Mount Guard
Data Sheet

pod POINT
Charging your Electric Car

Guards are designed for use with the POD Point Twin chargers

Ordering Information	
Part Number	G600-F
Description	Floor mounted 570mm guard
Compatibility	POD Point twin charge range
Mounting	Floor Mounted
Material & Finish	Steel, black powdercoat, smooth finish
Tube Diameter	33mm
Tube wall thickness	3mm +/- 1mm
Fixings	6 x M10 bolts, not supplied

1. Floor Mount Guard 570mm G600-F

Ø 33.70   470   Ø 13   Ø 100   400   344   573.15

Pod Point Twin Unit
Installation Guide
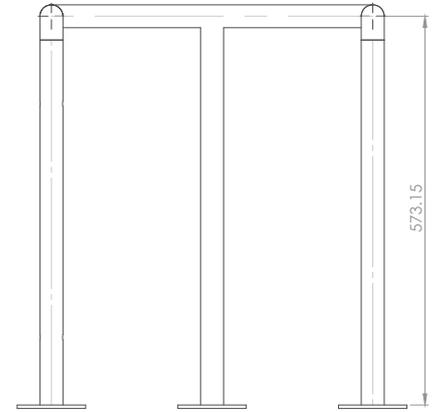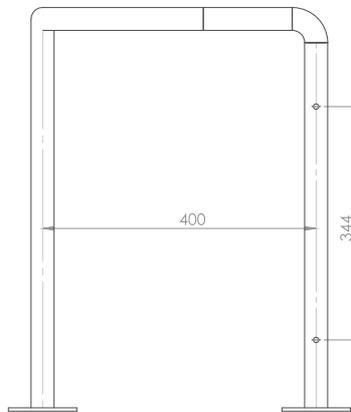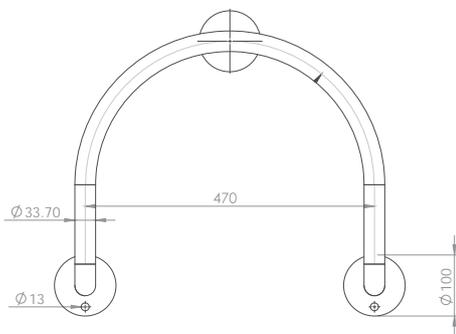
pod POINT
Charging your Electric Car

This guide is intended for use by competent electrical installers with the necessary experience to carry out the installation in accordance with the local applicable regulations and legislation.

Introduction

Pod Points are designed to give a long and reliable service life. However, the operational reliability depends on a number of installation factors.

Before starting installation, please confirm the following:

- There is a Wifi signal available at the installation site. Failing that there should be a good GSM signal available. (please refer to 3G to Wifi guide). A suitable power source is within reasonable distance of the proposed location (consult a qualified electrician if required)
- The proposed site has been selected in order to minimise the risk of damage to the Pod Point

Fig. 1 Pod Point Twin Unit

Note on Wifi

Pod Points communicate with a control network via a GSM/GPRS connection. To allow this, a Wifi network signal is required and must be checked at the site survey. You can check Wifi network availbility on your phone when standing at the area where Pod Point is going to be installed.

Tools

Security torx bits are:
- Pin Torx T30 (upper door)
- Pin Torx T45 (lower door and ground level fixing)

Other items not supplied, but that may be required:
- M10 x 120 mm (minimum) countersunk security anchor bolts x 4 (surface mount only, suitable or local substrate)
- 5 mm steel rod (for stabilising subterranean foundation during installation only)
- Feeder Pillar

Civil Work

The surface mounting foundation adapter can be used to secure the POD Point to existing concrete (or similar) surfaces, or to a purpose laid 600 x 600 x 150 mm concrete pad. Cable entry subterranean or surface mounted.

The surface mounting plate is secured to the ground using four M10 x 120mm minimum expanding countersunk concrete anchor bolts (or preferred equivalent fixing).

You can see on figure 2 where the front of the post will be located.

Fig. 2 Surface Mount

Front

Back
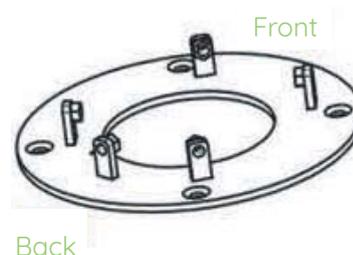
The Subterranean Foundation adaptor (fig. 3) is typically set in 0.6 x 0.6 x 0.45m of PAV1 S2 Slump concrete and is designed to accept subterranean cables which are buried 450 mm below the surface. The cable enters the foundation through a standard 32~75mm Rigiduct.

Fig. 3 Subterrenean Mount

It is very important that the foundation is level in all axes, as this controls the angle of the POD Point. It is also very important to orientate the foundation correctly, as this controls the orientation of the POD Point. If required, it is possible to stabilise the subterranean foundation by inserting suitable lengths of 5/6mm rods through pairs of holes at the top of the unit. Ensure that the underside of the mounting plate

sits on the terrain's surface, failure to do this may result in difficulty in fitting and removing the access door.

Obstructing the pavement location of the POD Point and signage - in no circumstances should the width of a public footway be restored to less than 1m, preferably not less than 1.5m.
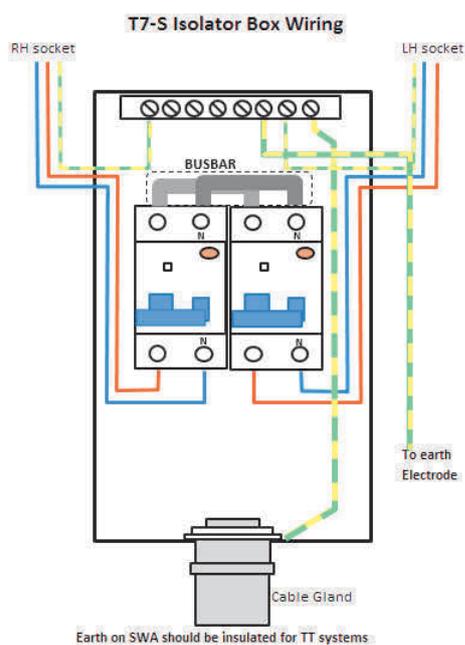
Electrical Work

Single Phase:

Each POD Point ideally needs 240V AC at 32A (two phases) or 64A (single phase).

Each side of the POD can supply 32A per door, either fed from an 80A single phase supply, 2 independent 40A single phase supplies or 2 phases of a 3 phase supply plus Neutral (40A).

NOTE: cables used must be able to handle 40A/80A fault condition for T7-S or 20A/40A for T3-S. An RCD/MCB/RCBO should be fitted at source and must factor in Discrimination, typically a 150~300mA timed delay version used.
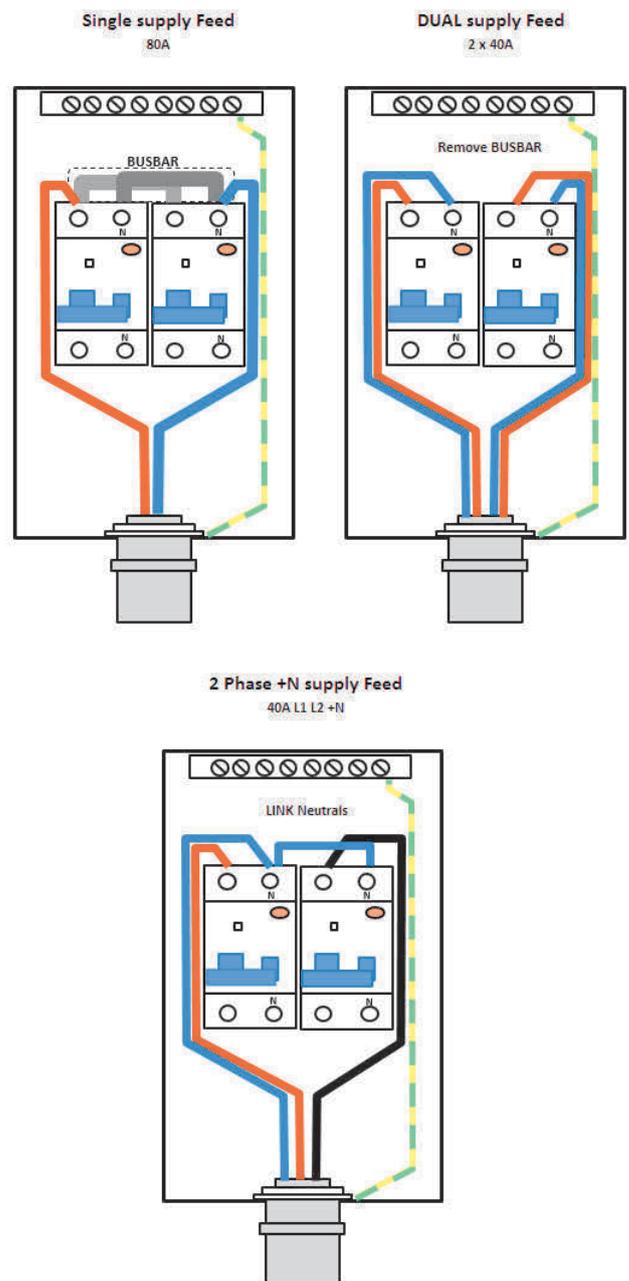
In Fig. 4, the wiring of the POD Point's isolation box, fitted inside the unit, is shown.

Fig. 4 Twin single phase unit isolater box wiring

T7-S Isolator Box Wiring

RH socket · LH socket

BUSBAR

To earth Electrode

Cable Gland

Earth on SWA should be insulated for TT systems

In Fig. 5 different ways to supply the POD Point are illustrated.

Fig. 5 Different options for wiring of POD Point 1-phase unit.

Single supply Feed 80A

BUSBAR

DUAL supply Feed 2 x 40A

Remove BUSBAR

2 Phase +N supply Feed 40A L1 L2 +N

LINK Neutrals

Pod Point Twin Unit
# Installation Guide

Three Phase

Each POD Point 3 phase unit needs 3-phase (3P+N*) 400 VAC at 100 A (32A per Phase). The unit should be provided with an 80A 400V 3 phase +N supply (Fig.6) and must factor in discrimination, typically a 150-300mA timed delay version used. An RCD/MCB/RCBO must be fitted at source. It is possible to de-rate the Point to 11kW/door (16A x 2 per phase) where the supply capability is not adequate. RCD should be of minimum Type A but Type B may be required for some specific customers. Type AC RCD's must NOT be used.

* (3P+N) : 3 Phases + neutral star network.

Note

Alternatively, the POD Point 3 phase unit can be supplied from 2x 32A supplies.

Fig. 6 Wiring of POD Point 3-phase unit.
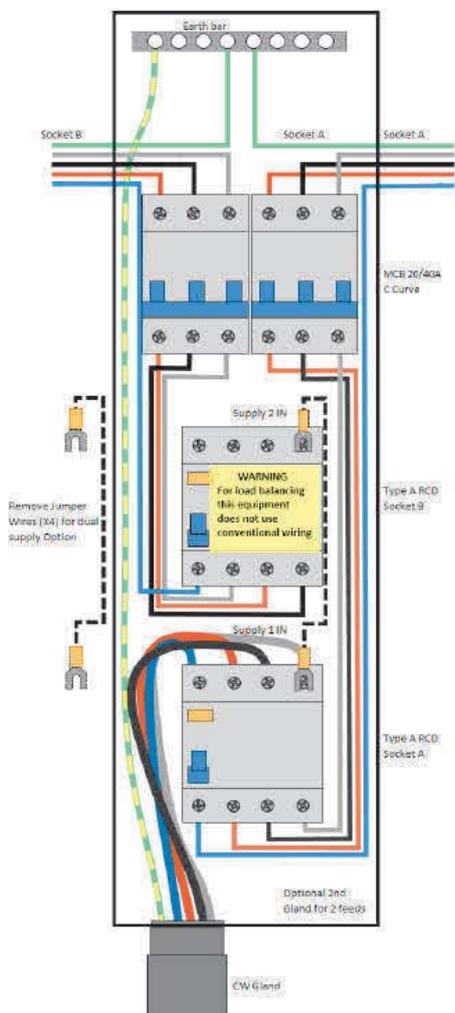
Earth arrangements

Electric vehicle supply equipment must be installed to BS7671 regulations, Where the charger is to be installed outside as "street furniture" the same regulations apply as if it were a lighting column, a separate earth electrode is required. A separate earth electrode is required where the charge point is located inside or on a building, i.e. a multi storey car park; where this is the case the POD Point units earth should be connected to the structure of the building and therefore in the same equipotential zone.

It is the responsibility of the installer to conduct a risk assessment of electrical or metallic items in the immediate area to a range of 10 Meters of the proposed location of the POD Point unit, If an adjacent installation (within 10 meters) has a different earthing arrangement, measures must be taken to eliminate risk of electric shock to the end user if a fault were to develop (PME neutral failure for instance). The POD Point earth shall be independent from the distributors earth system with no direct connection to the incoming supply. The SWA protective cover should be connected to the buildings structure or main earth, in almost all other installations the SWA should be insulated from the POD Point unit.

The electrical installer shall install a suitable copper rod electrode complete with appropriate CSA cable, termination housing and covers where appropriate. Earth/neutral impedance should be less than 150ohms (less than 100 preferred), POD Point unit earth to rod impedances should be less than 1ohm.

Notes

* An additional earth wire/eyelet is provided to earth the ground fixing plate
* During fixing of the rear door ensure it is earthed using the provided cable/screw

Connecting to Wi-fi network

On power up of the POD Point Solo the LED's on the front should illuminate white.

To connect the unit to a Wi-Fi network:

Obtain the site's Wifi network SSID and WiFi password key (usually found on the WiFi router):

1. Switch 1 side of the Twin unit on, by turning on 1 out of

2 RCBO's, while the other one is turned off.

2. Scan for podpoint Wi-fi network on a mobile device and connect to it.

3. Open the web browser and type the ip address: 192.168.1.1 followed by enter.

4. Complete the following information on the page displayed on the device:

a. SSID name of the network the Pod Point Twin Is to

connect via:

b. Type of encryption of this Wi-fi network.

c. Password of this Wi-fi network.

5. Press "Add" button located at the bottom of the web page.

6. Power cycle the Pod Point Twin and wait for 1 minute.

7. Follow the same procedure to connect the second side of the Twin unit to the Wifi.

Light should go blue with a short magenta flash. If the LED remains white, you may need to power cycle the unit again and verify the settings.

NOTE: the Pod Point connects to a secure server, all data is encrypted using a unique algorithm.

Commissioning of Twin Unit

Visit the PP Install App to commission this unit. If you do not have access to the App, see " Note for Commissioning".

Note for commisioning

If you do not have access to the app, please text the details listed below to this phone number: 07805833545

• Site operator's name
• Site operator's email address
• Site operators phone number
• Location of the unit
• Name of the unit (e.g. John-Mary)
• PG-number of the unit (e.g. : PG-90001)

Testing of Functionality

When power is turned on, lights on both sides of POD Point unit should change colours as follows:

1. Trying to get signal (takes up to 1 min) - White

2. Establishing communication with server - Magenta

3. Communication established, car not plugged - Blue with flashes of magenta

Test gun should then be plugged in to both sockets and unit functionality should be tested as follows:

1. Unlock mode - Blue with magenta flashes

2. Standby hi/low - Flashing green

3. Change hi/low - Green

4. Fault - Red with red flashes

If the test procedure fails at any stage please contact POD Point.

Contact Us

If you have any questions, comments, or issues regarding POD Point Products which are not covered by this installation guide, please contact our customer support team. You may be asked to provide the serial number of your POD Point Solo (See Fig.8). As part of our quality and training programme calls may be recorded or monitored.

Customer Support

Telephone: **020 7247 4114**

E-mail: **support@pod-point.com**

Web: **www.pod-point.com**

Fast Charging
Twin Charger
T3 | T7 | T11 | T22 Datasheet

Twin Charger

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The Pod Point Twin Charger is a dual Type 2-socketed vehicle charger suitable for commercial and public installations. The Twin charger is available for both single & 3 Phase electrical supplies and is compliant with a pay-as-you-go charging system for drivers. Every Twin charger includes and ships with a surface mount foundation plate.

Speed category	Fast Charging
Charging speed (s)	3.6kW, 7kW, 11kW and 22kW
Product family	Twin

Dual vehicle charging

Wi-Fi & 3G/4G enabled*

3 Year Warranty

Smart Reporting & Pod Point Network enabled

Surface Mount Foundation attached

Pod Point Twin Charger Model Numbers			
T3 - 3.6kW Speed (Single Phase)	**T7 - 7kW Speed (Single Phase)**	**T11 -11kW Speed (3 Phase)**	**T22 - 22kW Speed (3 Phase)**
T3-S-6mA -2	T7-S-6mA -2	T11-S-6mA -2	T22-S-6mA -2
T3-S-6mA -2-RO	T7-S-6mA -2-RO	-	T22-S-6mA -2-RO

Physical Properties

Height Width Depth	1330mm 241mm 295mm
Weight	19 kg 22.5 kg-T22
Shipping Height Width Depth	1480mm 340mm 370mm
Shipping Weight	24kg 30kg - T22

Standard colours	RAL9005 RAL9003
Finish	Anti-graffiti

Operating temperature	-25°C to 50°C
Operating humidity	95%

Socket type	Universal Type 2
Socket height	1000mm
Enclosure rating	IP54 Mennekes socket

(*3G/4G on RO models only)

Twin Charger

pod POINT

Power

Charge protocol	Mode 3
Rated frequency	50Hz
Over-current protection	Internal (dynamic)
RCD protection	Internal 30mAh resettable (per socket)**
DC vehicle fault protection	Internal 6mAh DC (per socket) (BS7671:2018)
RCD protection (main unit)	Internal 100mAh (time delayed)
Upstream RCD protection	Optional
Standby power consumption	8 Watts max

	T3, T7 Models Single Phase	T11 & T22 Models 3 Phase
Rate voltage	400V AC Poly phase+N	400V AC 3 phase+N
Rated output current	2 x 32A	3 x 64A
Rated output	2 x 3.6kW 2 x 7kW*	2 x 11kW* 2 x 22kW*

Standards & Compliance

Socket compliance	IEC62196-2:2016 (with lock & lock status)
Standards compliance	LVD 2014/35/EU EMCD 2014/30/EU EN61851-1 and -22 IEC62196-2:2016 CE Certified

Connectivity

Wi-Fi	(IEEE 802.11bgn) @2.4 Ghz
Connection security	Secure data encryption HTTPS
TCP	Port 443
Channel Mask	1 to 13
Scan RSSI Threshold	-95dB
Station addressing scheme	Dynamic

3G/4G	Optional modem available
Pod Point App	Pair via Wi-Fi
Smart charging	Enabled

Surface Mount Foundation (details)

Dimensions Height Width Depth	400mm 370mm 60mm
Weight	2.5Kg

*All Twin chargers can be de-rated remotely if required.
**Requires the disconnection of the charging cable

Twin Charger

pod POINT

Access

- For full user guide details please see the Twin charger user guide document.
- Each charging socket is protected by a hinged flap.
- Users begin charging by connecting their charging cable with the Twin and their vehicle.
- Authenticate and confirm a charge via the Pod Point mobile application.

Data & fees

- To connect and communicate to the Pod Point network a data contract must be maintained.
- Data costs will vary alongside contract duration and feature requirements.
- All of our Twin chargers use the industry standard Mode 3 charging protocol.

Installation

- For full installation details please see the Twin charger installation guide document.
- All Twin chargers are designed for either open air or protected environments.
- Each Twin is supplied with a baseplate
- Ancillaries such as feeder pillars, protective guards, signage and more - are all available from Pod Point.
- Pod Point can provide a turn-key service for the installation and commissioning of Twin charging points.
- Pod Point chargers are not put into service or valid for their warranty until installation is in accordance with Pod Point's protocols and local regulations have been verified.

After sales service

- We will not undertake any repairs for any out-of-warranty failures without first receiving acceptance of our quotation for related costs. Refer to the Twin installation guide for further details of supply requirements.

Smart charging

- Our hardware is designed to operate in coordination with grid demands, in periods of peak local, regional or national demand, charging may be interrupted or rate-limited for brief periods to facilitate grid management.

- Where data services have been purchased from Pod Point, Pod Point will manage these limits and mitigate any significant effect on vehicle charging overall

Warranty and support

- To maintain our thirty-six-month limited warranty, installation shall be in accordance with Pod Point's guidance and all relevant legislation and installed by a certified electrician.

- Any hardware failure should be promptly reported to us, ideally by email to support@pod-point.com or by calling our support team on 0207 247 4114. You must quote the serial number and location of the product with a brief description of the failure.

- Our support team will then investigate and attempt to remotely resolve the issue. They may ask you to provide additional information to assist in this.

- If the issue cannot be resolved remotely, and the product is within warranty, we will arrange for one of our team to visit. If the issue is a result of any shortcoming in design or manufacture it will be made good free of charge or at our option, exchanged for a replacement product. If we attend site and the fault is not a result of a design or manufacture issue of our product, we will make reasonable attempts to diagnose the issue and propose a resolution which may have a fee associated with it. A call out fee will be applicable where our product is not at fault.

Limitation of liability

- In no event will we accept any liability for any loss, costs or damages consequential of the use and/or misuse of our hardware products, except and only to the extent that this is caused by our negligence.

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📞 Call us for support on **020 7247 4114**

✉️ Email us at **support@pod-point.com**

🐦 Tweet us at **@Pod_Point**

📍 Website: **pod-point.com**

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Pod Point
Array Charging System

System Description

The Pod Point Array charging system allows multiple chargers to manage their individual and total charging load within the limits of a fixed supply. An Array system allows many more chargers to be fitted than would normally be the case as each charger will de-rate as necessary to never overload the incoming mains feed. The system consists of suitable cabinets containing the Pod Point Array controller electronics and MCBs. A chosen number of Pod Point double socketed chargers are wired to these cabinets (up to 4 for a single phase system or up to 12 for a three phase system).

System Requirements

• A Wi-Fi network must be available where the Pod Point double socketed EVCPs are installed
• The total amount of Pod Point double socketed EVCPs allowed must be calculated with a safety contingency based on the supply
• The Array Charging system can be installed on single phase supply or three phase supply
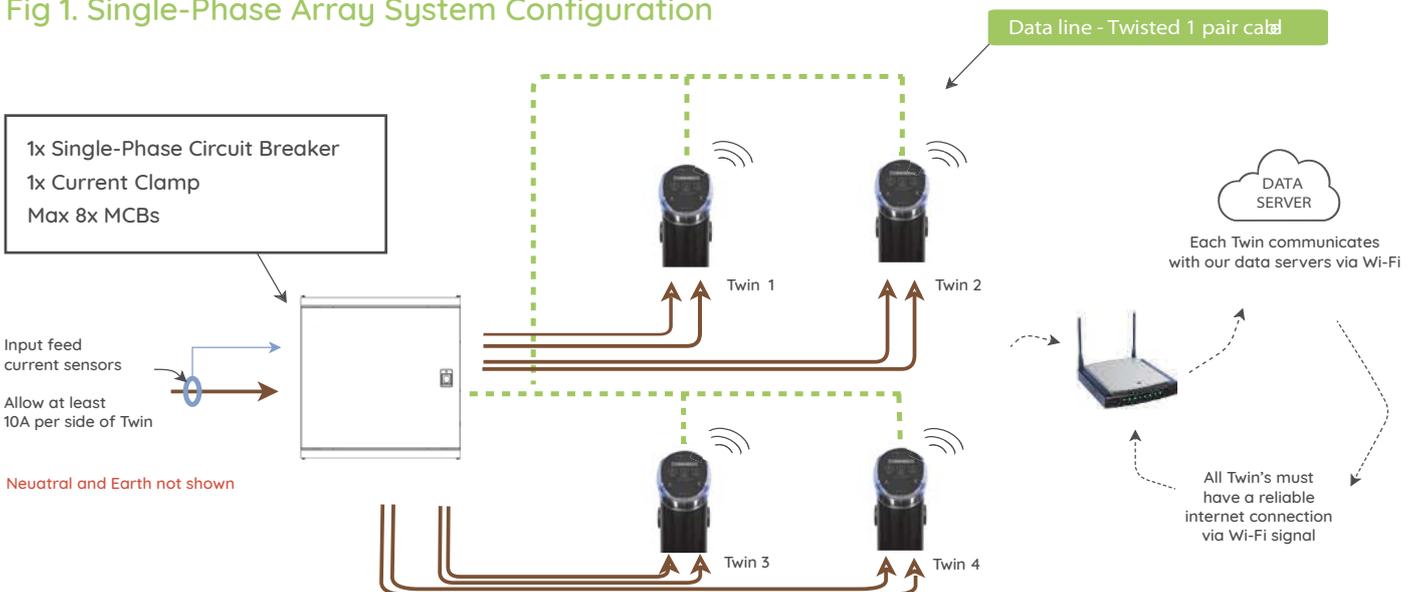
System Diagram

Array Charging is available in different options to cover most system requirements. Pod Point are able to advise on suitable configurations.

Single-Phase supply – up to 4 double socketed Pod Points (Fig. 1)

For a supply of 100A up to 4 double socketed Pod Point EVCPs (8 outlets) can be installed (depending on maximum available supply - See Table 1)

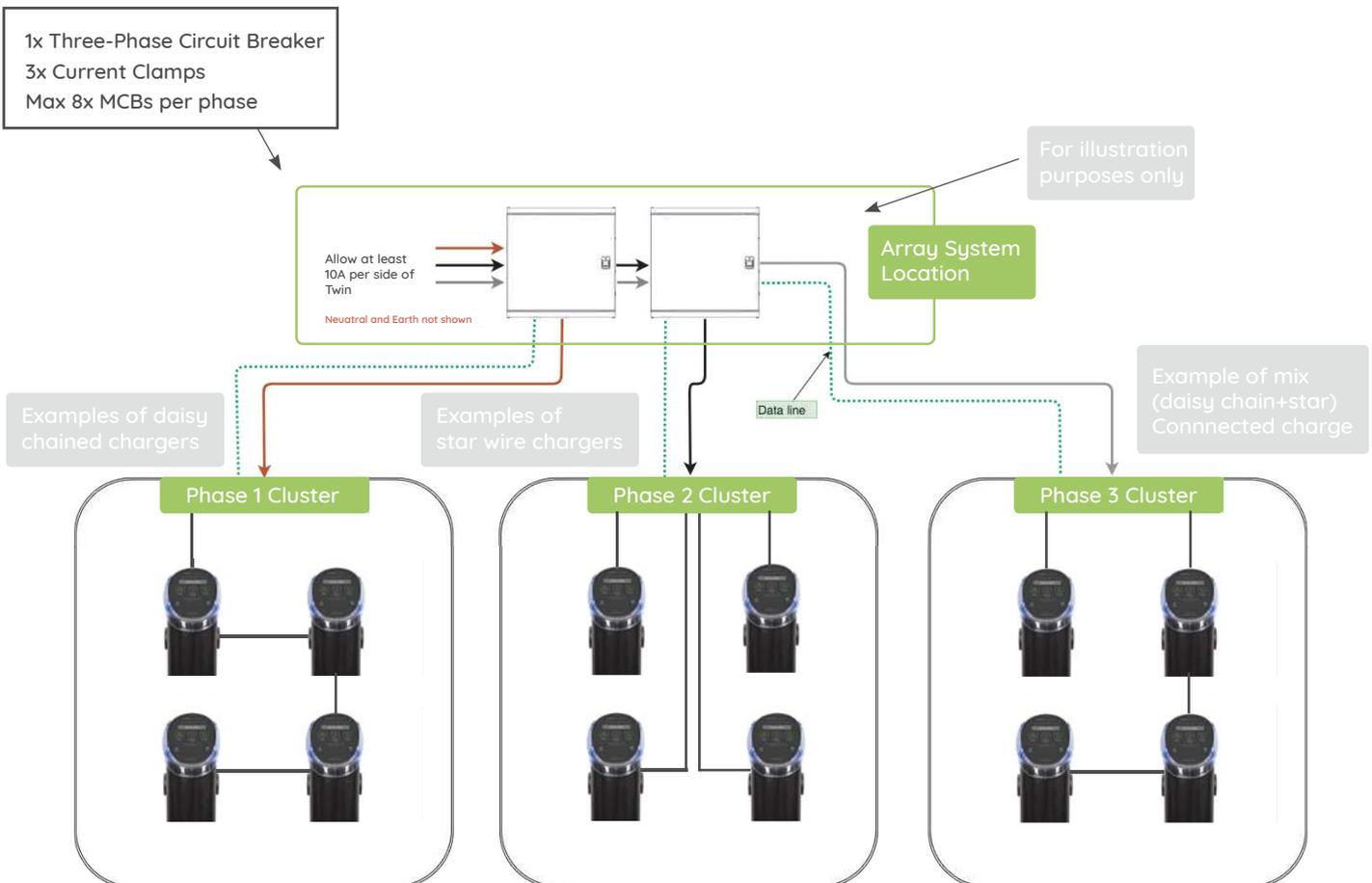### Fig 1. Single-Phase Array System Configuration

Data line - Twisted 1 pair cable

1x Single-Phase Circuit Breaker
1x Current Clamp
Max 8x MCBs

Input feed current sensors

Allow at least 10A per side of Twin

Neuatral and Earth not shown

Twin 1   Twin 2
Twin 3   Twin 4

DATA SERVER

Each Twin communicates with our data servers via Wi-Fi

All Twin's must have a reliable internet connection via Wi-Fi signal

Three-Phase supply – up to 12 double socketed Pod Points (Fig. 2)

Option 2 is Pod Point's preferred option. It allows load management of up to 12 double socketed Pod Point EVCPs on a 100A TPN (Three-Phase) supply. On a 100A TPN system (Fig 2), the Pod Point EVCPs must be installed in clusters of a maximum of 4 units per phase. Each cluster connects to one phase of the supply.

Fig 2. Three-Phase Array System Configuration

1x Three-Phase Circuit Breaker
3x Current Clamps
Max 8x MCBs per phase

For illustration purposes only

Allow at least 10A per side of Twin

Neuatral and Earth not shown

Array System Location

Data line

Examples of daisy chained chargers

Examples of star wire chargers

Example of mix (daisy chain+star) Connnected charge

Phase 1 Cluster

Phase 2 Cluster

Phase 3 Cluster

Pod Point
Array Charging System

Array Charging Distribution Board

- Fully assembled three-phase system includes: 40A 2-pole MCBs, 3x current clamps, 1x three-phase circuit breaker and Array controllers
- Up to 4x double socketed Pod Point EVCPs per phase (for 100A supply). See Table 1 for different supplies and amount of Pod Point EVCPs allowed

Table 1. Maximum supplies available for Array Charging System

Max supply	Single-Phase system	Three-Phase system
	Amount of double socketed POD Point EVCPs per system	
40A	1	3 (1 per phase)
60A	2	6 (2 per phase)
80A	3	9 (3 per phase)
100A (default)	4	12 (4 per phase)
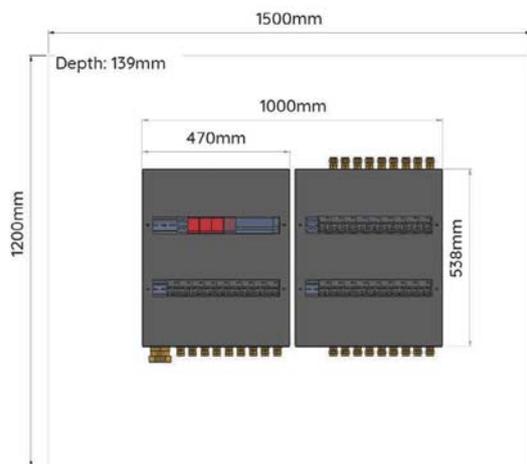
Fig 3. Horizontal installation of Three-Phase system
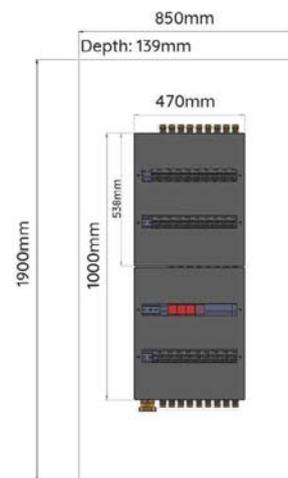
Fig 4. Vertical installation of Three-Phase system

Table 2. Dimensions of Array System Installation

System	Height	Width	Depth
Three-Phase Horizontal (Fig 3)	1200	1500	139
Three-Phase Vertical (Fig 4)	1900	800	139

*Single-phase system comprises of one DB box

Pod Point Twin
User Guide
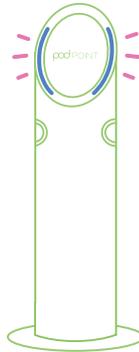
pod POINT
Charging your Electric Car

1) Twin in Standby

- The Pod Point Twin has 2 x charging sockets:

  Door A
  Door B

- Both Doors can charge a car simultaneously.

- Blue light with purple flashes indicates the chargepoint is in Standby mode and communicating with the Pod Point network.

2) Download App to use Twin

- Download the Pod Point Open Charge App on iOS/Android.

- Follow instructions on chargepoint and app.

- No smartphone? Use the web app at: open.pod-point.com

GET IT ON
Google Play

Download on the
App Store
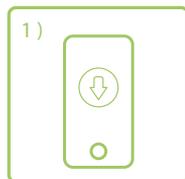
3) Start Charge

- Plug-in cable to car.

- Plug-in cable to Pod Point Door.

- Charging will start immediately.

- Solid green light indicates charging.

- For security, the charging cable will be locked into Door when charging starts.
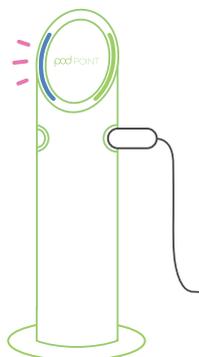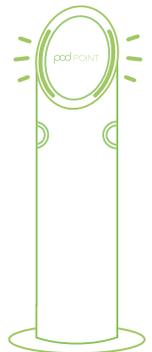
4) Confirm a Charge

- Select correct Pod Point Door in App.

- Confirm charge via App within 15 minutes.

- Charge will stop if not confirmed within 15 minutes.

5) End Charge

- Green light with green flashes indicates the car's battery is fully charged or charging has paused/stopped.

- Unlock cable via car's on-board display.

- Disconnect car from chargepoint.

6) Fault Alert

- Red light with red flashes indicates a fault has occurred.

- Please count the frequency of flashes, as this indicates the nature of the fault to our support team.

- In the unlikely event a fault does occur please contact our Customer Support team and we'll get it sorted as soon as possible.
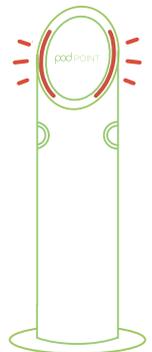
Contact Us

If you have any questions, comments or issues regarding POD Point Products which are not covered by this user guide, please contact our customer support team (details below).

Customer Support
Telephone: 020 7247 4114
E-mail: support@pod-point.com
Web: www.pod-point.com