

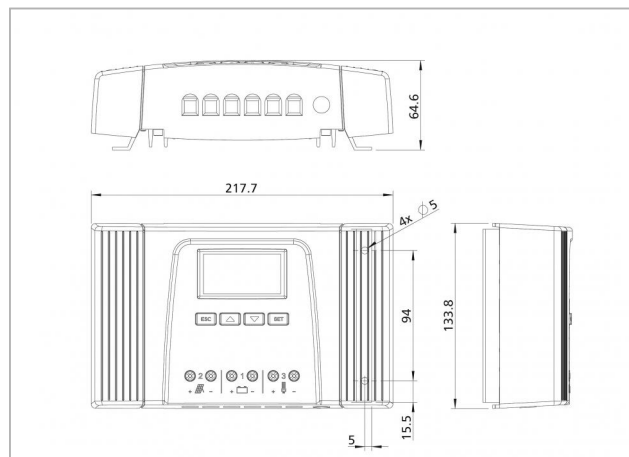
## Steca Tarom

### 4545, 4545-48

The new design for the Steca Tarom sets new standards in this power class. A graphic display informs the user about all important system data and enables configuration and adjustment of the controller to the specific requirements of the individual system.

Numerous clever functions allow the user to adjust the controller to the particular features of the system in question. Thanks to the significantly improved state of charge determination, the system is optimally controlled and the batteries are protected. The Steca Tarom charge controller is the ideal choice for larger systems at three voltage levels (12 V, 24 V, 48 V).

The integrated data logger stores all important system data. Controller data can be read by the minute via an open Steca UART interface. As an option, an external temperature sensor can also be connected. Two additional switching contacts can be freely configured as a timer, a night light function, to start generators or as surplus management. Up to six devices can be connected in parallel and communicate with one another via the StecaLink bus.



#### Product features

- Shunt topology with MOSFETs
- MicroSD slot for data logging of all minute values
- State of charge determination (SOC)
- Automatic detection of voltage
- PWM control
- Multistage charging technology
- Load disconnection depending on SOC
- Automatic load reconnection
- Temperature compensation
- Negative earthing of one or positive earthing of several terminals possible
- Real-time clock (date, time)
- Innovative, comprehensive data logger with energy meter
- MicroSD slot for data logging of all minute values
- Evening, night light and daylight functions
- Four freely programmable timers with week day function
- Integrated self test
- Monthly equalisation charge
- Two configurable multifunctional contacts
- Adjustable cut-off voltages

#### Electronic protection functions

- Overcharge protection
- Deep discharge protection
- Reverse polarity protection of module and battery
- Automatic electronic fuse
- Short circuit protection of load and module
- Open circuit protection without battery
- Reverse current protection at night
- Overtemperature and overload protection
- Load disconnection on battery overvoltage

#### Displays

- Multifunction graphical LC display with backlighting

#### Operation

- Simple menu-driven operation
- Programming by buttons

#### Interfaces

- StecaLink Bus
- Open Steca UART interface

#### Options

- Alarm contact

#### Certificates

- Compliant with European Standards (CE)
- RoHS compliant
- Made in EU
- Manufactured according to ISO 9001 and ISO 14001

#### Accessories

- Data cable Steca PA CAB2 Tarcom
- Current sensor PA HS 400
- External temperature sensor Steca PA TS-S

	4545	4545-48
Characterisation of the operating performance		
System voltage	12 V (24 V)	12 / 24 / 48 V
Own consumption	30 mA	
DC input side		
Open circuit voltage solar module (at minimum operating temperature)	< 60 V	< 100 V
Module current	45 A	
DC output side		
Load current	45 A	
Reconnection voltage (SOC / LVR)	> 50 % / 12.5 V (25 V)	> 50 % / 50 V
Deep discharge protection < 30 % (SOC / LVD)	< 30 % / 11.7 V (23.4 V)	< 30 % / 46.8 V
Battery side		
End-of-charge voltage	14.1 V (28.2 V)	56.4 V
Boost charge voltage	14.4 V (28.8 V)	57.6 V
Equalisation charge	15 V (30 V)	60 V
Set battery type	liquid (adjustable via menu)	
Operating conditions		
Ambient temperature	-10 °C ... +60 °C	
Fitting and construction		
Terminal (fine / single wire)	25 mm <sup>2</sup> / 35 mm <sup>2</sup> - AWG 4 / 2	
Degree of protection	IP 31	
Dimensions (X x Y x Z)	218 x 134 x 65 mm	
Weight	800 g	

- Technical data at 25 °C / 77 °F
- Inverters must not be connected to the load output.