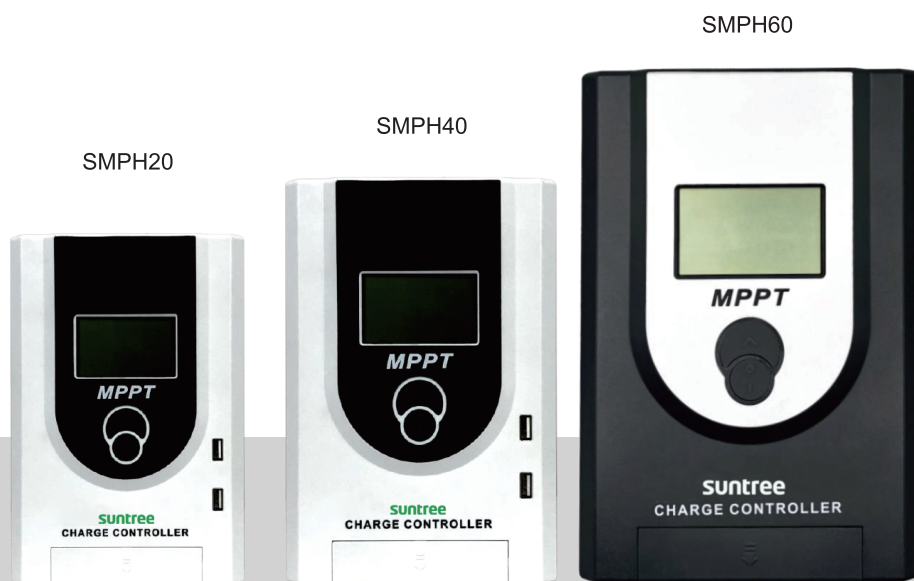


# MPPT

## SMPH series



**10A-60A Rated charge current**  
**12V/24V Auto100V System voltage**

### FUNCTION INTRODUCTION



Protections



Battery type



Parameters adjustable



Class V-0 flame retardant enclosure



Button mode



LCD display



USB Output



Temperature compensation

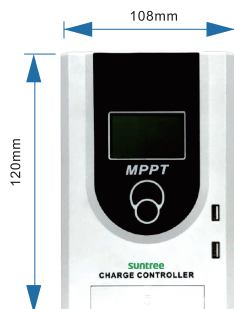


RS485/RJ45 port (Optional)



## PRODUCT SPECIFICATION

### SMPH20

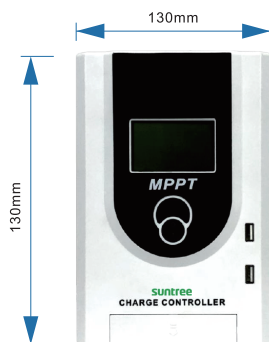


Mounting hole Size



| Rated voltage | Rated charging current | USB port | Product Size  | Rated voltage | USB port | Rated charging current | Product Size  |
|---------------|------------------------|----------|---------------|---------------|----------|------------------------|---------------|
| 12V/24V Auto  | 10A/20A                | 2A/5V×2  | 175×145×47 mm | 12V/24V Auto  | 2A/5V×2  | 10A/20A                | 175×145×47 mm |

### SMPH40

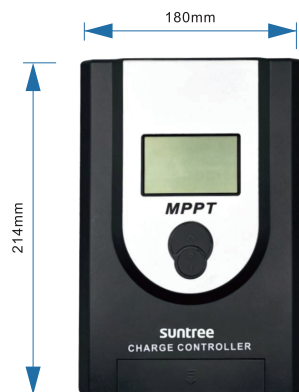


Mounting hole Size



| Rated voltage | Rated charging current | USB port | Product Size  | Rated voltage | USB port | Rated charging current | Product Size  |
|---------------|------------------------|----------|---------------|---------------|----------|------------------------|---------------|
| 12V/24V Auto  | 30A/40A                | 2A/5V×2  | 215×145×75 mm | 12V/24V Auto  | 2A/5V×2  | 30A/40A                | 215×145×75 mm |

### SMPH60



Mounting hole Size



| Rated voltage | Rated charging current | Product Size | Rated voltage | Rated charging current | Product Size |
|---------------|------------------------|--------------|---------------|------------------------|--------------|
| 12V/24V Auto  | 50A/60A                | 260×190×85mm | 12V/24V Auto  | 50A/60A                | 260×190×85mm |

## PACKAGING INFORMATION

### SMPH20

|               |               |
|---------------|---------------|
| Specification | 10A-20A       |
| Set/Carton    | 24PCS         |
| Weight/Carton | 16.1Kg        |
| Measurement   | 530×395×175mm |
| Volume/Carton | 0.04CBM       |



### SMPH40

|               |               |
|---------------|---------------|
| Specification | 30A-40A       |
| Set/Carton    | 12PCS         |
| Weight/Carton | 17.8Kg        |
| Measurement   | 600×500×235mm |
| Volume/Carton | 0.07CBM       |



### SMPH60

|               |               |
|---------------|---------------|
| Specification | 50A-60A       |
| Set/Carton    | 6PCS          |
| Weight/Carton | 16Kg          |
| Measurement   | 600×325×265mm |
| Volume/Carton | 0.06CBM       |



## PRODUCT DISPLAY

| Model                                                                                                                                                                 | SMPH20                                                                                                                |     | SMPH40 | SMPH60 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----|--------|--------|
| Input                                                                                                                                                                 |                                                                                                                       |     |        |        |
| Maximum PV open circuit voltage                                                                                                                                       | 100V (at the lowest temperature)<br>92V (at a standard temperature of 25°)                                            |     |        |        |
| Minimum PV voltage                                                                                                                                                    | 20V/40V/60V/80V                                                                                                       |     |        |        |
| Rated Charge Current                                                                                                                                                  | 20A                                                                                                                   | 40A | 60A    |        |
| Output                                                                                                                                                                |                                                                                                                       |     |        |        |
| System voltage                                                                                                                                                        | 12V/24V Auto                                                                                                          |     |        |        |
| Rated Discharge Current                                                                                                                                               | 10A                                                                                                                   | 20A | 30A    |        |
| Own consumption                                                                                                                                                       | ≤50mA                                                                                                                 |     |        |        |
| MPPT highest accuracy                                                                                                                                                 | 99%                                                                                                                   |     |        |        |
| Maximum charging efficiency                                                                                                                                           | 97%                                                                                                                   |     |        |        |
| Charging control mode                                                                                                                                                 | Multi-stage(MPPT, Absorption, Float,Equalization,CV)                                                                  |     |        |        |
| Float charge                                                                                                                                                          | 13.8V/27.6V                                                                                                           |     |        |        |
| Absorption charge                                                                                                                                                     | 14.4V/28.8V                                                                                                           |     |        |        |
| Equalization charge                                                                                                                                                   | 14.6V/29.2V                                                                                                           |     |        |        |
| Load disconnection(LVD)                                                                                                                                               | 10.8V/21.6V                                                                                                           |     |        |        |
| Load reconnection(LVR)                                                                                                                                                | 12.6V/25.2V                                                                                                           |     |        |        |
| Load control mode                                                                                                                                                     | Normal, light control, light and timing control, timing control, reverse light control                                |     |        |        |
| Light control point voltage                                                                                                                                           | 5V/10V/15V/20V                                                                                                        |     |        |        |
| Battery Type                                                                                                                                                          | GEL, SLD,FLD and USR(default),Lithium batteries customization<br>3series 3.7V,4 series 3.7V,4series 3.2V,5series 3.2V |     |        |        |
| Other                                                                                                                                                                 |                                                                                                                       |     |        |        |
| Human interface                                                                                                                                                       | LCD with backlight, 2 buttons                                                                                         |     |        |        |
| Cooling mode                                                                                                                                                          | AL alloy heat sink                                                                                                    |     |        |        |
| Wiring                                                                                                                                                                | High current copper terminal≤16 mm² (3AWG)                                                                            |     |        |        |
| Temperature probe                                                                                                                                                     | built in                                                                                                              |     |        |        |
| Communication mode                                                                                                                                                    | RS485 RJ45 port                                                                                                       |     |        |        |
| Working temperature range                                                                                                                                             | -20~+55°C                                                                                                             |     |        |        |
| Storage temperature range                                                                                                                                             | -30~+80°C                                                                                                             |     |        |        |
| Humidity                                                                                                                                                              | 10%~90% No condensation                                                                                               |     |        |        |
| Note: Please operate at the ambient temperature allowed by the controller. If the ambient temperature exceeds the allowable range of the controller, please derate it |                                                                                                                       |     |        |        |