

Smart Charging Requirements

To ensure a future proof deployment of electric mobility, the Netherlands is committed charging infrastructure and electric vehicles must be "smart charging ready". With the Smart Charging Requirements an unambiguous definition of "smart charging ready" is provided.

The complete document with Smart Charging Requirements can be found on www.agendalaadinfrastructuur.nl

Module 1: basic requirements vehicle

- Supports control signals.
- Acts according to Power Quality limits.
- Ensures a stable electricity system.

Optional

Module 4: requirements bidirectional charging vehicle (V2X)

- Discharges in accordance with the guidelines for electricity generators (such as solar installations).

Module 2: basic requirements charge point

- Is connected.
- Supports control signals.
- Communicates Cyber Secure via standard protocols.

Module 3a: additional requirements charging point at home

- Interacts with smart energy management systems and smart meters.

Module 3b: additional requirements public charging point

- Supports additional public communication options (eg. protocols of external parties).

Optional

Module 5: requirements bidirectional charging charge point (V2X)

- Discharges in accordance with the guidelines for electricity generators (such as solar installations).
- When a vehicle is discharging, this is visible at the charge point.
- In the event of a power failure the charge point disconnects from the grid.

The Smart Charging Requirements have been prepared by the Dutch National Program for Charging infrastructure in collaboration with car - and charge point manufacturers, charge point operators, governments, grid operators and consumer representatives.