

Solo 3

Technical File

The Electric Vehicles (Smart Charge Points)
Regulations 2021

This document is the technical file for the following chargepoint:

Charge point make:	Pod Point
Charge point model:	Solo 3: S7-UC-03, S7-UCB-03, S7-2C-03, S7-1C-03, S22-UC-03, S22-2C-03
Software version at point of sale:	Refer to the label in the Statement of Compliance provided with your Solo 3 to identify which version applies to your charger: A30P-3.1.27 A24P-2.37.0
Seller:	Pod Point Ltd. 28-42 Banner Street, London, EC1Y 8QE
Last update to technical file:	31st May 2022



Universal



Tethered

Description of the smart charge point

The Solo 3 includes and exceeds all required and “optional” safety features noted in the BS EN 61851-1 standard for electric vehicle charging. The Solo 3 is available in universal socketed or tethered models with either Type 1 or 2 cables. The Solo 3 is available with models offering charging rates of either 3.6kW, 7kW or 22kW. The auto power balancing feature is not available on the 22kW model.

The Solo 3 incorporates a simple LED user interface on the charger itself, with more advanced operations available via the Pod Point App. A Wi-Fi connection is required for app functionality.

Operating manual

A copy of the operating instructions for this charger can be found at:
pod-point.com/solo-3-user-guide

Technical solutions implemented to meet the requirements of the Regulations

Smart functionality

The Solo 3 is able to connect to a communications network via a local Wi-Fi network, or where installed, a cellular data link.

The Solo 3 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 Solo 3 to participate in DSR services and scheduled or 'off-peak' charging.

Users are able to schedule their charges via the Pod Point smartphone App.

The LED on the front of the Solo 3 indicates its current status.

Electricity supplier interoperability

The Solo 3 is 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 Pod Point App.

Loss of communications network access

In the event that the Solo 3 is unable to connect to the communication network, it 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 a Solo 3 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 Solo 3 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 is 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 Pod Point App. The app can be used to view all charges within the last 12 months. These can be viewed individually, or grouped by week, month or year (available with app release v3.10.2).

Solo 3 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 will not be sent during periods of unavailability of the communication network. Therefore, unavailability of the communication network from time to time 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 connected to the Pod Point App, the Solo 3 will have a default schedule activated to charge vehicles when demand on the electricity grid is lowest.

You can change the schedule times or disable the scheduling feature via the Pod Point App.

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 Solo 3 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 Solo 3 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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