offer a wide range of power output and configurations

Fast charging
The maximum total power deliverable by the station is 150 kW for the DC side (75 kW for each DC output) and 43 kW for the AC side. Using the high-power DC charging station, electric vehicles are charged very quickly. The charging time becomes compatible, for example, with the average stay inside a service station

Connectivity
Also FIMER ELECTRA DC Station can be connected in Wi-Fi, OCPP 16 Json, Ethernet, GSM/3G/4G, WLAN, Bluetooth

Customization on request
FIMER ELECTRA can be customized according to the technical and graphic needs of the Customer, who can even request to make his own brand illuminable with a LED

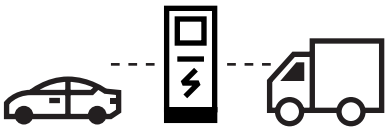
Maximum attention to all aspects related to safety
(Diagnostics, parameters assessment and functionalities of protection and intervention)

Graphical user interface for charging status: 7" display for excellent readability

60 kW + CCS + CCS

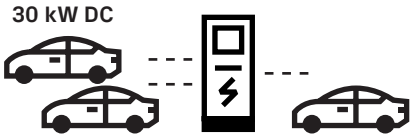
60 kW DC

60 kW + CCS + CHAdeMO



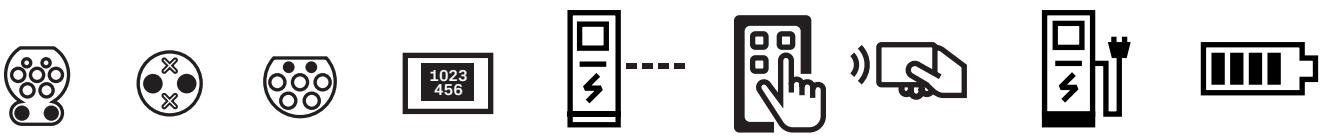
30 kW DC **30 kW DC**

60 kW + CCS + CHAdeMO + Type 2 AC or CCS + CCS + Type 2 AC



30 kW DC **43 kW DC**

The example refers to a charging station with a maximum power of 60 kW. When the power modules increase, the total power of the station (up to 150 kW) and its outputs (up to 2x75 kW) also increase.

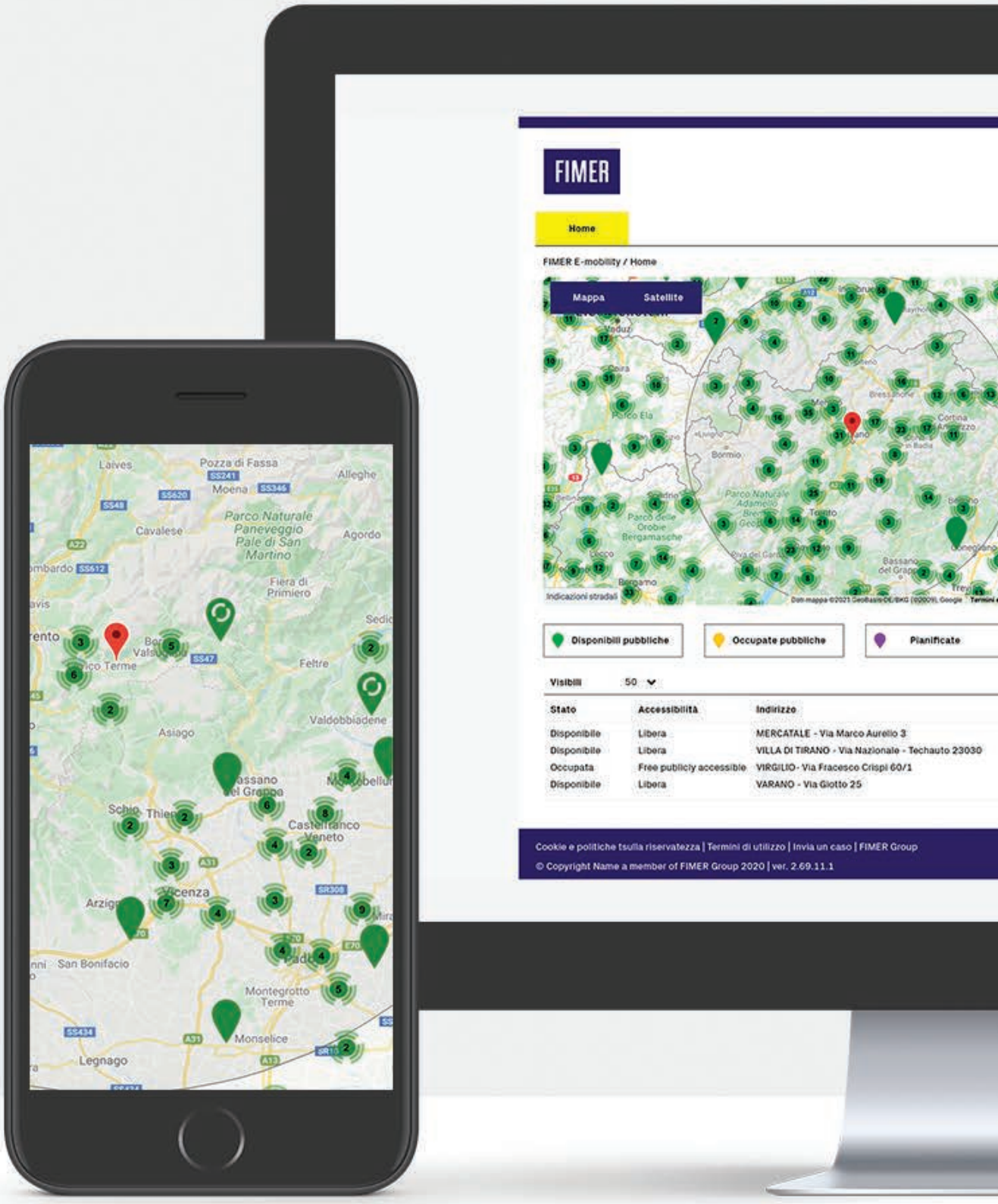


CCS **CHAdeMO** **Type 2** **7 inches display** **OCPP protocol** **App** **RFiD** **Customizations** **Power backup**

Technical data

DC station model	FIMER ELECTRA 60-150 (500V) 60-150 kW max EV DC	FIMER ELECTRA 60-150 (1000V) 60-150 kW max EV/BUS DC
Protection rating	IP54 / IK10	
Dimensions	1850 mm x 700 mm x 650 mm	
Weight (60 kW / 150 kW model)	230kg / 320kg	230kg / 320kg
Operating temperature	**-25°C ... 50°C**	
Storage temperature	-25°C ... 70°C	
Humidity	0...95% (non-condensing)	
Altitude	Up to 4000m	
Cooling	Forced ventilation	
Energy meter	MID certified	
Type of charging	Simultaneous	
Backup power supply	UPS	
Input characteristics		
AC Voltage	400 V ±10%	
Frequency	50/60 Hz	
Phases	3PH +N+PE	
Power factor	0.99	
THD	<5%	
Efficiency	>96%	
Output characteristics		
DC Voltage	**150 – 550 VDC**	**150 – 1000 VDC**
DC Current	**0-2 x 200 ADC (400A @ 400V)**	**0-2 x 100 ADC (200A @ 1000V)**
Max DC power (each output)	**75 kW max**	
Max total DC power	**150 kW max**	
DC voltage ripple + noise	500 mVp-p	
DC current ripple (typ.)	<1 Arms @ Rated Power (measured with a resistive load)	
AC Voltage	400 V ±10%	
AC Current	3PH +N+PE - 32 A max	
AC Power	43kW	
Electrical protections		
Overcurrent	•	
Overvoltage	•	
Short circuit	•	
Circuit breaker	•	
Overtemperature	•	
Open door	•	
Emergency button	•	
Isolation controller	•	
User interface and control		
DC output plug type	Options: CCS2, CCS1, CHAdeMO	
AC output plug type	Options: Type 2 cable to 43kW IEC62196-2, GB/T	
HMI	7 inch graphical LCD (800x480), keys for commands	
Supported languages	Italian, English, Spanish, others on request	
Emergency button	1 emergency button	
Charging options	Configurable up to 3 simultaneous charges, dual DC + AC charging	
Internal power management	Dynamic output distribution through contactors (data matrix contactor)	
User authentication	ISO / IEC 14443 A / B Mifare RFiD reader	
Network interface	Ethernet, GSM/3G/4G, WLAN, Bluetooth	
Communication protocol	OCPP 1.6 Json, others on request	
Signals and control		
LED status and signaling light during charging	•	
Customizations	•	
Logo lighting	•	
Certifications		
EU	•	
UL	•	
EMA	Optional	
AU	Optional	

Control and monitoring activities



FIMER E-Mobility: a “smart” management of EV charging stations

FIMER E-Mobility is a digital platform developed to enable the control and management of charging stations.

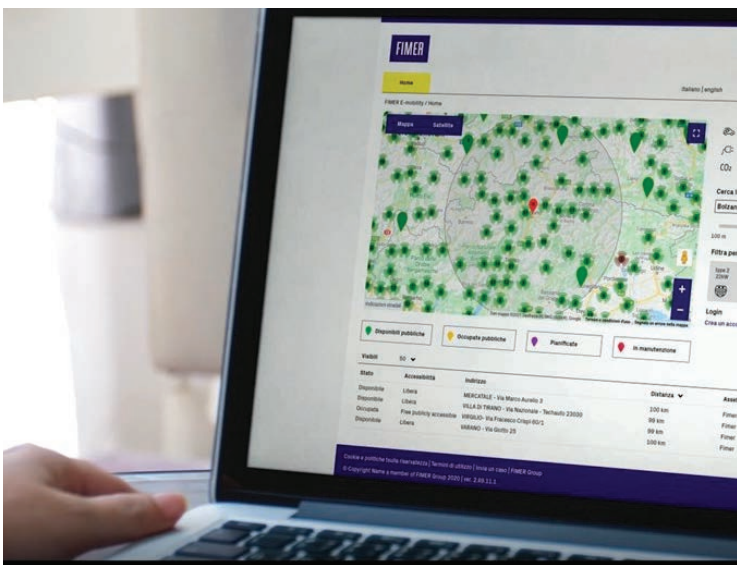
Available in Desktop and Mobile version, FIMER E-Mobility offers the possibility to manage and monitor the charging stations, to configure the infrastructure, to geolocate the charging stations on maps updated in real time and to acquire and analyze the diagnostic data of the stations.

Key features:
- Remote control of charging stations, via smartphone or computer
- Configuration and geolocation of charging stations located in the area
- Checking charging station availability
- Management of all charging stations
- Contract management
- Smart management of charges based on the status of the mains

The management of the alarm system, the reading of the counters inside the columns, the sending of commands, the remote software updating and the booking of the columns themselves become simple and immediate.
The maintenance interventions can be planned: the remote monitoring allows indeed to have always under control the status of the charging devices in the field.
Management is centralized.

Through the FIMER E-Mobility platform it is possible:
- to easily configure, manage and monitor all charging stations
- to geolocate the charging stations on maps updated in real time and check their status (free, busy, out of order)
- to acquire and analyze columns’ diagnostic and consumption data
- to manage the payment for the charging via App, QRcode, RFiD, prepaid cards (minutes or kW/h)
- to build Customer loyalty (with cards, coupons, etc..)
- to set parameters for advanced load management
- to manage tickets and schedule maintenance interventions

With the user App of the E-Mobility platform, the user is able to manage his own charging via App and:
- to geolocate available charging stations, choose the nearest one and book it,
- to unlock the charging station,
- to pay for the charging,
- to receive the invoice



The payment for charging has never been so easy and fast

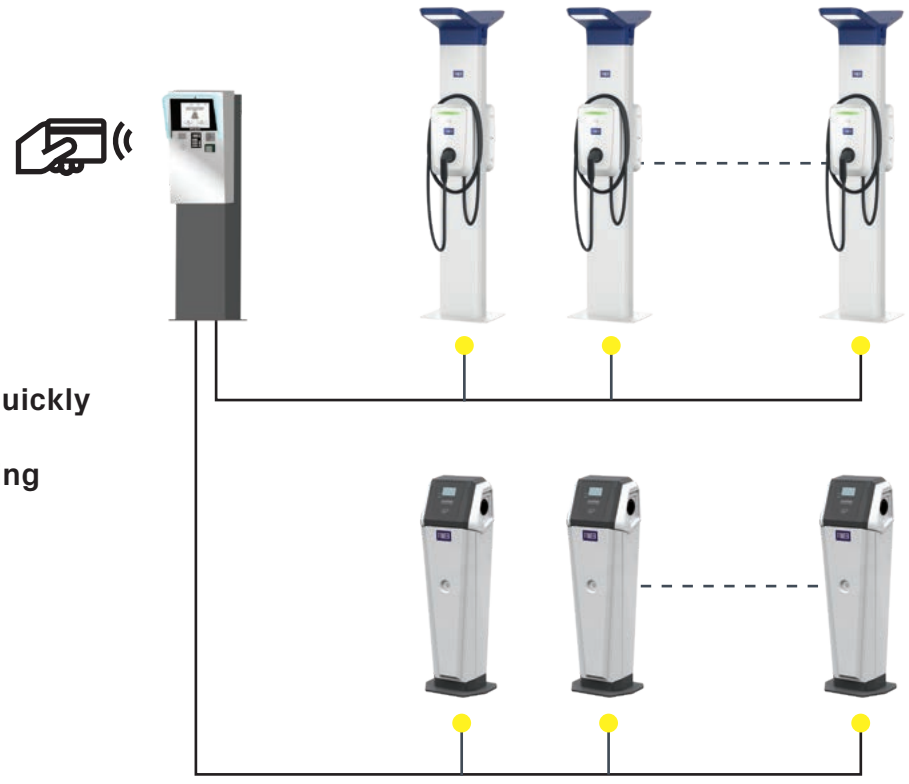
The market trend asks for more and more "user-friendly" charging experiences for electric cars, without complicated steps. In order to meet this need, FIMER collaborates with Fortech for the installation in the parking lots of smartOPT, which allows to connect several stations and manage the payment for charging through a single terminal, without the need for user registration, thus making the charging operation even faster.
The payment for charging becomes extremely simple also thanks to the possibility of using different forms of payment, including QRcode, vouchers and Mobile Payment that go alongside the more typical forms of payment, such as cards, debit cards and private cards.
Its 12" flat touchscreen monitor (with vandal-proof glass), the possibility to choose the voice guidance in 5 languages and the presence of the microphone that allows assistance to be given directly through the smartOPT, make the Customer's experience clear, unique and intuitive.

Key features of smartOPT:

- Easy and intuitive user friendly interface
- Does not require user registration
- Customized management of charging programs
- Management of several charging points with a single smartOPT terminal
- Payment by cards, debit cards, private cards, QRcode and vouchers
- Designed for sending vending machine fees
- Designed for electronic invoice (with Fattura1click)
- 12 inch touchscreen monitor with anti-vandal glass
- Voice guidance system in 5 languages
- Microphone for assistance

Fortech

The system allows to quickly and easily manage the payment for the charging service



Visit FIMER through the 360° Virtual Tour Experience

Our Made in Italy excellence is just one click away

We are opening the doors of our Italian establishments to the whole world. Thanks to the 360° virtual tour experience, we are pleased to invite our Customers and Partners to visit us, at any time and with a simple click, through your PC or smartphone, and enjoy an interactive and engaging path.

Visitors will be able to access the Italian branches of Vimercate (Monza Brianza) and Terranuova Bracciolini (Arezzo), visiting the manufacturing sites where our photovoltaic inverters and charging solutions for electric vehicles take shape, and experience first hand - although only “virtually” - the quality of the FIMER branded solutions.

Thanks to advanced Matterport technology we have been able to recreate real-life, external and internal images, of the Global HQ of Vimercate, the modern, zero impact production and Research & Development center, and of the magnificent production site located in Terranuova Bracciolini, at the forefront with regards to the quality of production processes and of engineering excellence.

Last but not least: FIMER's Virtual Tour includes insights of the processes and machineries used during the production phase and a dedicated description of the same.

To log in just register on

discoverus.fimer.com

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