



SMART EV CHARGING REGULATIONS EXPLAINED

From 30th June 2022, all electric vehicle charging points sold and installed for private use must comply with The Electric Vehicles (Smart Charge Points) Regulations 2021. The regulations ensure that electric vehicle charging points possess smart functionalities, enabling EVs to recharge when there is less demand on the grid or when more renewable and cleaner electricity is available.

Electric vehicle charging points must adhere to the following to comply with the regulations:



Smart Functionality

Charging points must be equipped with smart functionality to send and receive information, the ability to respond to signals to increase the rate or time at which electricity flows through the charging point, demand side response (DSR) services and a user interface, for example, an app for charging.



Electricity Supplier Interoperability

Charging points must retain smart functionality, even if the owner of the charging point decides to switch their electricity supplier. This feature is to ensure that the charging point owner is not 'locked in' to a single electricity supplier. Electricity supplier interoperability also ensures that charging point owners do not have to purchase a new charging point when switching suppliers.



Continued Charging

To achieve smart functionality, charging points must rely on a communication network such as cellular, ethernet or WiFi to send and receive signals. Charging points must be able to continue charging the electric vehicle even if the charging point ceases to be connected to a communications network.



Randomised Delayed Charging

Charging points must also have a randomised delayed charging function of up to 10 minutes at the beginning of each charging session. This function protects the grid from destabilising during scenarios when a high number of charging points are plugged into electric vehicles. The application of randomised delayed charging ensures grid stability in a more manageable way for the network.



Off-Peak Charging

EV charging points must incorporate pre-set, off-peak, default charging hours whilst also allowing the owner to accept, remove or change these upon use. Default charging hours must be pre-set to NOT charge during times of peak electricity use (between 8am-11am and 4pm-10pm on weekdays). However, the charge point owner must be able to override this feature should they require charging during peak hours.

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Safety Provisions

Charging points must be equipped with safety provisions to prevent the user from carrying out an operation that could risk the user's health or safety.



A Measuring System

Charging points must have a measuring system in place to calculate the electricity imported and exported and the time the charging lasts. This information must be visible to the owner of the charging point.



Security

Charging points must be consistent with the existing cyber security standard ETSI EN 303 645.

The implementation of the smart EV charging regulations has been a long time coming; standardisation of EV charging points is without a doubt crucial for the roll-out of the nation's electric vehicle charging network. At Sevadis, all of our charging points comply with the new regulations, ensuring that installers and contractors can provide their clients with reliable charging solutions that are fit for purpose and fit for the future of electrified transport.

For a more detailed overview of The Electric Vehicles (Smart Charge Points) Regulations 2021, please visit: [Complying with The Electric Vehicles \(Smart Charge Points\) Regulations 2021 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/97123/ev-smart-charging-regulations-2021.pdf)

To view our range of compliant EV charging solutions, please visit: [MaxiCharger - EV Charging Station - Sevadis](https://www.sevadis.com/ev-charging-stations)

