

# SmartPvCharge

## The ecological solution for managing e-mobility!

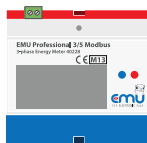
Combining the electric car in household with the optimized charging process SmartPvCharge, is the ideal means of regulating the consumption of power. An electric car powered by the SmartPvCharge system can facilitate a self-consumption rate of over 80% over the long term due to high storage capacity and the time-oriented flexibility of the charging process. At the same time, sustaining a flexible approach to charging levels can facilitate the achievement of „CO2-neutral“ mobility: “Fill up - but with sun only!”

### CONTROLLER



Voltage supply	10-30 V DC
Power input	approx. 3 W
Grid frequency	50 Hz
Type of mounting	Top hat rail assembly (35mm bearing rail, DIN EN 60175)
Protection class	IP20
Dimensions	240 x 140 x 100mm (9 HP)
Weight	approx. 0.6 kg
Operating temperature range	0°C - +45°C
Storage temperature range	0°C - +45°C
Air moisture	30% - 80%, non-condensing
Item number	976000-485
Conformity to standards by manufacturer	EN61000-6-1:2007, EN61000-3:2007

### METER



Nominal voltage	3x230/400 V (+/- 20%)
Power input	0.8 W / phase
Grid frequency	50 Hz
Accuracy class	B (+/- 1%) for active power EN50470-1, -3
Rated current	up to 75 A
Type of mounting	Top hat rail assembly (35mm bearing rail, DIN EN 60175)
Protection class	IP20
Dimensions	90 x 91 x 69mm (5 HP)
Weight	approx. 0.4 kg
Operating temperature range	-25°C - +55°C
Storage temperature range	-30°C - +70°C
Air moisture	75% - 95%, non-condensing
Item number	261902-003
Conformity to standards by manufacturer	EN50470-1:2006, EN50470-3:2006

### POWER SUPPLY UNIT



Nominal voltage	90 – 264 V AC
Grid frequency	50 Hz
Output voltage	24 V DC
Output current	1.3A
Type of mounting	Top hat rail assembly (35mm bearing rail, DIN EN 60175)
Protection class	IP 20
Dimensions	53 x 91 x 56mm (3 HP)
Weight	approx. 0.2 kg
Operating temperature range	-25°C - +71°C
Storage temperature range	-25°C - +85°C
Air moisture	20% - 95%, non-condensing
Item number	976000-484
Conformity to standards by manufacturer	EN55022, EN55024, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN61000-6-2, EN61000-6-3

### SD-KARTE



Housing	SDHC
Capacity	16GB
Power / speed	45MB/s
Dimensions	24 x 32 x 2.1mm
Weight	approx. 0.2 kg
Operating temperature range	-25°C - +85°C
Storage temperature range	-40°C - +85°C
Item number	990000-546

# SmartPvCharge

## Items / Sets

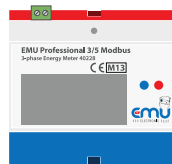
### SmartPvCharge Premium 261902-002

- 1 pc. SPC controller
- 1 pc. SPC meter
- 1 pc. SPC power supply unit
- 1 pc. SPC SD card with operating software
- 1 pc. SPC cable set 230V supply
- 1 pc. SPC cable set 24V meter connection
- 1 pc. SPC instruction manual



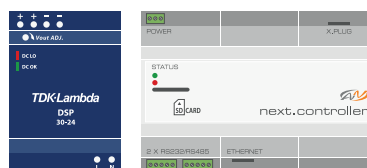
### SPC meter 261902-003

- 1 pc. SPC meter



### SmartPvCharge Net 261902-004

- 1 pc. SPC controller
- 1 pc. SPC power supply unit



Please take into account that if optimization requirements of various systems are temporally superposed (heterodyned) and interfere with each other, unexpected effects may occur. Thus, time settings for the charging of the EV may, for example, only release the charging operation at those predefined times, whereas the Home Energy Management System suggests other charging times according to energy surplus from the PV plant. In such cases, the EV charging time might be shortened, not thoroughly charging the vehicle and thus resulting in insufficient range. In order to avoid such undesirable effects, the EV user should ensure that he does not generate contradictory settings. At present, SmartPvCharge may only restrictedly be used in combination with the EV model Renault Zoe, due to reasons of safety.