



Simon|SM20

BUSINESS

simon



## Simon|SM20

The Simon SM20 is a state-of-the-art recharging point for electric vehicles designed for multi-point and multi-user installations. Designed and conceived to create a network of chargers, the Simon SM20 will help you transform car parking spots into investments in a sustainable future, as we evolve towards a cleaner and more conscientious electric mobility.

# Simon SM20



The **Simon SM20** was created as an advanced solution for **electric mobility for a variety of businesses**. It can adapt to a wide range of needs, thanks to its intelligent load management and versatile configurations.



Car parks



Hotels



Hospitals



Private companies



Shopping centres



Fleet management

## DESIGN AND FUNCTIONALITY:



### Adaptive and scalable

The Simon SM20 can be installed as single or multipoint device. It adapts to power management needs based on to the number of chargers.

In installations with up to 12 chargers, you can assign a master device that shares the load equally among the devices in use. However, we recommend that you install the Simon SM20 with the Simon Electron Manager, as this will help you to intelligently balance the load according to the number of devices in use and each connected vehicle's demand. What's more, doing this will also allow you to safely and easily increase the number of devices over time, with a total of 128 connected sockets.



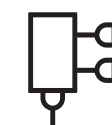
### Safety

The Simon SM20 has a cable retention system that protects against theft by third parties.



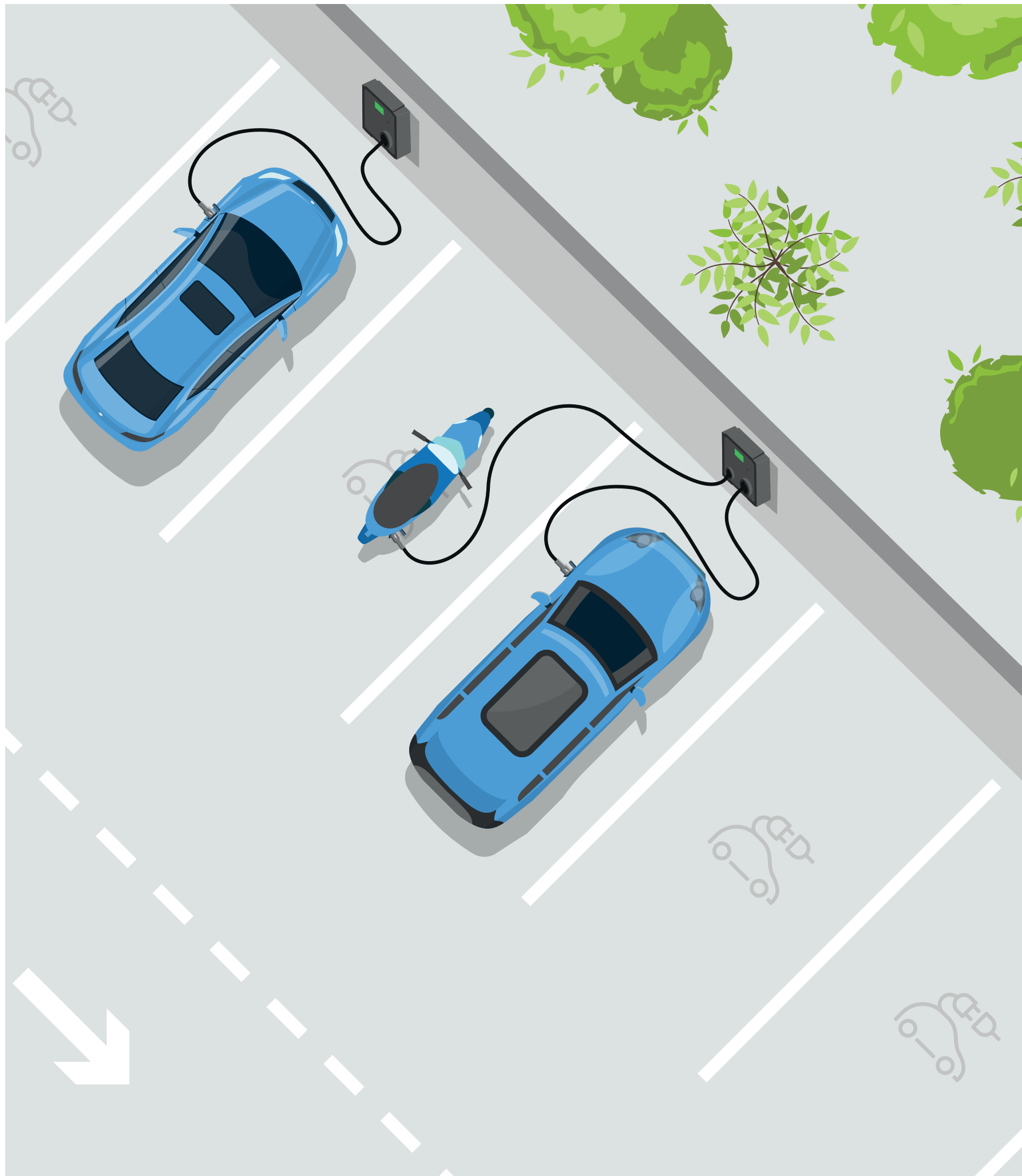
### Architectural versatility

The Simon SM20 is designed to be wall mounted, although there is also the option of adding a vertical support for column installation with capacity for one or two devices.



### Combination of Outlets Schuko - IEC 62196 Type 2

The Simon SM20 can also include a Schuko connector for charging lower-power electric vehicles such as motorcycles and scooters, in addition to the IEC 62196 Type 2 connector.



## CONFIGURATION OF CONNECTORS



IEC 62196  
Type 2 Socket

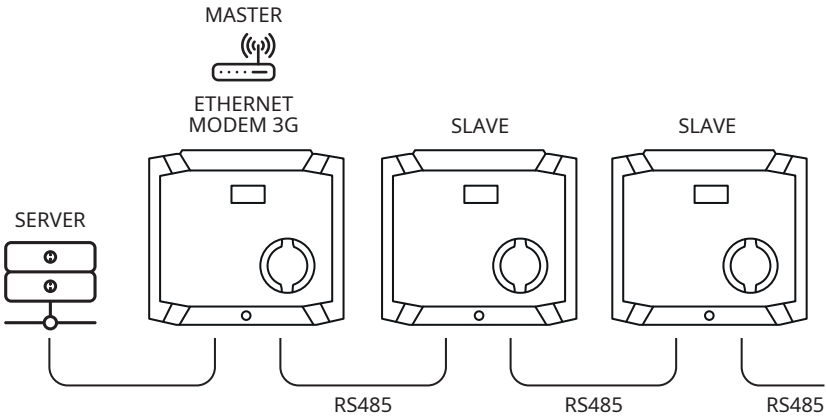


Schuko - Type 2  
combination



5m cable with Type 2  
connector

# MULTIPOINT MANAGEMENT SOLUTIONS



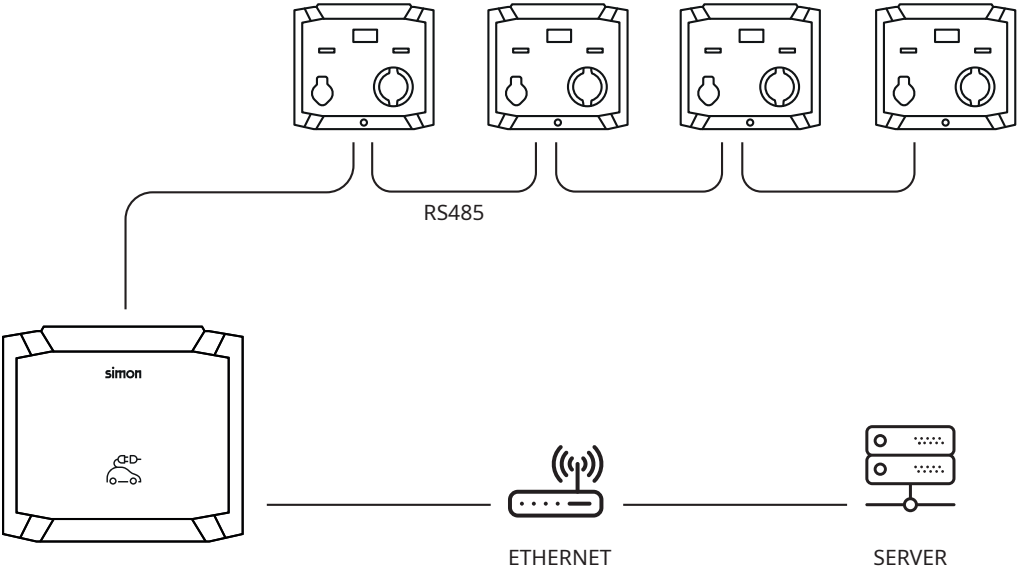
## Even load sharing

The Simon SM20 can be connected to several devices to make it easier to wire the installation and share a load equally among the devices in use.

The system works by designating one recharging point as a Master, which controls the remaining devices, allowing up to 12 chargers including the master.

This interconnection method is recommended for small to medium installations, and the line analyser accessory is recommended for optimising the installation's available power.

The device's built-in RFID serial identifier makes it easy to manage access among authorized users via the management software.



## Intelligent load balancing solution

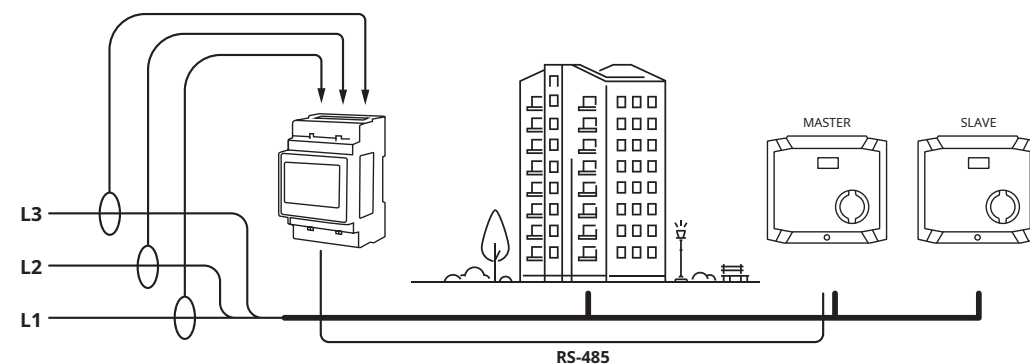
Simon Electron Manager is a device that allows users to intelligently balance the available load based on the recharging points in use and vehicle demand. This optimises charging according to the kW available in the installation and supplies each vehicle with the maximum power that the charger can provide.

This intelligent balancing system is recommended for all types of multipoint installations. Simon Electron Manager can manage up to 128 sockets and allows configuration and control via PC or web server, making it easier to identify users with access to the load via RFID cards.



## Compatible solution

The Electron Manager solution is compatible with the full range of SIMON recharging points: NEON, SM20 and SM34.



### Network analysers

Devices performing Master or Simon Electron Manager functions require the network analyser to know how much power is available in the installation so that it can correctly perform intelligent load balancing. This should be used to avoid overloading when there are additional elements, apart from chargers, connected to the system's power supply line.

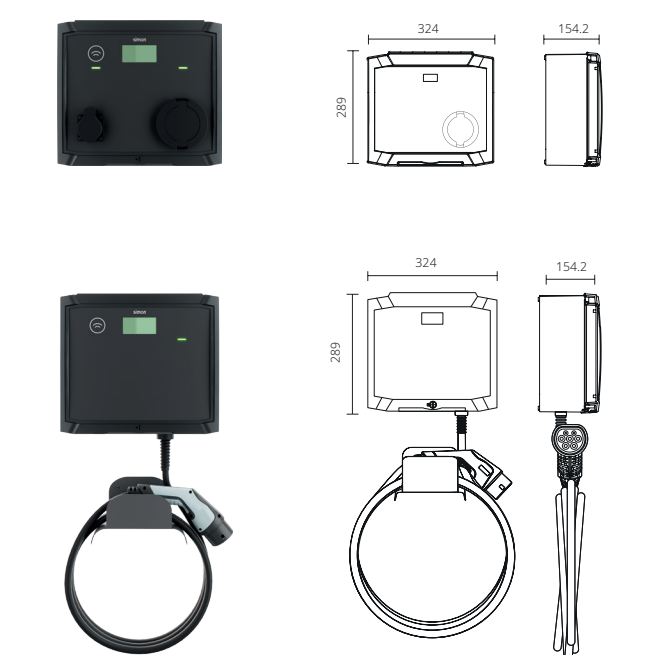
### Single and double pedestals for the SM20

For installations where there is no wall on which to install the Simon SM20 charger, a range of pedestals is available to vertically mount one or two units.





DIMENSIONS



COMMON CHARACTERISTICS

GENERAL FEATURES

|                                 |                                                        |
|---------------------------------|--------------------------------------------------------|
| Maximum intensity per connector | 32 A (Type 2)<br>10 A (Schuko)                         |
| Charging mode                   | Mode 3 (Type 2)<br>Mode 1 and 2 (Schuko)               |
| Secondary counter               | Included, per outlet, with MID certificate             |
| LCD Display                     | Included                                               |
| Power balancing between outlets | Yes                                                    |
| Master-slave                    | Yes, a maximum of 12 devices (1 master, 11 slaves)     |
| Status indicator                | Status LED on the front                                |
| RFID reader                     | Yes (ISO14443A / MIFARE - 13.56 MHz), 2 cards included |
| Communications                  | Ethernet, RS485 (multipoint)                           |
| Protocol                        | TCP, IP                                                |
| Safety:                         | Connector lock                                         |

PHYSICAL FEATURES AND MATERIALS

|                          |                                          |
|--------------------------|------------------------------------------|
| IP                       | IP54                                     |
| IK                       | IK10                                     |
| Environmental conditions | -30 °C / +50 °C                          |
| Housing                  | ABS                                      |
| Dimensions and weight    | 324 mm x 289 mm x 154 mm, 6 kg           |
| Finish                   | Simon Standard                           |
| Maintenance              | Front Opening                            |
| Cable section admitted   | Up to 25 mm2                             |
| Compatibility            | Electron Manager, SPL Analyser Accessory |

ELECTRICAL PARAMETERS

|                            |                                                        |
|----------------------------|--------------------------------------------------------|
| Supply voltage             | 230 - 400 VAC                                          |
| Frequency                  | 50 Hz                                                  |
| Maximum Intensity/outlet   | 32 A (Type 2)<br>10 A (Schuko)                         |
| Max power/input            | 7.4kW - 32A / 22kW - 32 A (lower values configurable). |
| Differential protection    | Class A Differential 30mA per connector                |
| Magneto-thermal protection | C-Curve Magneto-thermal circuit breaker per connector. |

STANDARD ART. NOS.

| Art. No.    | Assembly | Connectivity     | Power  | Connector             | Protections                                    |
|-------------|----------|------------------|--------|-----------------------|------------------------------------------------|
| 0640141-000 | Wall     | Ethernet         | 7.4 kW | T2 Socket             | -                                              |
| 0640141-100 | Wall     | Ethernet         | 7.4 kW | T2 Socket             | Automatic C-Curve + Class A Differential 30 mA |
| 0641141-000 | Wall     | Ethernet + Modem | 7.4 kW | T2 Socket             | -                                              |
| 0641141-100 | Wall     | Ethernet + Modem | 7.4 kW | T2 Socket             | Automatic C-Curve + Class A Differential 30 mA |
| 0640341-000 | Wall     | Ethernet         | 7.4 kW | T2 socket + Schuko    | -                                              |
| 0640341-100 | Wall     | Ethernet         | 7.4 kW | T2 socket + Schuko    | Automatic C-Curve + Class A Differential 30 mA |
| 0641341-000 | Wall     | Ethernet + Modem | 7.4 kW | T2 socket + Schuko    | -                                              |
| 0641341-100 | Wall     | Ethernet + Modem | 7.4 kW | T2 socket + Schuko    | Automatic C-Curve + Class A Differential 30 mA |
| 0640142-000 | Wall     | Ethernet         | 7.4 kW | 5 m cable T2 straight | -                                              |
| 0640142-100 | Wall     | Ethernet         | 7.4 kW | 5 m cable T2 straight | Automatic C-Curve + Class A Differential 30 mA |
| 0641142-000 | Wall     | Ethernet + Modem | 7.4 kW | 5 m cable T2 straight | -                                              |
| 0641142-100 | Wall     | Ethernet + Modem | 7.4 kW | 5 m cable T2 straight | Automatic C-Curve + Class A Differential 30 mA |
| 0640121-000 | Wall     | Ethernet         | 22 kW  | T2 Socket             | -                                              |
| 0640121-100 | Wall     | Ethernet         | 22 kW  | T2 Socket             | Automatic C-Curve + Class A Differential 30 mA |
| 0641121-000 | Wall     | Ethernet + Modem | 22 kW  | T2 Socket             | -                                              |
| 0641121-100 | Wall     | Ethernet + Modem | 22 kW  | T2 Socket             | Automatic C-Curve + Class A Differential 30 mA |
| 0640122-000 | Wall     | Ethernet         | 22 kW  | 5 m cable T2 straight | -                                              |
| 0640122-100 | Wall     | Ethernet         | 22 kW  | 5 m cable T2 straight | Automatic C-Curve + Class A Differential 30 mA |
| 0641122-000 | Wall     | Ethernet + Modem | 22 kW  | 5 m cable T2 straight | -                                              |
| 0641122-100 | Wall     | Ethernet + Modem | 22 kW  | 5 m cable T2 straight | Automatic C-Curve + Class A Differential 30 mA |
| 0640321-000 | Wall     | Ethernet         | 22 kW  | T2 socket + Schuko    | -                                              |
| 0641321-000 | Wall     | Ethernet + Modem | 22 kW  | T2 socket + Schuko    | -                                              |

ACCESSORIES

INTELLIGENT LOAD BALANCING

| Art. No.    | Description            |
|-------------|------------------------|
| 0694002-000 | Simon Electron Manager |

NETWORK ANALYSERS

| Art. No.    | Description                                            |
|-------------|--------------------------------------------------------|
| 0691100-000 | Single-phase SPL Analyser Accessory + 1 toroid <100 A  |
| 0691200-000 | Single-phase SPL Analyser Accessory + 1 toroid <200 A  |
| 0691300-000 | Single-phase SPL Analyser Accessory + 1 toroid <300 A  |
| 0692100-000 | Three-phase SPL Analyser Accessory + 3 toroids <100 A  |
| 0692200-000 | Three-phase SPL Analyser Accessory + 3 toroids <200 A  |
| 0692300-000 | Three-phase SPL Analyser Accessory + 3 toroids <300 A  |
| 0692600-000 | Three-phase SPL Analyser Accessory + 3 toroids <600 A  |
| 0692M00-000 | Three-phase SPL Analyser Accessory + 3 toroids <1000 A |

RFID IDENTIFICATION

| Art. No.    | Description                  |
|-------------|------------------------------|
| 0603000-039 | Pack of 10 MIFARE RFID cards |
| 0603001-039 | Pack of 25 MIFARE RFID cards |

PEDESTALS

| Art. No.    | Description       |
|-------------|-------------------|
| 0693010-000 | Single SM20 Tower |
| 0693020-000 | Double SM20 Tower |