





## **BE-T Series**

BE-T is a range of wall boxes for electric vehicles recharging in AC alternating current up to 22kW, equipped with a front socket or integrated cable fitted with a Type 2 connector. The Type 2 socket has integrated protection shutters, Scame patent. The user interface is ensured via local WiFi app or LCD display, depending on the models.

Available with free or controlled access, BE-T wall boxes can, depending on the versions, also be managed via the Scame Management System or be connected to an OCPP backend.

Made of halogen-free thermoplastic materials and with a powdercoated aluminum frame, the BE-T wall boxes are characterized by the clean and essential lines by Trussardi+Belloni Design, available in several aesthetic variants, as well as by the possibility of graphically customizing the front panel.

(i) technical sheet p. 14

## Ichnical information

**Main characteristics** 





Type 2 socket with shutters (T2S) Scame patented Type 2 socket outlet integrates a mechanical protection system (known as shutters) that elevate the safety standard to IPXXD.

- 01 User interface via local WiFi app or LCD display
- 02 RFID reader for user authentication
- Connectivity via Ethernet-WiFi-2/3/4G
- Access to protections compartment
- Possibility of graphic customization of the front panel in addition to 5 aestethic variants
- 06 Powder-coated aluminium frame
- Type 2 sockets with integrated shutters (T2S)
- 08 Charging status LED indicator
- 09 Menu navigation push button



### **BE Logo**



Within the vast offer of Scame Parre, the BE logo, alongside the institutional one, identifies and characterizes the line of products intended for electric vehicles recharging.

By exhibiting it, the stations, the charging cables and the related components are the bearers of over twenty years of company experience in the e-mobility sector, going back to 1999 the presentation by Scame Parre of the first connector specifically designed for this application.

Above all, however, they convey the message behind the logo itself: "Be Eco".

An invitation to embrace a concept of s ustainable mobility as an integrated part of a lifestyle that respects man and the environment, rather than a recognition for those who have already done so by choosing one of our products.

A logo in the form of a stylized leaf that, almost resting on the product, leaves an indelible mark on it, adding another chapter to the story of passion, sustainability and innovation from that of Scame.

## **Graphic customization**



## Aesthetic variants

The whole range of BE-T wall boxes can be further embellished, in terms of design, through 5 aesthetic variants of the front panel in exclusive combinations with specific colours of the metal frame.



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## Versions

LITE For standalone applications with free or controlled access	<b>BUSINESS</b> For standalone or multi-station applications (Satellite)	<b>PRO</b> For multi-station applications (Master)
Along with the possibility of allowing free usage, access to the charging station can be restricted to a group of users, the registration of which takes place locally. LITE version charging stations operate in a standalone way and cannot be placed in a network of other stations.	In addition to the possibility of operating in a standalone way, either with or without access restriction, a BUSINESS charging station can operate as a Satellite of a Master station. A Master station defines the rules that regulate the access to the group of stations. That is done via Scame's Management System or an OCPP backend to which the Master is connected to.	PRO charging stations are designed to operate as Masters in a Master/Satellite system architecture. Access to a charging session can be restricted, or not, according to the rules defined in the Scame Management System or by the OCPP platform to which the Master station is connected to.
OPERATING MODE		
- FREE - PERSONAL	- FREE - PERSONAL - WEB/NET (Satellite)	- WEB/NET (Master)
FUNCTIONALITIES		
- Local WiFi app* - Dynamic Power Management**	- Dynamic Power Management** - Management System - Satellite - Load Balancing - Satellite	<ul> <li>Dynamic Power Management**</li> <li>Management System - Master</li> <li>Load Balancing - Master</li> <li>Management of up to 16 charging points</li> <li>OCPP 1.6JSON</li> </ul>

"\* In the models in which it is foreseen \*\* Accessory for supported models"

## Application examples







## **Operating modes**

Scame's AC charging stations are designed for different operating modes, functional to the type of installation, application and use for which they are intended.

The stations intended for standalone installation without the need to be included in a network architecture are available in the following operating modes:



## FREE

FREE mode charging stations are the ideal choice for installation in environments that do not require controlled access as use is limited to a few people, usually vehicle owners, or in places where access is already regulated from other systems. Charging stations in FREE mode cannot be inserted in a Master/Satellite architecture.

Access to charging: Free. Without authentication.



### PERSONAL

PERSONAL mode charging stations are suitable for installation in all places requiring controlled access as use is not limited exclusively to vehicle owners, but extends to a greater number of users, or in cases where access to charging stations should be monitored and regulated. Charging stations in PERSONAL mode cannot be inserted in a Master/Satellite architecture.

**Access to charging**: With local authentication via app or RFID.

The stations intended to be inserted in a network architecture, managed via Scame Management System or via an external E-Mobility Service Provider (EMSP) via OCPP protocol, are available only in the following operating mode:



#### WEB/NET

WEB/NET mode chargin stations are the definitive solution in all those cases in which the system must be monitored and managed remotely.

WEB/NET mode charging stations are distinguished between Master and Satellite. The Master stations have incorporated the Scame Management System. The Satellite stations are controlled by the Master, access to recharging can be with or without authorization according to the rules defined by the network manager in the Scame Management System or in the OCPP platform.

A Master/Satellite architecture can include up to 16 charging points.

Access to charging: With or without authorization based on the rules defined on the Scame Management System or on the OCPP platform.



## Scame E-Mobility app

For the LITE versions of Scame wall boxes, designed for purely domestic use, the Scame E-Mobility local WiFi app is available, compatible with Android and iOS and downloadable from the main e-stores.

The Scame E-Mobility app projects the user into a new dimension of dialogue with the station, allowing full control of the recharging operations in an easy and intuitive way.

Through the Scame E-Mobility app it is in fact possible to:

- **01** Authenticate the user enabling him to recharge
- 02 Monitor in real time and manage individual charging sessions
- **03** Schedule and program individual charging sessions
- Manage Dynamic Power Management functioning mode
- Download chaging sessions reports and history
- **06** Check the status of the charging station and change its operating mode.



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## **Dynamic Power Management**

The Dynamic Power Management function is an indispensable option in residential installations where the available power is limited.

In this context, starting a recharging session of an electric vehicle while other electrical appliances are in operation (e.g. a washing machine) can cause an interruption in the power supply due to exceeding the contractual power.

The intelligent Dynamic Power Management function allows the wall box to dynamically modulate the current intended for recharging the electric vehicle based on the instantaneous consumption of all household appliances, avoiding power outages, all while also taking into consideration the current generated by photovoltaic panels or other renewable source, if any. ENERGY METER HOME METER

Once the Dynamic Power Management function has been activated, it is possible to set three different functioning modes:

#### FULL

#### Always recharge at full power

It uses the power available from the grid and any power generated by the local renewable source production plant, if any.



#### ECOSMART

#### Green charging with no worries

It uses the power generated by the local renewable source plus a minimum contribution from the grid, predefined but which can be increased by the user, to make up for any drops in power, thus guaranteeing continuity of charge.

This mode can only be selected in the presence of a local renewable source production plant (e.g. photovoltaic, wind...).

#### ECOPLUS

#### Green charging from renewable source only

It uses the power generated only by the local production plant from renewable sources (e.g. photovoltaic, wind...). In this mode the charge is totally dependent on the state of generation of the renewable source and may be subject to suspensions such that the vehicle may not charge at the desired times.





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## **Management System**

Scame's charging stations can be monitored and managed remotely via the proprietary Management System or they can be connected to an external management platform via the standard OCPP 1.6JSON communication protocol.

#### SCAME LOCAL MANAGEMENT SYSTEM

Scame charging stations can be monitored and managed remotely through the proprietary Management System.

The software does not require subscriptions and manages from 1 to 16 charging points when organized in a Master/Satellite system architecture.

The Scame Management System must be configured in the local network and does not require any installation of additional software as access takes place with credentials via LAN IP address.

The Scame Management System provides full control of the system and allows for an extensive list of actions and information such as:

- Management of access modes to the charging point (with or without authorization)
- Management of the list of authorized users and any limitations (time or number of accesses)
- Information on the status of the charging points and any error messages
- Start/stop/pause/resume charging sessions
- Real-time data of the charging session
- Monitoring of consumption data

- Search/filter/download transaction history
- Limitation of the current available at the recharging point
- Load Balancing
- Soft reset of the charging point Hard reset of the entire system
- Firmware and software update
- Web server
- Configuration of links to external platforms via OCPP 1.6JSON

#### **OCPP EXTERNAL MANAGEMENT SYSTEM**

Through the Scame Management System it is possible to decide to connect the Master station, with its possible Satellites, to an external management platform via the standard OCPP 1.6JSON communication protocol.

The charging stations connected to an external supervisor will be able to take advantage of the services provided by the platform such as, for example, the billing and station booking operations. Connection to an external platform may require the prior signing of a contract with the same and therefore subscription fees may apply.

Scame guarantees compatibility between its charging stations and external management platforms that have been subjected to an OCPP 1.6JSON compatibility test. The list of approved supervisors is available upon request: contact your Scame contact person for more information.





## Load Balancing

The Scame Load Balancing feature proves to be essential when there are multiple charging points, but the system is not able to power them all simultaneously at their maximum rated power. This feature, which can be managed within the Scame Management System, allows you to allocate a maximum current threshold for a Master/Satellite architecture.

In the event that the sum of the instantaneous currents supplied by the charging points exceeds this threshold, the Master station would democratically rebalance the power supplied by the entire system, thus keeping it below the established maximum threshold, but allowing all vehicles to continue to recharge. If the system does not have enough power available to allow all the charging points to supply the minimum current necessary for the correct performance of a charging session, any new sessions will be temporarily suspended.

Temporarily suspended charging sessions will be automatically reinitialized at the end of one of the charging sessions in progress. The Scame Load Balancing Scame feature can also be active when the Master station and its satellites are connected to an external management platform via OCPP 1.6JSON protocol.



#### LITE



Rated	Socket	User		Energy			Dynamic Power <sup>11</sup>	
power	outlet	interface	Access	Meter	Protections	Connectivity	Management	Code
7.4 kW	T2S	APP	APP	STANDARD			OPTIONAL	205.T119-BAB
7,4 KVV	T2S	APP	APP	STANDARD	RCB0		OPTIONAL	205.T113-BAB
22 kW	T2S	APP	APP	STANDARD			OPTIONAL	205.T119-DAB
ZZKVV	T2S	APP	APP	STANDARD	RCB0		OPTIONAL	205.T113-DAB

1) OPTIONAL DYNAMIC POWER MANAGEMENT: To activate the Dynamic Power Management function, the installation of the wall box must be integrated with a specific external energy meter that can be ordered using the code 208.PM01 for the 7,4kW single-phase versions or 208.PM02 for the 22kW three-phase versions.

#### Mode: FREE PERSONAL

## LITE >> TETHERED



Rated power	Socket outlet	User interface	Access	Energy Meter	Protections	Connectivity	Dynamic Power <sup>1)</sup> Management	Code
7.4 kW -	T2	APP	APP	STANDARD			OPTIONAL	205.T119-SAB
7,4 KVV -	Τ2	APP	APP	STANDARD	RCB0		OPTIONAL	205.T113-SAB
22 kW -	T2	APP	APP	STANDARD			OPTIONAL	205.T119-UAB
22 KVV -	T2	APP	APP	STANDARD	RCB0		OPTIONAL	205.T113-UAB

1) OPTIONAL DYNAMIC POWER MANAGEMENT: To activate the Dynamic Power Management function, the installation of the wall box must be integrated with a specific external energy meter that can be ordered using the code 208.PM01 for the 7,4kW single-phase versions or 208.PM02 for the 22kW three-phase versions.

Mode: FREE PERSONAL Cable length: 7,5m





#### BUSINESS



Rated power	Socket outlet	User interface	Access	Energy Meter	Protections	Connectivity	Dynamic Power <sup>1</sup> Management	Code
	T2S	LCD	RFID	MID	RCB0		OPTIONAL	205.T33-BAB
7,4 kW	T2S	LCD	RFID	MID			OPTIONAL	205.T37-BAB
22.1.1.1	T2S	LCD	RFID	MID	RCB0		OPTIONAL	205.T33-DAB
22 kW	T2S	LCD	RFID	MID			OPTIONAL	205.T37-DAB

1) OPTIONAL DYNAMIC POWER MANAGEMENT: To activate the Dynamic Power Management function, the installation of the wall box must be integrated with a specific external energy meter that can be ordered using the code 208.PM01 for the 7,4kW single-phase versions or 208.PM02 for the 22kW three-phase versions.

#### Mode: FREE PERSONAL WEB/NET (Satellite)

#### BUSINESS >> TETHERED



Rated	Socket	User		Energy			Dynamic Power <sup>1</sup>	)
power	outlet	interface	Access	Meter	Protections	Connectivity	Management	Code
7.4 kW	T2	LCD	RFID	MID	RCB0		OPTIONAL	205.T33-SAB
7,4 KVV	T2	LCD	RFID	MID			OPTIONAL	205.T37-SAB
22 kW -	T2	LCD	RFID	MID	RCB0		OPTIONAL	205.T33-UAB
ZZKVV	T2	LCD	RFID	MID			OPTIONAL	205.T37-UAB

1) OPTIONAL DYNAMIC POWER MANAGEMENT: To activate the Dynamic Power Management function, the installation of the wall box must be integrated with a specific external energy meter that can be ordered using the code 208.PM01 for the 7,4kW single-phase versions or 208.PM02 for the 22kW three-phase versions.

Mode: FREE PERSONAL WEB/NET (Satellite) Cable length: 7,5m

### **Aestethic variants**



**G** GREEN frame

ie. 205.T119-BMG



205.T119-BWB

ie.

**W** WOOD graphic



ie.





ie. 205.T119-BTN

### PR0



Rated power	Socket outlet	User interface	Access	Energy Meter	Protections	Connectivity	Dynamic Power <sup>1)</sup> Management	Code
	T2S	LCD	RFID	MID	RCB0	Ethernet	OPTIONAL	205.T52-BAB
7.4 kW	T2S	LCD	RFID	MID	RCB0	ETH-WiFi-2/3/4G	OPTIONAL	205.T62-BAB
7,4 KVV	T2S	LCD	RFID	MID		Ethernet	OPTIONAL	205.T74-BAB
	T2S	LCD	RFID	MID		ETH-WiFi-2/3/4G	OPTIONAL	205.T85-BAB
	T2S	LCD	RFID	MID	RCB0	Ethernet	OPTIONAL	205.T52-DAB
22 kW	T2S	LCD	RFID	MID	RCB0	ETH-WiFi-2/3/4G	OPTIONAL	205.T62-DAB
ZZ KVV	T2S	LCD	RFID	MID		Ethernet	OPTIONAL	205.T74-DAB
	T2S	LCD	RFID	MID		ETH-WiFi-2/3/4G	OPTIONAL	205.T85-DAB

Mode: WEB/NET (Master)

1) OPTIONAL DYNAMIC POWER MANAGEMENT: To activate the Dynamic Power Management function, the installation of the wall box must be integrated with a specific external energy meter that can be ordered using the code 208.PM01 for the 7,4kW single-phase versions or 208.PM02 for the 22kW three-phase versions.

#### PR0 >> TETHERED



Rated power	Socket outlet	User interface	Access	Energy Meter	Protections	Connectivity	Dynamic Power <sup>1</sup> Management	Code
	T2	LCD	RFID	MID	RCB0	Ethernet	OPTIONAL	205.T52-SAB
7 / 1.).//	T2	LCD	RFID	MID	RCB0	ETH-WiFi-2/3/4G	OPTIONAL	205.T62-SAB
7,4 kW	T2	LCD	RFID	MID		Ethernet	OPTIONAL	205.T74-SAB
	T2	LCD	RFID	MID		ETH-WiFi-2/3/4G	OPTIONAL	205.T85-SAB
	T2	LCD	RFID	MID	RCB0	Ethernet	OPTIONAL	205.T52-UAB
22 kW	T2	LCD	RFID	MID	RCB0	ETH-WiFi-2/3/4G	OPTIONAL	205.T62-UAB
ZZ KVV	T2	LCD	RFID	MID		Ethernet	OPTIONAL	205.T74-UAB
	T2	LCD	RFID	MID		ETH-WiFi-2/3/4G	OPTIONAL	205.T85-UAB

Mode: WEB/NET (Master) Cable length: 7,5m

1) OPTIONAL DYNAMIC POWER MANAGEMENT: To activate the Dynamic Power Management function, the installation of the wall box must be integrated with a specific external energy meter that can be ordered using the code 208.PM01 for the 7,4kW single-phase versions or 208.PM02 for the 22kW three-phase versions.





## FUNCTIONALITY



Description	Code
EXTERNAL ENERGY METER SINGLE PHASE	208.PM01
EXTERNAL ENERGY METER THREE-PHASE	208.PM02





## AC CHARGING STATIONS



REFERENCE STANDARDS

EN IEC 61851-1

EN 61439-7

#### VERSIONS



LITE
- socket outlet
- tethered
ooonot outtor

#### BUSINESS - socket outlet

- tethered



PRO - socket outlet - tethered

#### USER INTERFACE AND SYSTEM CONTROL

User interface:	APP/LCD depending on the version
Connectivity:	WiFi Ethernet Ethernet/WiFi/2G/3G/4G depending on the version
User authentication:	Free APP authentication RFID authentication depending on the version
Communication protocol:	OCPP 1.6JSON depending on the version

## TECHNICAL CHARACTERISTICS

32A
230Vac-400Vac
50-60Hz
250V-500V
IP54
-30°C +50°C
Thermoplastic/Aluminum
650°C
IK09
Surface mounting
Resistant
Resistant

#### STANDARD EQUIPMENT

- Adjustable rated current
- DC Leakage detection

- Save unlock - in case of power outage unlatches the locking mechanism allowing to unplug the charging cable from the socket outlet

- Remote enable contact





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SCAME PARRE S.p.A. Via Costa Erta, 15 - 24020 Parre (BG) Italy Tel. +39 035 705000





