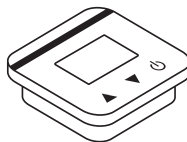


## SM 1 SOLAR MONITOR SM 2 FOR MPPT SOLAR CHARGE CONTROLLERS



### USER MANUAL

#### Function


The ECTIVE Solar Monitor can be connected to a MPPT Solar Charge Controller to display the following parameters: charging current (A), solar battery voltage (V), solar charging power (W), and charge capacity (Ah and Wh).

Please read this manual and the safety advice carefully before using the solar monitor.






#### Connection and Operation

Connect the Solar Monitor with the MPPT Solar Charge Controller using the connection port labelled "Solar Monitor". Follow the appropriate safety advice.

The MPPT Solar Charge Controller supplies power necessary for the Solar Monitor.



The Solar Monitor's display can either be in standby-mode (no values are displayed) or in the active display mode - with the backlight either turned on or off. When no input is registered for 3 minutes, the backlight is automatically turned off. Pressing any button activates the backlight. The display can be turned on or off with the power-button: 

#### Setting the Backlight Intensity

- 1) Press  or  for 3 seconds.
- 2a) Briefly press  : Increase backlight intensity.
- 2b) Briefly press  : Decrease backlight intensity.
- 3) Briefly press  : Save changes.

#### Displaying Different Parameters

 and  - Display cycles between the following parameters:

- Solar Charge Current (A)
- Battery Voltage (V)
- Total Capacity (Wh). Press  for 3 seconds to reset to 0.
- PV Power (W)
- Total Charging Power to Battery (Ah). Press  for 3 seconds to reset to 0.

The sun symbol on the display indicates the status of the solar charge controller:

- No Sun: No charging (e.g. at night).
- Full Sun: Normal charging.
- Flashing Sun: Battery (almost) fully charged. Power is being limited by the solar charge controller.

#### Technical Data

	SM 1	SM 2
Nominal Voltage	12 V / 24 V	12 V / 24 V
Voltage Range	8 - 32 V	8 - 32 V
Power Consumption (depending on backlight)	3-30 mA	3-30 mA
Display Size (mm)	51 x 30	51 x 30
Dimensions (mm)	90 x 90 x 30	90 x 90 x 30
Weight	75 g	75 g
Compatible ECTIVE MPPT solar charge controllers (*BT = Integrated Bluetooth functionality)	DSC 12 (without BT) DSC 25 (without BT)	DSC 12 (with BT) DSC 25 (with BT) SC 20 (with/without BT) SC 40 (with/without BT)