

## TESUP MPPT

### 3020, 5020

TESUP MPPT are solar charge controllers with maximum power point tracking. These are suitable for all common module technologies and are optimally suited for solar systems with module voltages higher than the battery voltage. In particular, such inexpensive PV modules that are used for grid-connected systems can also be used off-grid.

TESUP MPP tracking algorithm always provides the maximum usable power of the module, significantly increasing energy yield, especially in poor weather conditions (cloud cover, winter, diffused light). The TESUP MPPT charge controllers combine state-of-the-art charging technology with high efficiency, professional battery care with numerous programming options, modern design, excellent protection functions and an intuitive LC display with menu guidance.

For remote monitoring, TESUP provides the cost-efficient item PA WiFi1 as an optional accessory.



#### Product features

- Maximum Power Point Tracker (MPP tracker)
- Voltage and current regulation
- Multistage charging technology
- Automatic load reconnection
- Monthly equalisation charge

#### Electronic protection functions

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

#### Displays

- Graphical LC display

#### Operation

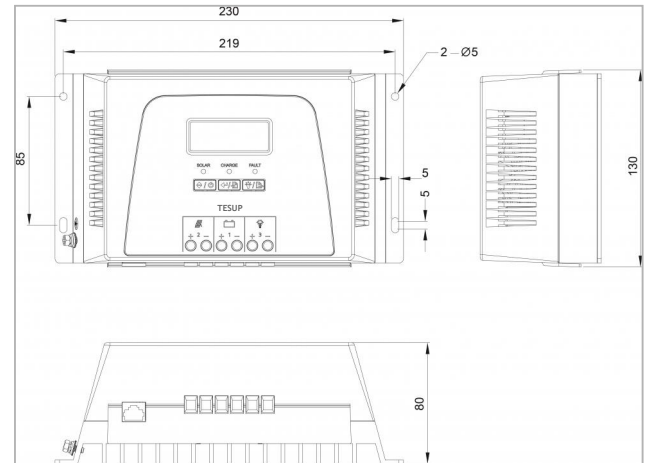
- Simple menu-driven operation
- Programming by buttons
- Manual load switch

#### Certificates

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

#### Accessories

- Web Portal through PA WiFi1



	TESUP MPPT 3020	TESUP MPPT 5020
<b>Characterisation of the operating performance</b>		
System voltage	12 V (24 V)	12 / 24 / 48 V
Nominal power	450 W (900 W)	750 W / 1500 W / 3000 W
<b>DC input side</b>		
MPP voltage		15 V / 30 V / 60 V < U <sub>modul</sub> < 150 V
Open circuit voltage solar module (at minimum operating temperature)	17 V ... 100 V (34 V ... 100 V)	17 V / 34 V / 68 V < U <sub>modul</sub> < 150 V
Module current	30 A	50 A
<b>DC output side</b>		
Load current	20 A	
Reconnection voltage (LVR)	12.5 V (25 V)	12.5 V / 25 V / 50 V
Deep discharge protection (LVD)	11.5 V (23 V)	11.5 V / 23 V / 46 V
<b>Battery side</b>		
Charge current	30 A	50 A
End-of-charge voltage	14.1 V (28.2 V)	14.1 V / 28.2 V / 56.4 V
Boost charge voltage	14.4 V (28.8 V)	14.4 V / 28.8 V / 57.6 V
Equalisation charge	15 V (30 V)	15 V / 30 V / 60 V
Set battery type	liquid	
<b>Operating conditions</b>		
Ambient temperature	-25 °C ... +40 °C	
<b>Fitting and construction</b>		
Terminal (fine / single wire)	16 mm <sup>2</sup> - AWG 6	35 mm <sup>2</sup> - AWG 2
Degree of protection	IP 20	
Dimensions (X x Y x Z)	230 x 130 x 80 mm	250 x 230 x 85 mm
Weight	1370 g	3140 g

- Technical data at 25 °C / 77 °F
- Inverters must not be connected to the load output.
- caution\_open\_circuit\_voltage\_100