

Solo 3 & Twin

Technical File - Commercial

The Electric Vehicles (Smart Charge Points)
Regulations 2021

This document is the technical file for the following charge points:

Charge point make:	Pod Point
Charge point model:	S7-UP-03, S7-UPB-03, S22-UP-03, T7-S-06, T22-S-06
Software version at point of sale:	A30P-3.1.27
Seller:	Pod Point Ltd. 28-42 Banner Street, London, EC1Y 8QE
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Universal



Twin

Description of the smart charge point

The Solo 3 Charger - Commercial is a single vehicle charger designed for commercial purposes only. The Solo 3 Charger is available in a universal socketed model only. The Solo 3 is available in a variety of charging rates. The Twin Charger is a dual Type 2-socketed vehicle charger suitable for commercial and public installations. The Twin Charger is available for both single & three phase electrical supplies. Both models incorporate a simple LED user interface on the charger itself, with more advanced operations available via the Pod Point Smart Reporting Portal. A Wi-Fi connection is required for data and settings to be transferred between the Smart Reporting Portal and the chargers. The Wi-Fi connection can either be provided by other infrastructure at the installation site or using an optional cellular data link.

Operating manual

A copy of the operating instructions for these chargers can be found at:

- pod-point.com/commercial-solo-guide
- pod-point.com/commercial-solo-3-guide
- pod-point.com/twin-user-guide

Technical solutions implemented to meet the requirements of the Regulations (when installed in a workplace)

Smart functionality

Solo 3 and Twin chargers are able to connect to a communications network via a local Wi-Fi network, or where installed, a cellular data link.

The chargers can respond to commands sent over the communication network to alter the allowed current limit during a charge, including pausing the charge. This mechanism allows the chargers to participate in DSR services and scheduled or 'off-peak' charging.

Owners are able to schedule use of the chargers via the Smart Reporting Portal.

The LED(s) on the charger indicates its current status. LEDs are located on the front of the Solo 3, or the top edge of the Twin.

Electricity supplier interoperability

The Solo 3 or Twin are not dependent on any particular electricity tariff or provider and will continue to provide all functions on any suitable power supply, including features available via the Smart Reporting Portal.

Loss of communications network access

In the event that the chargers are unable to connect to the communication network, they will default to charging the vehicle when plugged-in, subject to an (up to) 600 second random delay in some circumstances. For example:

- the random delay is applied if the charger is energised when a vehicle is already plugged-in
- if the communication network becomes unavailable during a paused charging session.

To ensure the owner remains in direct control, the time schedule will be ignored while the communication network is unavailable and a plugged-in vehicle will charge subject to the random delay.

Safety

Local safety systems within the charger will take priority over commands to start charging received via the communication network or the user overriding random delays, demand side response actions or default schedule settings. These are designed to prevent overloading of the circuit supplying the charger and mitigate against the risk of electric shock.

Measuring system

The Solo 3 and Twin chargers are capable of measuring:

- Electricity flowing to a connected vehicle, in kilowatt-hours (kWh).
- The total time within a charging session during which power was flowing.

This information is available via the Smart Reporting Portal (to the owner) and the Pod Point App (to end users). These applications can be used to view all charges within the last 12 months. They can be viewed individually, or grouped by week, month or year.

Electrical power measurements sent over the communication network have been tested to be accurate within 10%. The electrical power measurements are made every 1 second. Power measurements which could not be sent due to unavailability of the communication network are not re-transmitted. Therefore, missing charge data may lead to some inaccuracy in monthly or annual aggregated charge statistics.

Off-peak charging

After completion of an installation and once the charger has been configured to communicate with the Smart Reporting Portal, the Solo 3 and Twin chargers will have a default schedule activated to charge vehicles when demand on the electricity grid is lowest. The owner can opt-out of having the default schedule applied, with a view to setting their own schedule or continuing without a schedule.

The owner can change the schedule times or enable and disable the scheduling feature via the Smart Reporting Portal.

If the charger is sold with a DSR agreement, allowing a third party to manage the charging rate and control energy usage for a defined group of chargers, the schedule will not be activated.

Randomised delay

During the following scenarios, a random delay of up to 600s will be applied to a charge's start or stop operation:

1. When a charge is started or stopped by a user created schedule or the default charging schedule.
2. When the charger is energised and it is already connected to a vehicle which is able to accept charge.
3. When the communication network becomes available and the charger is set to perform a scheduled charge.
4. When the communication network becomes unavailable outside of the user's scheduled charging times and a vehicle which is able to accept charge is connected.

The duration of the random delay is capable of being increased to 1800 seconds if required.

A user can override this delay in each case by either temporarily disabling the schedule (in scenario 1) or by unplugging the vehicle and reconnecting it (in scenarios 2, 3 & 4) in each case the delay will be applied.

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