



## >>> Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Dual communication ports for Battery communication and Wifi communication
- Built-in 120A MPPT Solar charge:max 6200W(for 3.6KW/4.2KW),max 6500W (for 6.2KW)
- High PV input voltage range(60~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output



## »» Product Data Sheet

| MODEL                                      | RT-ES4.2KW-24                               | RT-ES6.2KW-48 |
|--|---|---------------|
| Phase                                      | 1-phase                                     |               |
| Maximum PV Input Power                     | 6200W                                       | 6500W         |
| Rated Output Power                         | 4200W/4200VA                                | 6200W/6200VA  |
| Maximum Solar Charging Current             | 120A  |               |
| <b>GRID-TIE OPERATION</b>                  |   |               |
| <b>PV INPUT (DC)</b>                       |   |               |
| Nominal DC Voltage/Maximum DC Voltage      | 360/500VDC                                  |               |
| Start-up Voltage / Initial Feeding Voltage | 60VDC/90VDC                                 |               |
| MPPT Voltage Range                         | 60~450VDC                                   |               |
| Maximum Input Current                      | 1/18A                                       | 1/22A         |
| <b>GRID OUTPUT (AC)</b>                    |   |               |
| Nominal Output Voltage                     | 220/230/240VAC                              |               |
| Output Voltage Range                       | 195~253VAC                                  |               |
| Nominal Output Current                     | 18.2A                                       | 27.0A         |
| Power Factor                               | >0.99                                       |               |
| <b>EFFICIENCY</b>                          |   |               |
| Maximum Conversion Efficiency (DC/AC)      | 98%   |               |
| <b>TWO LOAD OUTPUT POWER</b>               |   |               |
| Full Load                                  | 4200W                                       | 6200W         |
| Maxium Main Load                           | 4200W                                       | 6200W         |
| Maxium Second Load(battery mode)           | 1400W                                       | 2067W         |
| Maxium Load Cut Off Voltage                | 26VDC                                       | 52VDC         |
| Maxium Load Return Voltage                 | 27VDC                                       | 54VDC         |
| <b>OFF-GRID OPERATION</b>                  |   |               |
| <b>AC INPUT</b>                            |   |               |
| AC Start-up Voltage / Auto Restart Voltage | 120-140VAC/180VAC                           |               |
| Acceptable Input Voltage Range             | 90-280VAC or 170-280VAC                     |               |
| Frequency Range                            | 59~61±1HZ                                   |               |
| Maximum AC Input Current                   | 24.7A                                       | 36.4A         |
| <b>PV INPUT (DC)</b>                       |   |               |
| Nominal DC Voltage/Maximum DC Voltage      | 360/500VDC                                  |               |
| MPPT Voltage Range                         | 60~450VDC                                   |               |
| Maximum Input Current                      | 1/18A                                       | 1/22A         |
| <b>BATTERY MODE OUTPUT (AC)</b>            |   |               |
| Nominal Output Voltage                     | 220/230/240VAC                              |               |
| Output Waveform                            | Pure sine wave                              |               |
| Efficiency (DC to AC)                      | 94%   |               |
| <b>BATTERY &amp; CHARGER</b>               |   |               |
| Nominal DC Voltage                         | 24VDC                                       | 48VDC         |
| Maximum Solar Charging Current             | 120A  |               |
| Maximum AC Charging Current                | 100A  |               |
| Maximum Solar+AC Charging Current          | 120A  |               |
| <b>HYBRID OPERATION</b>                    |   |               |
| <b>PV INPUT (DC)</b>                       |   |               |
| Nominal DC Voltage/Maximum DC Voltage      | 360/500VDC                                  |               |
| Start-up Voltage / Initial Feeding Voltage | 90VDC/120VDC                                |               |
| MPPT Voltage Range                         | 60~450VDC                                   |               |
| Maximum Input Current                      | 1/18A                                       | 1/22A         |
| <b>GRID OUTPUT (AC)</b>                    |   |               |
| Nominal Output Voltage                     | 220/230/240VAC                              |               |
| Output Voltage Range                       | 195~253VAC                                  |               |
| Nominal Output Current                     | 18.2A                                       | 27.0A         |
| <b>AC INPUT</b>                            |   |               |
| AC Start-up Voltage / Auto Restart Voltage | 120-140VAC/180VAC                           |               |
| Acceptable Input Voltage Range             | 90-280VAC or 170-280VAC                     |               |
| Maximum AC Input Current                   | 24.7A                                       | 36.4A         |
| Maximum AC Charging Current                | 100A  |               |
| <b>GENERAL</b>                             |   |               |
| <b>PHYSICAL</b>                            |   |               |
| Dimension,D*W*H(mm)                        | 420*350*110                                 |               |
| Cartoon Dimension,D *W *H(mm)              | 500*415*180                                 |               |
| Net Weight (kgs)                           | 8.0   | 8.9           |
| Gross Weight(kgs)                          | 9.0   | 10.0          |
| <b>INTERACE</b>                            |   |               |
| Communication Port                         | RS232/RS485/WIFI/GPRS/LITHIUM BATTERY       |               |
| <b>ENVIRONMENT</b>                         |   |               |
| Humidity                                   | 5% to 95% Relative Humidity(Non-condensing) |               |
| Operating Temperature                      | -10°C~50°C                                  |               |