# Alfen Smart Charging Network (SCN)

## Local Charging Management

### PRODUCT INFORMATION:

- Local charging management for the combination of Alfen charging stations
- Distribution of the available charging capacity
- For 2 to a maximum of 100 charging points
- Can be combined with OCPP backend (freely selectable)
- Modular integration of new charging points
- Charging management takes into account vehicles that do not meet the required behaviour of IEC 61851 (minimum charging current > 6 A)
- Local configuration or alternatively via remote access (ACE Service Installer or backend)

### TECHNICAL DETAILS:

| General data | |
|---|---|
| Number of charging points | Up to 100 |
| Charging management | Equal distribution of the available charging power to connected vehicles;<br>Release of the charging power of charging points at which vehicles are fully charged;<br>Test of the minimum charging current of thevehicle (possibly 14 A, which does not comply withIEC 61851);<br>Alternate charging of vehicles, when the maximum power is exhausted (pausing of charging processes) |
| Unbalanced load | No limitation of the unbalanced load for 1- and 2-phase charging electric vehicles if they physically load the identical phases of the grid connection;<br>Phase rotation is provided between the individual charging points, but no limitation to a maximum asymmetry of 20 A between the phases |
| Backend connection | Charging management can be combined with OCPP backend (freely selectable) |
| Hardware | Function integrated in Alfen charging stations (see compatible charging stations);<br>Switch required;<br>Activation using licence |

| Interfaces and connection | |
|---|---|
| Communication | LAN (connection of the charging stations via switch);<br>Connection of the individual charging stations via star (no looping through of the communication line);<br>IP address assignment via DHCP server or AutoIP;<br>OCPP 1.6 |
| Energy management | Static load management, dynamic charging management optionally with Modbus meter (Socomec E27 for direct measurement up to 80 A or alternatively B-Control EM300) |
| **Compatible charging stations** | |
| AC | Alfen Eve Single Pro-line,<br>Alfen Eve Double Pro-line |
| DC | - |
| **Configuration SCN** | |
| a) | Max. available current of a charging group |
| b) | Max. charging current per charging point |
| c) | Min. desired charging current |
| d) | Stopping time of a charging point in the event of a capacity shortage |



**GP JOULE Connect GmbH**
Cecilienkoog 16 • D-25821 Reußenköge
www.connect-gp-joule.de • vertrieb@connect.gp-joule.de

As of 11/2021