

For off-grid application

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- Can be connected to both PV , battery and load
- Multiple load operating modes to meet diverse needs

# **User-Friendly**

- Easy to install and simple to use
- Natural cooling absolutely quiet

## Safety

- Complete charge and discharge protection mechanism
- High quality components for stable operation

### All-in-One

- Supports multiple battery type
- Highly integarted, helps you save space and wire

#### **Efficient**

- MPPT with up to 99.9% efficiency
- Support solar panel 2 in series/more in parallel

# Intelligent

- Supports TTL RS485 and CAN (RV–C protocol)
- Supports Bluetooth with mobile APP



| MODEL                                  | Shiner2410   | Shiner2420                        | Shiner2430                      | Shiner2440                      | Shiner2460                          |   | CAN<br>  BE<br>  SET |
|--|--|-----------------------------------|---------------------------------|---------------------------------|-------------------------------------|---|----------------------|
| PV INPUT                               |  |                                   |                                 |                                 |                                     |   | , J.                 |
| Max.Voltage of Open Circuit            | 60Vdc  |                                   | 100Vdc                          |                                 |                                     |   |                      |
| MPPT Voltage Range                     | (Battery voltage+2V)~45Vdc   |                                   | (Battery voltage+2V)~72Vdc      |                                 |                                     |   |                      |
| Max.PV Input Power                     | 130W/12V<br>260W/24V   | 260W/12V<br>520W/24V              | 400W/12V<br>800W/24V            | 520W/12V<br>1040W/24V           | 800W/12V<br>1600W/24V               | 260W/12V<br>520W/24V<br>780W/36V<br>1040W/48V | √                    |
| BATTERY                                |  |                                   |                                 |                                 |                                     |   |                      |
| Battery Type                           | Lead-acid / Li-ion / User Defined  |                                   |                                 |                                 |                                     |   | ✓                    |
| Rated Battery Voltage                  | 12/24Vdc 12/24/36/48Vdc  |                                   |                                 |                                 |                                     |   |                      |
| Battery Voltage Range                  | 8~32Vdc  |                                   |                                 |                                 |                                     | 8~64Vdc                                       | ✓                    |
| Rated Charging Current                 | 10A  | 20A                               | 30A                             | 40A                             | 60A                                 | 20A   | ✓                    |
| MPPT Charging Mode                     | Buck   |                                   |                                 |                                 |                                     |   |                      |
| LOAD                                   |  |                                   |                                 |                                 |                                     |   |                      |
| Load Type                              | Resistive load 、Capacitive load、Inductive load   |                                   |                                 |                                 |                                     |   |                      |
| Rated Load Voltage                     | Equal to battery voltage 12V/24/36/48V   |                                   |                                 |                                 |                                     |   |                      |
| Rated Load Current                     | 10A 20A  |                                   |                                 |                                 |                                     |   |                      |
| Load Working Mode                      | Light control, Light control + Time control, manual control (default), Debugging mode, Normal open |                                   |                                 |                                 |                                     |   | ✓                    |
| EFFICIENCY                             |  |                                   |                                 |                                 |                                     |   |                      |
| MPPT Tracking Efficiency               | >99%   |                                   |                                 |                                 |                                     |   |                      |
| Max. Charging Conversion<br>Efficiency | 85%~98%(Correspond load power10%~100%)   |                                   |                                 |                                 |                                     |   |                      |
| COMMUNICATION                          |  |                                   |                                 |                                 |                                     |   |                      |
| TTL、RS485 (default)                    | TTL Baud rate 9600kps , RS485 RJ45 port  |                                   |                                 |                                 |                                     |   | ✓                    |
| CAN (optional)                         | RJ45 port, RV-C protocol   |                                   |                                 |                                 |                                     |   | ✓                    |
| Bluetooth (optional)                   | External module BT-2 with mobile app   |                                   |                                 |                                 |                                     |   |                      |
| GENERAL                                |  |                                   |                                 |                                 |                                     |   |                      |
| Weight                                 | 350g(0.77lb)   | 650g(1.43lb)                      | 1.2Kg(2.64lb)                   | 1750g(3.85lb)                   | 2.4Kg(5.3lb)                        | 750g  |                      |
| Dimension                              | 155*99*41.7mm<br>(6.1*3.8*1.6in)   | 181*118*61.7mm<br>(7.1*4.6*2.4in) | 187*133*72mm<br>(7.3*5.2*2.8in) | 228*160*72mm<br>(8.9*6.2*2.8in) | 261*186*82mm<br>(10.23.9*7.3*3.2in) | 181*118*61.7mm<br>(7.13*4.65*2.43in)          |                      |
| Protection Degree                      | IP32   |                                   |                                 |                                 |                                     |   |                      |
| Operating Temperature Range            | -35°C~65°C (-31°F∼149°F)   |                                   |                                 |                                 |                                     |   |                      |

