

Featured Packed as Standard

Your Electric Vehicle Charge Point Guide 2020



EVD-150D / EVC-AC44D / DC150D



EVD-40S-P

EVA-07S-S

1-0

EVA-22S-S



EVA-22D-S



EVA-11S-S

D

EVA-07S-S Pro Earth



View More Information Visit

www.projectev.co.uk

Working towards Decarbonisation with Renewable Energy and Electric Vehicle Charging is at the Heart of What We Do.

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.

PROJEC

PROJECT EV

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 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.





Low

Medium

Download on the App Store ANDROID APP ON Google[®] play

EV Vehicle Uptake

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 introduction EV's as a part of their core range. The infrastructure is growing at the same pace with more accessibility to charge points across the UK.

265,000

Plug-in Cars Registered UK Jan 2019 (Approx)

8,700

Plug-in Vans Registered UK Jan 2019 (Approx) 135

Plug-in Models Available Jan 2019 (Plus variants)

<u>29,514</u>

UK Charge Points Jan 2019 (Zap-Map) 10563

Locations

293

New Charge Points Last 30 Days

29502

Charge Points

16968

Devices





Number of UK charging locations and connectors over past 12 months: Zap-Map, January 2020

The Electric Vehicle Home Charging Scheme

Customer Requirements

Customer must have off street parking attached to the property, garage or driveway

Property must be a dwelling

Grant of up to £500 for 75% of the total cost of the installation

Only one charge point per house, unless they have 2x eligible vehicles. max is 2x charge points

Obtained the vehicle, new or used, on or after 1st October 2016

Customer must be a registered keeper / lease holder or have a vehicle on order to arrive within 4 months (with paperwork)

Funding Availability

Electric vehicle users can receive funding from OLEV (Office for Low 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. PROJEC

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

*capped £500, Inc. VAT

Olev Electric Vehicle Homecharge Scheme approved chargepoint model list Growat Power Technology ATESS

URLs

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

Workplace Charge Scheme

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

Workplace Charge Scheme

An OLEV grant (WCS workplace grant scheme) of up to £500 per charge point (up to 75% of the cost) of the can be applied for up to a maximum of 20 charge points.

How it works

Your business applies for a voucher through the scheme and this is handed to us 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

Currently all Electric Vehicles have a benefit-in-kind (BIK) tax of 16 percent, which is the lowest available rate in the UK.

In the 2020/21 tax year, both new and existing Electric Vehicles will be eligible for a 0 percent BIK 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.

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Apply For An



Petrol vs Electric & How Much CO2



Small Car (Renault Zoe) Average Annual Savings

£913.72

Average MPG 45

Miles Per Year 10,000



Average Petrol Car Mileage: 10000 Miles Total Car Footprint 2.91 tonnes of C02e



Medium Car (Tesla Model S)

Average Annual Savings

£1289.07

Average MPG 35

Miles Per Year 10,000



Large Car (SUV Tesla Model X)

Average Annual Savings

£1964.69

Average MPG 25

Miles Per Year 10,000



Average Diesel Car Mileage: 10000 Miles Total Car Footprint 5.70 tonnes of C02e



Average Diesel Van

Mileage:

10000 Miles Total Car Footprint 6.84 tonnes of C02e

As a general rule of thumb, we calculate that four mature trees will offset one tonne of C02e

Source evdatabase.uk (Jan 2019)

Complete Smart Control with the Project EV APP



Charging inventory list for one or multiple vehicles registered



1

Securely authorise another person to use



Manage and add multiple charge points to one master account

Set times for charging your car at different electricity rates for example - Economy 7, Solar production peak times, time of use tariffs

Built-in boost facility, allowing you to override the smart EV app in case of a charging emergency

Remote control - turn the EV charger on or off via your smart devices







Our Chargers Work With All Plug-in Vehicle Brands





Featured Packed as Standard

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



The Range & Key Features



Wall Mount

7kW, 11kW, 22,kW AC Free APP, 3-Year Warranty, Remote Control and Monitoring, Built in Earthing Solution (EV07s Pro), Power Modulation, Untethered, RFID. OCPP1.6, RCD type-b Equivalent, On Board RCD isolation, Smart. Wi-Fi & Ethernet Built In, Floor Stand and Full Range of Accessories Available **OLEV** Approved

Floor Standing

2x7KW & 2x22kw AC Free APP, 3-Year Warranty, Remote Control and Monitoring, Power Modulation, Untethered, RFID, OCPP1.6, On Board RCD isolation, Smart, Wi-Fi & Ethernet Built In, Floor Stand and Full Range of Accessories Available OLEV Approved

DC Commercial

40kw DC / 150kw DC 2 gun / 150kw DC 2 Gun & 2 x 22kw AC Free APP, 3-Year Warranty, Remote Control and Monitoring, Power Modulation, Untethered, RFID, OCPP1.6, RCD type-b Equivalent, On Board RCD isolation, Smart, Wi-Fi & Ethernet Built In, Floor Stand and Full Range of Accessories Available





EVA-07S-S Pro Earth

No Earthing Required



PROJEC



Meet the next generation of EV charge points.

Built in earthing arrangement means no costly groundwork, holes in driveways or additional mess or costly inspection chambers



New simple inspection chamber



Market beating pricing



STABLE

IP65 protection grade, capable for harsh environmental conditions

3 YEAD

WARRAN'

410 OR STAND

9LAILAB



INTELLIGENT

Intelligent power adjustment, emergency



TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge





Input & Output

Input voltage	230V AC
Input frequency	50/60HZ
Output voltage	230V AC
Max. output power	7.3KW
Max. output current	32A
Charging interface type	IEC 62196-2,Type 2

Protection

Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Short circuit protection	Yes
Earth leakage protection	Yes
Over-temp protection	Yes
Lightning protection	Yes

Function and Accessory

Ethernet/WIFI/4G	Yes/Yes/Opt
Connector	Socket/Plug
LCD	Opt
RCD	Type A +6mA DC fault current protection
LED Indicator light	(Equivalent to Type D)
Emergency stop button	Yes
Intelligent power adjustment	Opt
RFID	Opt

Working environment

Protection degree
Environment temperature
Relative humidity
Maximum altitude
Cooling
Standby power consumption

Mechanical

Dimension (W/H/D) Weight

Mounting Accessories

Wall-mounting Ground-mounting pole

Certification











0-95%non-condensing <2000m Natural air cooling <8W

240/380/145mm <7KG

Yes Opt

IP65

-25°C~+50°C

EVA-07S-S / EVA-07S-S RFID

EV AC Charging Station (Single Phase)





COMPACT DESIGN

Attractive appearance, simple but elegant



EUROPEAN STANDARD

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



STABLE

IP65 protection grade, capable for harsh environmental conditions



FULL PROTECTION

Full electrical protection, over/under temperature protection, etc



EASY TO INSTALL

Wall-mounting or pole-mounting optional

INTELLIGENT

Intelligent power

monitoring

adjustment, emergency

stop, Wifi/APP/ethernet







SOLAR COMPATIBLE

All of our EV chargers are solar compatible and can be used in conjunction with existing solar installations



TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge your vehicle





Project EV Datasheet

Input & Output

Input voltage	230V AC
Input frequency	50Hz
Output voltage	230V AC
Max. output power	7.3KW
Max. output current	32A
Charging interface type	IEC 62196-2, Type II

Protection

Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Short circuit protection	Yes
Earth leakage protection	Yes
Over-temp protection	Yes
Lightning protection	Yes

Function and Accessory

Ethernet/WIFI/4G	Yes/Yes/Opt
Connector	Socket
RCD	Type A + 6mA DC fault current protection (Equivalent to Type B)
LED Indicator light	Yes
Emergency stop button	Yes
Intelligent power adjustment	Opt
BEID	Yes (Only applies to EVA-07S-S RFID)

Working environment

Protection degree	IP65
Environment temperature	-20°C ~ +65°C
Relative humidity	0-95% non-0
Maximum altitude	<2000m
Cooling	Natural air c
Standby power consumption	<8W

Mechanical

Dimension (W/H/D)
Weight

Mounting Accessories

Wall-mounting	Yes
Ground-mounting pole	Opt

Certification

Certificate

nly app ((

C condensing cooling

240/380/145mm <7KG









EVA-11S-S RFID

EV AC Charging Station (Three Phase)





COMPACT DESIGN

Attractive appearance, simple but elegant



EUROPEAN STANDARD

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



STABLE

IP65 protection grade, capable for harsh environmental conditions



FULL PROTECTION

Full electrical protection, over/under temperature protection, etc



EASY TO INSTALL

Wall-mounting or pole-mounting optional



INTELLIGENT

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



SOLAR COMPATIBLE

All of our EV chargers are solar compatible and can be used in conjunction with existing solar installations





TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge your vehicle





Project EV Datasheet

Input & Output

Input voltage	415V AC
Input frequency	50Hz
Output voltage	400V AC
Max. output power	ΊΙΚW
Max. output current	16A Per Phase
Charging interface type	IEC 62196-2, Type II

Protection

Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Short circuit protection	Yes
Earth leakage protection	Yes
Over-temp protection	Yes
Lightning protection	Yes



Function and Accessory

LCD	Yes
Ethernet/WIFI/4G	Yes/Yes/Opt
Payment support	RFID/QR(standard)
Connector	Socket
RCD	Type A + 6mA DC fault current
LED Indicator light	protection (Equivalent to Type B)
5	Yes
Emergency stop button	Yes
Intelligent power adjustment	Opt
RFID	Yes

Working environment

Protection degree	IP65
Environment temperature	-20°C ~ +65°C
Relative humidity	0-95% non-condensing
Maximum altitude	<2000m
Cooling	Natural air cooling
Standby power consumption	<8W

Mechanical

Dimension (W/H/D)	
Weight	

Mounting Accessories

Wall-mounting	Yes
Ground-mounting pole	Opt

Certification

Certificate

300/465/170mm

<16KG







EVA-22S-S RFID

EV AC Charging Station (Three Phase)





COMPACT DESIGN

Attractive appearance, simple but elegant



EUROPEAN STANDARD

STABLE

IP65 protection grade,

environmental conditions

capable for harsh

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



FULL PROTECTION

Full electrical protection, over/under temperature protection, etc



EASY TO INSTALL

Wall-mounting or pole-mounting optional





INTELLIGENT

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



TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge your vehicle



SOLAR COMPATIBLE

All of our EV chargers are solar compatible and can be used in conjunction with existing solar installations





Project EV Datasheet

Input & Output

Input voltage	415V AC
Input frequency	50Hz
Output voltage	400V AC
Max. output power	22KW
Max. output current	32A Per Phase
Charging interface type	IEC 62196-2, Type II

Protection

Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Short circuit protection	Yes
Earth leakage protection	Yes
Over-temp protection	Yes
Lightning protection	Yes



Function and Accessory

LCD	Yes
Ethernet/WIFI/4G	Yes/Yes/Opt
Payment support	RFID/QR(standard)
Connector	Socket
RCD	Type A + 6mA DC fault current protection (Equivalent to Type B)
LED Indicator light	Yes
Emergency stop button	Yes
Intelligent power adjustment	Opt
RFID	Yes

Working environment

Protection degree	IP65
Environment temperature	-20°C ~ +65°C
Relative humidity	0-95% non-condensing
Maximum altitude	<2000m
Cooling	Natural air cooling
Standby power consumption	<8W

Mechanical

Dimension (W/H/D)	300/465/170mm
Weight	<16KG

Mounting Accessories

Wall-mounting	Yes
Ground-mounting pole	Opt

Certification

Certificate





Google play Ownload on the App Store

EVA-07D-S RFID

EV AC Charging Station (Single Phase)





FULL PROTECTION

Complex electrical protection, over/under temperature protection, residual current protection, etc



STABLE

IP65 protection grade, capable for harsh environmental conditions



OCPP SUPPORTED

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



Input & Output

Input voltage	230VAC
Input frequency	50Hz
Output voltage	230V AC
Max. output power	7.3KW*2
Max. output current	32A*2
Charging interface type	IEC 62196-2, Type II
Connector	Socket
Number of connection	2





Project EV Datasheet

Protection

Yes
Yes

Function and Accessory

Ethernet/WIFI/4G	Yes/Yes/Opt
Payment support	RFID/QR(standard)
LCD	Yes
RCD	Type A + 6mA DC fault current protection (Equivalent to Type B)
LED indicator	Yes
Integrated smart meter	Opt
Emergency stop button	Yes
RFID	Yes



Working environment

Protection degree	IP65
Environment temperature	-20°C ~ +65°C
Relative humidity	0-95% non-condensing
Maximum altitude	<2000m
Cooling	Natural air cooling
Standby power consumption	<8W

Mechanical

Dimension (W/H/D)

Certification

Certificate

320/1635/175mm

CE











EVA-22D-S RFID

EV AC Charging Station (Three Phase)





FULL PROTECTION

Complex electrical protection, over/under temperature protection, residual current protection, etc



STABLE

IP65 protection grade, capable for harsh environmental conditions



OCPP SUPPORTED

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



Input & Output

Input voltage	415V AC
Input frequency	50Hz
Output voltage	400V AC
Max. output power	22KW*2
Max. output current / Socket	32A Per Phase
Charging interface type	IEC 62196-2, Type
Connector	Socket
Number of connection	2





Project EV Datasheet

Protection

Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Short circuit protection	Yes
Earth leakage protection	Yes
Over-temp protection	Yes
Lightning protection	Yes

Function and Accessory

Ethernet/WIFI/4G	Yes/Yes/Opt
Payment support	RFID/QR(standard)
LCD	Yes
RCD	Type A + 6mA DC fault current protection (Equivalent to Type B)
LED indicator	Yes
Integrated smart meter	Opt
Emergency stop button	Yes
RFID	Yes

Working environment

Protection degree	IP65
Environment temperature	-20°C ~ +65°C
Relative humidity	0-95% non-condensing
Maximum altitude	<2000m
Cooling	Natural air cooling
Standby power consumption	<8W

Mechanical

Dimension (W/H/D)

Certification

Certificate

320/1635/175mm

CE







180

EVD-40S-P RFID

EV DC Charging Station (Three Phase)





CONVENIENT

7' touch screen LCD for parameter browsing and setting



СОМРАСТ

Suitable for wall mounting



CAPABLE

CCS type II plug, more efficient charging



RELIABLE

IP54 protection level for outdoor installation



FLEXIBLE

QR code and RFID payment supported



TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge your vehicle







Project EV Datasheet

Input & Output

Input voltage	AC230~415V
Frequency	45~65HZ
DC plug type	CCS Type II
Output voltage range	250~750V DC
Output current	0~33.3A/0~50A
Voltage accuracy	≤±1%
Current-regulating accuracy	≤±1%
Metering accuracy	0.5%
Current accuracy	≥30A:≤±1% ; <30A:≤±0.3A
Voltage-regulating accuracy	≤±0.5%
Ripple coefficient	≤±1%
Efficiency	≥95.2%
Connection	DC Gun *1
Protection	
Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes

	105
Leakage current protection	Yes
Overtemperature protection	Yes
Undertemperature protection	Yes
Lightning protection	Yes

Function and Accessory

Display	
Ethernet/WIFI/4G	
Indicator	
Payment support	
Emergency stop	
Cable	
RFID	

Working Environment

Mechanical	
Noise emission	
Standby power	
Cooling	
Maximum altitude	
Relative humidity	
Environment temperature	
Protection degree	

Dimension (W/H/D) Weight

Certification

Certificate

7 inch touch screen Yes/Opt/Opt Yes RFID/QR(standard) Yes 4m Yes

-20°C ~ +65°C 0-95% non-condensing <2000m Forced air cooling <25W ≤65db

540/760/271mm 55KG



Optional Floor Stand (Not Included)



EVD-150D

EV DC Charging Station (Three Phase)





CONVENIENT

7' touch screen LCD for parameter browsing and setting



SAFE STRUCTURE

DC gun hidden design



CAPABLE

Dual CCS type II plug,more efficient charging



RELIABLE

IP54 protection level for outdoor installation



FLEXIBLE

QR code and RFID payment supported



TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge your vehicle









Input & Output

Input voltage	AC415V
Frequency	50HZ±1
DC plug type	CCS Type II,double plugs
Output voltage range	200-850V DC
Output current	Single connector MAX:200A
Voltage accuracy	≤±1%
Current accuracy	≥30A ≤ ± 1% ; < 30A: ≤ ±0.3A
Voltage-regulating accuracy	≤±1%
Current-regulating accuracy	≤±1%
Ripple coefficient	RMS: ≤ ±0.5; Peak: ≤±1
Metering accuracy	0.5%
Efficiency	≥94%
Connection	DC Plug *2

Protection

Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Leakage current protection	Yes
Overtemperature protection	Yes
Undertemperature protection	Yes
Lightning protection	Yes

Function and Accessory

Ethernet/WIFI/4G	Yes/Opt/Opt
Display	7 inch touch screen
Indicator	Yes
Payment support	RFID/QR(standard)
Emergency stop	Yes
Cable Length	5m

Working Environment

Protection degree	IP54
Environment temperature	-20°C ~ +65°C
Relative humidity	0-95% non-condensing
Maximum altitude	<2000m
Cooling	Forced air cooling
Standby power	<30W
Noise emission	≤65db

1260/2045/800mm 800KG





Certificate

Certification

Weight

Mechnical

Dimension (W/H/D)

EVC-AC44D / DC150D

EV DC Charging Station (Three Phase)





CONVENIENT

7' touch screen LCD for parameter browsing and setting



SAFE STRUCTURE

DC gun hidden design



CAPABLE

Dual CCS type II plug,more efficient charging



RELIABLE

IP54 protection level for outdoor installation



FLEXIBLE

QR code and RFID payment supported



TIME SHIFTING

You could save 100's per year by utilising off peak energy tariffs to charge your vehicle







Input & Output

Input voltage	AC415V
Frequency	50HZ±I
Max input power	200kW
Connection	DC Plug *2, AC socket*2
DC Charging	CCS Type 2, double plugs
AC Charging	Type 2,double sockets
Output voltage range	200-850V DC
DC output current	MAX 200A Per connector
AC output current	32A per socket
Voltage accuracy (DC)	≤1%
Current accuracy (DC)	≥30A:≤±1%; <30A:≤±0.3A
Ripple coefficient (DC)	RMS: ≤±0.5; Peak: ≤±1
Efficiency (DC)	≥94%
Protection	
Over voltage protection	Yes
Under voltage protection	Yes
Over load protection	Yes
Short circuit protection	Yes
Forth lookage protection	Vec

Earth leakage protection Yes Over-temp protection Yes Lightning protection Yes

Function and Accessory

Ethernet/WIFI/4G	Yes/Opt
Display	7 inch to
Indicator	Yes
Payment support	rfid/qf
Emergency stop	Yes
Cable Length	5m
Metering Accuracy	0.5%

Working Environment

Protection degree
Environment temperature
Relative humidity
Maximum altitude
Cooling
Standby power
Noise emission
Mechnical
Dimension (W/H/D)
Weight

Certification

Certificate



IP54 -20°C ~ +65°C 0-95% non-condensing <2000m Forced air cooling <30W ≤65db 1260/2045/800mm 900KG





CE

Our Charge Point Accessories

View our range of accessories for all of our car chargers



Project EV Floor Stand 7kW / 11kW / 22kW

EV-FLRSTAND



Type 2 to Type 2 – 5m Length (11kW/22kW) Electric Car Charging Cable (Three Phase) EV-11KW

Project EV Floor Stand 40kW DC EV-FLRSTAND-40KW



4G Network Monitoring EV-4G Electric Car Charging Cable Type 2 to Type 2 - 5m Length (7kw)

EV-7KW



Charge Point RFID Cards EV-RFID

RFID





Intelligent Power Adjustment Load Management

EV-CTCLAMP









Three Phase

Meter

EV-TPM



Load Management Solar Export / Balancing

Domestic Load Management



Commercial Load Management



With the introduction of electric vehicles to the home and workplace comes additional demands on the buildings incoming electricity supply.

Most buildings have a limited amount of electrical capacity, the maximum demand per on a domestic property is suggested by the DNO (district network operator) is 32amps, for commercial properties this can vary even more.

As you can imagine adding additional stress to your house or business electricity capacity is not a great idea, therefore we have load balancing a simple solution that looks at what is going on in the home or business and automatically adjusts according to the power loading, in a commercial environment this is even more important as you may have several vehicles requiring charge at the same time.

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, by 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.



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 onboard charger which in turn converts the AC power to DC allowing the battery to be charged. The size of the onboard charging device is constrained by the space inside the vehicle and price point the manufacturer needs to sell the car. Because the onboard 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 onboard 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 Comparisions

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



Key Points





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Email: enquiries@projectev.co.uk

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*Information correct as of 31/01/20

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