

The

# FUTURE of EV CHARGING





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Our mission is to drive Project EV and its range of Electric Vehicle chargers to being the most advanced smart solution for all customers, resellers or manufacturers. With leading technology and exceptional service, Project EV aims to be the preferred choice in the UK and Europe.

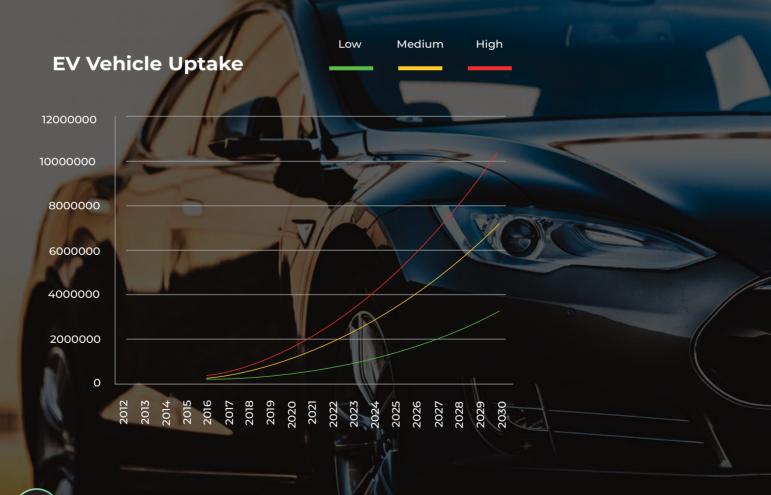


## About Project EV & Why You Need It



The Department for Business, Energy & Industrial Strategy (BEIS) recently updated its uptake forecasts, stating that by 2030 there will be in the region of 3 million to 10.5 million electric vehicles on the road.

 Driven by the falling cost of electric vehicles, increased infrastructure, and government lead policies and incentives; there is no better time to invest in electric vehicles and charging in your own home.



# Everybody is GOING ELECTRIC

Everybody is going electric; the range of vehicles is bigger than ever with all manufacturers from Ford to Ferrari, domestic and commercial vehicles are all making introduction EVs a part of their core range. The infrastructure is growing at the same pace with more accessibility to charge points across the UK.

500,000+

Approx. cumulative plug-in vehicles registered in the UK (from 2012)

30

New Plug-in Models Available in 2021

18,752

New EV registrations April 2021 41,621

UK Charge Points June 2021 (Zap-Map)

29,502

**Charge Points** 

24,174

Devices
June 2021

10,563

Locations

**627** 

New Charge Points Last 30 Days

#### Go Electric Now and Save

#### Small Car (Renault Zoe)

Average Annual Savings



£1135.03

Average MPG 45

Miles Per Year 10.000



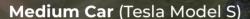
**Average Petrol Car** 

Mileage:

10,000 Miles

**Total Car Footprint** 

2.81 tonnes of CO<sub>2</sub>e



Average Annual Savings



£1461.20

Average MPG 35

Miles Per Year 10.000



**Average Diesel Car** 

Mileage:

10,000 Miles

**Total Car Footprint** 

2.71 tonnes of CO,e

Large Car (SUV Tesla Model X)

**Average Annual Savings** 



£2048.29

Average MPG

Miles Per Year 10,000



**Average Diesel Van** 

Mileage:

10,000 Miles

**Total Car Footprint** 

4.37 tonnes of CO,e

# The Electric Vehicle Home CHARGING SCHEME

#### **Customer Requirements**

- Grant up to £350 for 75% of the total installation cost.
- You need to submit the vehicle details and registration number. DVLA will validate these details internally.
- You will need to submit evidence that vehicles are on order.
- You will be required to provide one photograph that clearly shows the property, the off-street parking and the installed charge point.
- Where the property and the off-street parking cannot be clearly displayed in a photograph, you will need to provide a photograph showing the off-street parking and the installed charge point and titles deeds which demonstrate that the parking is linked to the property.
- Up to 2 charge points per household (1 per vehicle, up to a maximum of 2).
- You can now provide any electronic or paper form of signature for both yourselves and your customers.
- You will only need to supply the cost for the installation once, with a breakdown for the associated costs for the charge point; any additional equipment; and labour.
- The equipment installed must be on the OZEV approved equipment list.

#### **Funding Availability**

Electric vehicle users can receive funding from OZEV (Office for Zero Emission Vehicles) to install a home charger for their plug-in vehicle through the Electric Vehicle Home charge Scheme. This provides a grant of up to 75% of the eligible costs of charge point installation\* for the registered keeper, lessee or nominated primary user of a new or second-hand eligible electric vehicle.

To receive funding or grant aid the customer must use an OZEV accredited supplier. Project EV is fully OZEV accredited meaning you can take advantage of any available grants.

\*capped £350, Inc. VAT

OZEV Electric Vehicle Homecharge Scheme approved chargepoint model list Growatt Power Technology ATESS If you are a new installer who wants to become OZEV approved, you can email at chargepointgrantapps@dvla.gov.uk

https://www.gov.uk/government/publications/electric-vehicle-homecharge-scheme-approved-chargepoint-model-list

Information correct as of 03/21

# Join the WORKPLACE CHARGING SCHEME

- Incentivise Staff
- Charge existing fleet vehicles
- To provide a service for visitors
- Improve your green credentials

#### **Workplace Charge Scheme**

An OZEV grant (WCS workplace grant scheme) of up to £350 per charge point (up to 75% of the cost) can be applied for up to a maximum of 40 charge points.

WCS is a voucher-based scheme designed to provide eligible applicants with support towards the upfront costs of the purchase and installation of EV chargepoints. The contribution is limited to the 75% of purchase and installation costs, up to a maximum of £350 for each socket, up to a maximum of 40 across all sites for each applicant.

#### How it works

Your business applies for a voucher through the scheme and this is handed to Project EV (the installation company) who gets paid the grant. It couldn't be simpler.

Note must be taken regarding larger installations and the surrounding infrastructure including additional works that may be required.

#### **Energise Your Employees**

In the 2020/21 tax year, both new and existing Electric Vehicles will be eligible for a 0 percent BIK (Benefit In Kind) rate. The BIK rate will rise to 1 percent in 2021/22 and to 2 percent in 2022/23.

The average petrol or diesel vehicle has a BIK rate of 20 to 37 percent.

## **CONTROL EVERYTHING**



Power flow management



Load balancing feature



Charging inventory list for one or multiple chargers registered



Solar charging option



Off-peak timed charging



Multiple mode control
(via app, plug and go, RFID swipe card)



Securely authorise another person to use



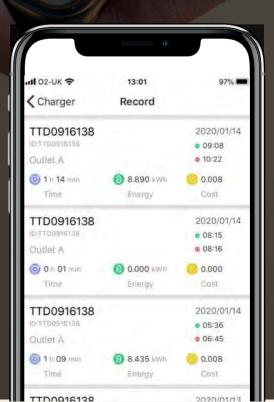
Manage and add multiple charge points to one master account











## PROFESSIONAL CHARGING

Lancaster Park

The Project EV Pro App is a unique EV charging platform, providing you the ability to utilise public charging capabilities and manage and control multiple chargers - from which you can generate a fluid revenue stream.

The Project EV Pro App dashboard is intuitive and user-friendly, allowing you to monitor your

charger activity, and review data and analytics to discover new revenue opportunities.

With our RFID function you can assign your staff a designated charging tag, creating a simple workplace charging scheme with the swipe of a card - allowing for more efficient monitoring of expenses costs.



Revenue & expenses analysis: daily, monthly, and yearly



Redeem voucher codes



Create RFID tags for charger operation



Multiple, easy payment methods



Track your charging costs







Project EV App
FREE
Advanced
Professional

Plug & Charge

RFID control (only with RFID chargers)

App control

Dynamic Load Balancing

Static Load Balancing for multiple chargers

Solar charging modes

Records of your charging

Schedule charging

Lock your charging lead

Public charging Pay-At-Charger

Customisable tariffs

Private & fleet management

Use your company RFID card to control chargers

Live-View Back Office dashboard

Historical & analytical reports

Visibility of your charge points in all locations

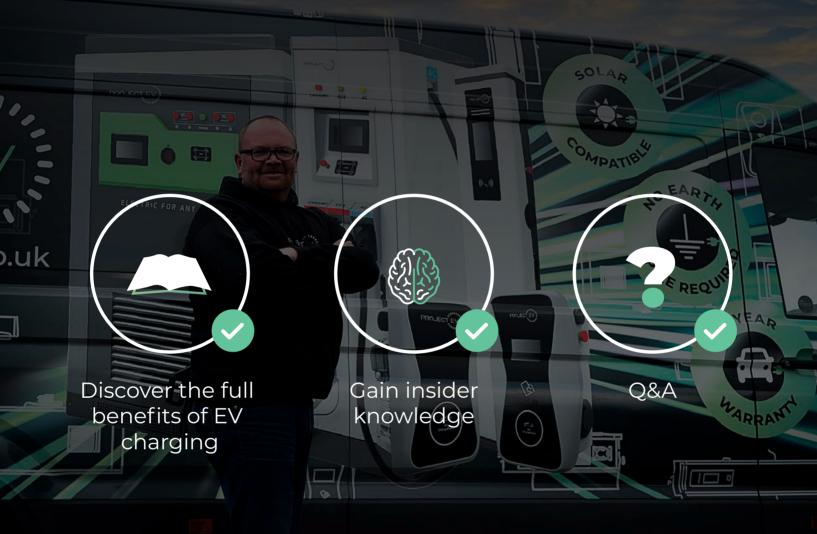
Track users

Instant notification when offline





## PROJECT EV ROADSHOW



## Coming to a branch near you

Find out more on our socials







projectev.co.uk

#### Project EV

## **CUSTOM BRANDING**

If you wish to brand your EV charging point even further, we have the solution for you.

With our internal marketing department, we can help design artwork wraps for your specifications and requirements.

#### **ENQUIRE TODAY**



## HOW TO ORDER

#### The Quick & Easy Steps

When placing your order for your Project EV branding, it is important that you specify which options you would like, whether that be a 1. Personalisation Badge, 2. Logo Covering Badge, or a 3. Sticker Decal Transfer.







Personalisation badges

Logo covering badges

Sticker decal transfers



#### 7 DAY LEAD TIME

For us to be able to create your customized branding we will need to be sent a high-resolution copy of the logo/image you wish to have featured on the EV charging unit. For the best outcome, it is highly suggested you submit your logo/image in JPEG, PNG, or PDF format. A logo with a transparent background is desirable, however, we can work and tailor most artwork to fit within our specifications.

All of our branding options have a 7 day lead time as a minimum. This lead time may vary and increase dependant on the quantity of units ordered.

Project EV will supply a mounting solution for all our branding options, however, you are responsible for attaching your custom branded products to your EV Charging unit.

If you have any questions or queries regarding our branding options, please contact us by emailing at: enquiries@projectev.co.uk or take a look at our branding brochure - featured on our website.

#### **Feature Packed as Standard**

We pack our products with features, so you can give your customers more.

Project EV launches into the electric vehicle charge point market, giving the customer and the installer a full range of feature-packed competitively priced products, from 7kW domestic AC to 300kW commercial DC charge stations. All our chargers are OCPP 1.6 compliant, meeting current and new UK and European regulations and requirements.











#

## The Range & Key Features



#### Wall Mount

7kW, 22kW AC

Free app

5-Year Warranty

Remote Control and Monitoring

Built in Earthing Solution (EVA-07S-SE &

EVA-22S-SE-RFID)

Power Modulation

Untethered

RFID

OCPP1.6 compliant

RCD type-b Equivalent

On Board RCD isolation

Smart

WiFi & Ethernet Built In

Floor Stand and Full Range of

Accessories Available

**OZEV** Approved



### Floor Standing

2x7KW & 2x22kw AC

Free app

5-Year Warranty

Remote Control and Monitoring

Power Modulation

Untethered

RFID

OCPP1.6 compliant

On Board RCD isolation

**Smart** 

WiFi & Ethernet Built In

Full Range of accessories available

**OZEV** Approved

## **DC Commercial**

40kw, 50Kw, 60kw, 150kw, 300kW

Free app

5-year / 30,000 hour Warranty

Remote Control and Monitoring

**Power Modulation** 

Tethered

RFID

OCPP1.6 compliant

RCD type-b Equivalent

On Board RCD isolation

Smart

Network ready

Full Range of accessories available









Floor stand EV-FLRSTAND



Protection post EV-POST2



Signage EV-SIGN1



CT Clamp EV-CTCLAMP



RFID EV-RFID



Single-phase meter IPHM



Ground Mount EV-GMEVA-S



RFID Writer EV-RFIDWRITER



4G Monitoring EV-4G





Floor stand EV-FLRSTAND



Protection post EV-POST2



Signage EV-SIGN1



CT Clamp EV-CTCLAMP



RFID EV-RFID



Three-phase meter 3PHM



Ground Mount EV-GMEVA-S



RFID Writer EV-RFIDWRITER



4G Monitoring EV-4G





Protection post EV-POST2



Signage EV-SIGN1



RFID EV-RFID



Single-phase meter



Ground Mount EV-GMEVA-D



RFID Writer EV-RFIDWRITER



Three-phase meter 3PHM





Floor stand EV-FLRSTAND40



Protection post EV-POST2



Signage EV-SIGN1



Three-phase meter 3PHM



Ground Mount EV-GM40KW



RFID Writer EV-RFIDWRITER

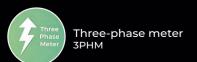


RFID EV-RFID





Protection post EV-POST2





Signage EV-SIGN1





RFID EV-RFID







Protection post EV-POST2



Three-phase meter 3PHM



Signage EV-SIGN1



Ground Mount EV-GM40KW



RFID EV-RFID



RFID Writer EV-RFIDWRITER





Protection post EV-POST2



Signage EV-SIGN1





RFID EV-RFID



## **Our Charge Point Accessories**

## View our range of accessories for all of our car chargers





Project EV Floor Stand 7kW / 22kW

EV-FLRSTAND



Project EV Floor Stand 40kW DC

EV-FLRSTAND40



**Ground Mount** 

EV-GMEVA-S EV-GMEVA-D EV-GM40KW



**Protection Barriers** 

EV-POST2



**Electric Car Charging Cable** 

Full range of cable capacities and lengths available.



Signage

EV-SIGN1



**CT Clamp** 

EV-CTCLAMP



Charge Point RFID

Cards EV-RFID



Single Phase

Meter

1РНМ



**Three Phase** 

Meter

3РНМ



#### 4G Network Monitoring

EV-4G



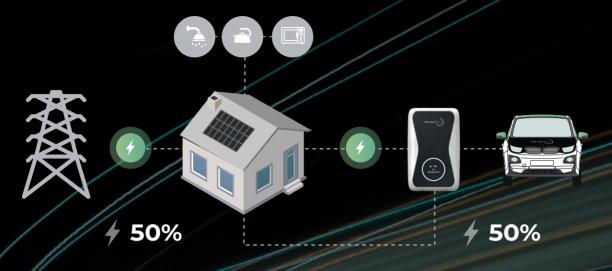
#### **RFID Writer**

EV-RFIDWRITER



#### **Load Management**

#### **Domestic Load Management**



#### **Commercial Load Management\***

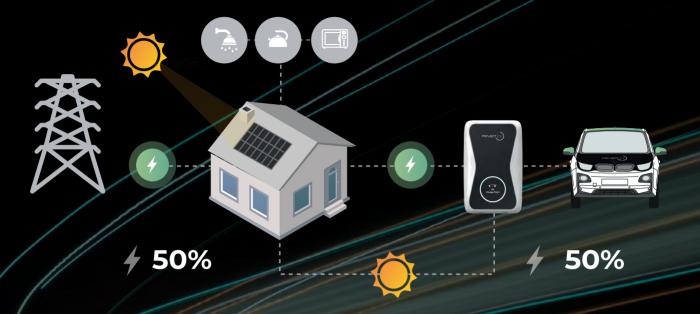


Project EV chargers can utilise a CT clamp (included in the Pro Earth range) to limit the amount of charge delivered to the vehicle based on the maximum load that the supply can deliver.

Project EV has a range of products that can allow dynamic load management. This can be via a Project EV metering solution, with CT clamps on single or multiple units. We have the Project EV CRM, including the Project EV Pro CRM system, which allows multiple chargers to take advantage of any surplus load on any particular site.

#### **Charge Your Car With Your Solar**

#### **Solar Export Control**



Solar export control works by utilising the exported energy produced by your solar PV panels, measuring the load in the property and sending the free unused power to the electric vehicle. This power would normally be exported to the grid and potentially wasted, however, diverting this unused power could result in charging your car for free.

Electric Vehicles could double your existing electricity bills, this is dependant on your mileage, there are multiple ways of reducing these costs with off-peak charging and installation of solar panels. A typical solar system rated at 4kw will provide approximately 3000Kwh which is enough power to charge most vehicles to

drive up to 10000 miles. Project EV chargers have the ability to charge a vehicle with any unused exported power which would normally flow back to the grid by analysing the exact amount of unused power and charging the vehicle direct from the solar panels.

This gives all Project EV customers the opportunity to minimise their costs of charging. Project EV has a completely free design service to explore the benefits of solar, ensuring every electric vehicle purchaser has the ability to take advantage of charging their vehicle in the most economical way. Please enquire with your Project EV assessor today.

You can also charge through solar power with Solar...



Fast charging charges through solar and tops up any remaining power from the grid.

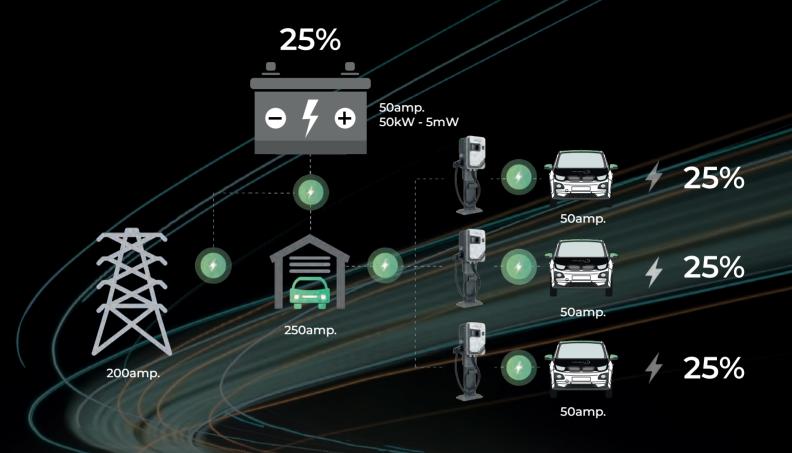


Solar Eco charges through solar and tops up any remaining power from the grid, but with a limit on the amount of power it takes from the grid.



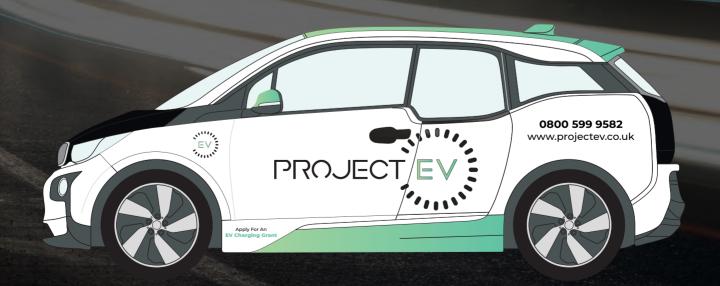
Solar Eco+ charges exclusively with solar power.

#### Increasing Site Capacity: Battery Storage



Project EV can help you to deliver multiple solutions to enable high-powered chargers working in harmony with the grid.

Using battery storage and solar panels can reduce grid upgrade costs and take advantage of off-peak power costs by using batteries during the day.



## The national grid delivers AC (Alternating Current) but electric vehicles must charge their batteries with DC (Direct Current).

An AC charging point/EVSE supplies the vehicle's on-board charger which in turn converts the AC power to DC allowing the battery to be charged. The size of the on-board charging device is constrained by the space inside the vehicle and price point the manufacturer needs to sell the car. Because the on-board converter is small, the amount of power that they are able to deliver to the battery is typically low (6-22 kW).

A DC fast charger bypasses the on-board charging device, supplying power directly and safely to the vehicle's battery. The DC charger is external to the vehicle and therefore not constrained in size or cost. DC fast chargers use 3-phase power, and have smart technology, enabling them to adjust the charge level to suit the battery state of charge (SOC). DC fast chargers have the ability to charge up to 50kw per hour dependant on EV charge point capacity.

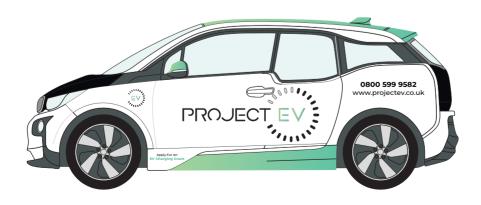
#### What are the different types of electric vehicles?

We can distinguish numerous parameters based on which we will systematize electrical vehicles. Based on possibility of external charging, the fundamental and interesting criterion is to define whether the vehicle be charged externally.

Hybrid – a combination of a combustion and electric engine which does not allow for charging of the battery using EV chargers.

PHEV (Plug-in Hybrid Electric Vehicle) – this is a hybrid of a combustion and electric engine which can also have its battery charged from a power socket. Most PHEV vehicles can only be charged using AC current electricity. There are however vehicles (e.g. Mitsubishi Outlander), which can be charged using electricity with either an AC or DC current.

BEV / BOEV (Battery Electric Vehicle / Battery Only Electric Vehicle) – vehicles only with an electric drive. All BEV vehicles can be charged from a power socket with an AC or DC current.



#### What Affects The Charging Time Of An Electric Vehicle?

In the case of AC charging the time required to charge depends on the power of the charger, as well as the power of the inverter installed within the vehicle.

#### What Kind Of Electrical Connection Is Required To Supply A Charging Station?

The power of the connection depends on the power of the charger. In the case of AC charging station, it is between 3.7kW and 22kW.

#### What are the benefits of Electric Vehicles (EV)?

Reduced Emissions – Electric vehicles produce fewer greenhouse gas emissions than internal combustion engines.

Improved Air Quality – Fewer emissions means reduced environmental pollutants and improved air quality.

#### **Cost Savings**

- Fuel Electricity costs are typically less costly than gasoline.
- Maintenance Electric vehicles, including plug-in hybrid have fewer powertrain components and have fewer maintenance requirements than internal combustion engines, i.e. oil changes, brakes, etc.
- Reduced Noise Electric vehicles are typically quieter and reduce engine noise dramatically.

#### What is the difference between a Level 2 charger and a DC fast charger?

Project EV (240 volt AC input) Pedestal and Wall Mount EV charging stations are well-suited for any commercial or public location. The sleek design and product features are perfect for spaces such as: retail locations, restaurants, hotels, public parking areas, schools, apartments, office buildings, or airports.

Project EV, DC Fast Chargers deliver the fastest EV charging rate currently available. The DC Fast Charger is perfect for high-traffic commercial locations, fleets installations, gas stations, and at locations along major transportation corridors. The DC Fast Charger is classified as a DC, 750volt, 50amp 3-Phase AC input charging station capable of 37.5 kW charge per hour.

#### **EV Charger Comparisons**

Car Battery Capacity	AC Charge Power	Wall Plug 2.3kw	EVA-07s 7.3kW	EVA-22s 22kW	EVD40s-P DC 50A
	(Fitted Inverter)	Single Phase		Three Phase	
18.7 kWh	3.7 kW	08:15	05:15	05:15	00:18
30.5 kWH	6.6 kW	14:30	05:00	05:00	00:27
35.8 kWh	7.2 kW	16:30	05:15	05:15	00:36
90.0 kWh	7.4 kW	43:30	13:30	13:30	01:15
95.0 kWh	11 kW	42:45	13:30	09:00	01:14
95.0 kWh	22 kW	42:45	13:30	04:30	01:14
		TIME IN - Hours: Mins			

## EV Chargers

## FOR DUMMIES

A glossary of terms for the tragically uninitiated.

∳ RCD

A Residual-current Device is what quickly breaks an electrical circuit to prevent electrocution.

7 RFID

Radio-frequency identification for touch and charge.

4 OCPP

Open Charge Point Protocol. Meaning it's connected to the nationwide network of EV chargers.

Dynamic load management

Power is evenly distributed so that multiple cars are charged at the same rate when charging simultaneously, and that - when there's sufficient capacity - charging happens at full volume.

Cable lock system

Cable lock is unique to the Project EV range of untethered EV charge points. It's the best of both worlds as it allows the user to lock their gun in the charge point, making it tethered for convenience - with the ability to unlock for safety and security when required.

Three phase meter

Instead of a single-phase electricity supply, there are three; meaning more power.

Type 2

AC, variable speed charge point plug for anywhere from 3 - 43kW

4 ccs

50 - 350kW rapid charging plug, used mostly for fleet charging.

CHAdeMO

DC, 50kW rapid charging socket.

#### **Key Points**



Quick.



Easy.



Grants Available.

#### **Key Features**



**Compact Design** 

Attractive appearance, simple but elegant



**Full Protection** 

Full electrical protection, over/under temperature protection, etc



**Global Standard** 

OCPP v1.6 open charge point protocol. IEC 62196 type II connector



Intelligent

Intelligent power adjustment, emergency stop, WiFi/APP/ethernet monitoring













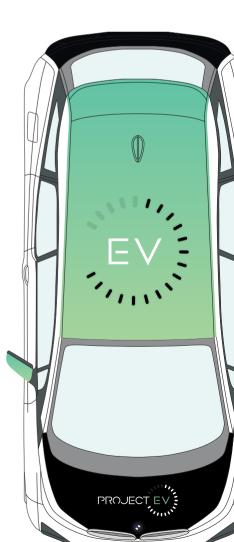


















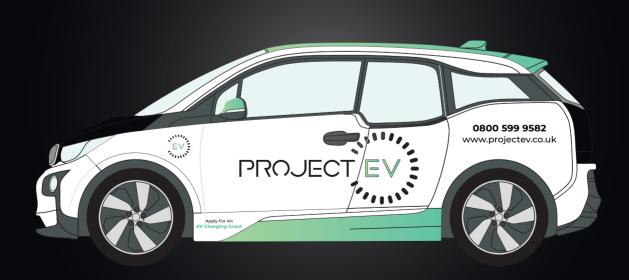
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\*Information correct as of 06/21