



# EP3300 TLV (1KW-6KW)

Low Frequency Pure Sine Wave Split Phase Inverter Charger

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## EP3300 TLV (1KW-6KW)

Low Frequency Pure Sine Wave Split Phase Inverter Charger



(1KW-3KW)



(4KW-6KW)

### INTRODUCTION

This split phase inverter EP3300 TLV series, capacity from 1KW-6KW, DC 12V/24V/48V, it's applicable to 110VAC/120VAC markets demands, which matches AC 110VAC/120V single phase, or two phase 110VAC/120V 120V/240V; In LCD display, you can set output voltage, frequency, charging voltage, charging current to design best use based on different loads applications; meanwhile, you can also connect extra solar charger controller to build a solar home system, take use of sunshine freely and save electricity bills.

### FEATURES

- Pure sine wave output, split phase HOT1+ N + HOT2 available, 120VAC/220VAC
- MFD (multi-function display) & Friendly user interface
- 3 Steps optimizing charge for battery pack
- Overload and short-circuit protection
- Settable: charging/charging current, utility/Battery priority, utility input wide/narrow range
- Inverter voltage can be set to 100V/110V/120V
- Inverter frequency can be set to 50/60Hz



Rated power  
1-6KW



Battery DC voltage  
12V, 24V, 48V



Wide AC input range  
155-280Vac



Wide frequency  
40HZ-80HZ



Home solar  
system



Battery smart  
charge design



Pure copper  
UI transformer



3 times surge power  
based on  
capacity 1KW-6KW



Multi protection



Pure sine wave



## EP3300 TLV (1KW-6KW)

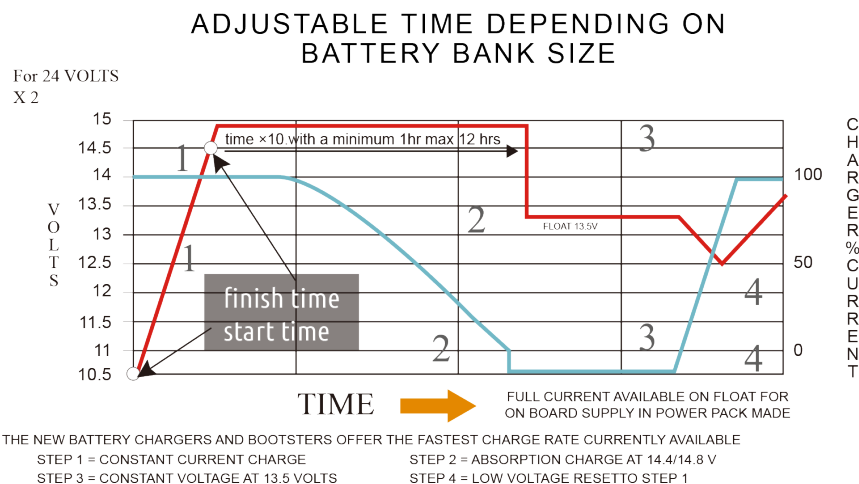
### Low Frequency Pure Sine Wave Split Phase Inverter Charger

#### SMART BATTERY CHARGERS - 3 SETPS OPTIMIZING BATTERY CHARGE

**Boost CC Stage:** If A/C input is applied, the charger will run at full current in CC mode until the charger reaches the boost voltage.

**Boost CV Stage:** the charger will keep the boost voltage in Boost CV mode until the charge current less 6A continue 1minute or keep the boost voltage time more than 2hours . Then drop the voltage down to the float voltage.

**Float Stage:** In float mode, the voltage will stay at the float voltage. If the A/C is reconnected , the charger will reset the cycle above.



#### INVERTER SYSTEM CONNECTION

EP3300 TLV, split phase inverter, it can support different loads with it's inbuilt pure copper transformer, like laptop, TV, Air-conditioner, fridge etc... Normally this inverter work with battery as back up system to meet different power demands in daily life; it can also connect extra MPPT/PWM solar charge controller, then work as an solar inverter system, use sunshine energy to save electricity bills.



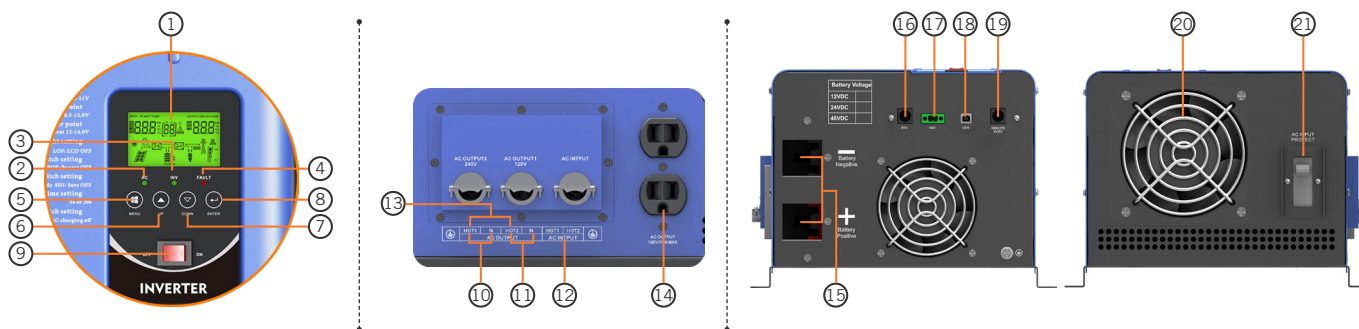
#### Solar Inverter System Connection:

Power Inverter + Battery + Solar Panels + Grid + Application Loads



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## Low Frequency Pure Sine Wave Split Phase Inverter Charger



- |                        |                                                         |                  |
|------------------------|---------------------------------------------------------|------------------|
| 1. LCD Setting         | 8. Enter and confirm                                    | 15. Battery -/+  |
| 2. AC Status LED       | 9. Switch on / off                                      | 16. BTS          |
| 3. Inverter Status LED | 10. AC OUTPUT1: HOT1 - N 120VAC/110 VAC/115VAC          | 17. AGS          |
| 4. Fault Warning LED   | 11. AC OUTPUT2: HOT2 - N 120VAC/110 VAC/115VAC          | 18. USB          |
| 5. MENU                | 12. AC INPUT: HOT1 - HOT2 240VAC/220 VAC/230VAC         | 19. Remote Panel |
| 6. Page up             | 13. AC OUTPUT: HOT1 - HOT2 240VAC/220 VAC/230VAC        | 20. Fan          |
| 7. Page down           | 14. 5.15AMAX JFCI Output 110V/115V/120V Socket, 15A MAX | 21. AC input     |

| MODEL                              |                             | EP33-1012 TLV                                                                                                                                                                                         | EP33-1024 TLV | EP33-1512 TLV | EP33-1524 TLV | EP33-2012 TLV | EP33-2024 TLV | EP33-3024 TLV | EP33-3048 TLV | EP33-4024 TLV | EP33-4048 TLV | EP33-5048 TLV | EP33-6048 TLV |
|------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Inverter Output                    | Rated power                 | 1KW                                                                                                                                                                                                   |               | 1.5KW         |               | 2KW           |               | 3KW           |               | 4KW           |               | 5KW           | 6KW           |
|                                    | Power factor                | 1                                                                                                                                                                                                     |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Wave form                   | Pure sine wave / Same as input wave form (bypass mode)                                                                                                                                                |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Output voltage RMS          | 100V / 110V /120VAC (200V / 220V / 240VAC) ±10%                                                                                                                                                       |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Output frequency            | 50Hz or 60Hz (±0.3Hz) (can be set)                                                                                                                                                                    |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Overload protection         | Breraker + software protection                                                                                                                                                                        |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Output short circuit        | Breraker + software protection                                                                                                                                                                        |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Inverter efficiency (peak)  | >80%                                                                                                                                                                                                  |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Overload                    | 100% < Load < 110% (alarm 5min then stop output and fault code 07)<br>110% < Load < 125% (alarm 60s then stop output and fault code 07)<br>Load > 125% (alarm 10s then stop output and fault code 07) |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Surge rating                | 3000VA                                                                                                                                                                                                |               | 4500VA        |               | 6000VA        |               | 9000VA        |               | 12000VA       |               | 15000VA       | 18000VA       |
| Capable of starting electric motor | 1P                          |                                                                                                                                                                                                       | 1P            |               | 1.5P          |               | 1.5P          |               | 2P            |               | 3P            |               |               |
| Battery                            | Battery voltage             | 12VDC/24VDC                                                                                                                                                                                           |               |               |               |               |               | 24VDC/48VDC   |               |               |               | 48VDC         |               |
|                                    | Minimum start voltage       | 11VDC/22VDC/44VDC                                                                                                                                                                                     |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Low battery voltage cut off | (Low voltage fault code04)<br>10/10.5/11V for 12V mode (*2 for 24VDC / *4 for 48VDC)                                                                                                                  |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Low battery voltage alarm   | Add 0.5V / battery:(Low battery alarm one second one time)<br>(10/10.5/11V)+0.5VDC for 12V mode (*2 for 24VDC / *4 for 48VDC)                                                                         |               |               |               |               |               |               |               |               |               |               |               |
|                                    | High battery voltage alarm  | Add 1V / battery:(High battery one second one time / after 30s fault 03)<br>(13.8-14.5V)+1V for 12V mode (*2 for 24VDC / *4 for 48VDC)                                                                |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Save mode                   | Loads ≤ 40W (110V) / 80W (220V)                                                                                                                                                                       |               |               |               |               |               |               |               |               |               |               |               |
| AC Input Mode                      | Input waveform              | Pure sine wave                                                                                                                                                                                        |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Nominal input voltage       | 220Vac / 230Vac / 240Vac                                                                                                                                                                              |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Max input voltage           | 270Vac MAX                                                                                                                                                                                            |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Input frequency             | 50Hz / 60Hz (auto sensing)                                                                                                                                                                            |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Efficiency (AC mode)        | >95% (load, full battery)                                                                                                                                                                             |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Transfer time AC to DC      | 15ms(max)                                                                                                                                                                                             |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Transfer time DC to AC      | 15ms(max)                                                                                                                                                                                             |               |               |               |               |               |               |               |               |               |               |               |
| Charge Mode                        | Boost voltage               | 14.1V(Default) Range of adjustment 13.8-14.5V / *2 for 24VDC / *4 for 48VDC (Regulation step 0.1V)                                                                                                    |               |               |               |               |               |               |               |               |               |               |               |
|                                    | Float voltage               | 13.5V(Default) Range of adjustment 13.5-13.7V / *2 for 24VDC / *4 for 48VDC (Regulation step 0.1V)                                                                                                    |               |               |               |               |               |               |               |               |               |               |               |
|                                    | 12V                         | 30A                                                                                                                                                                                                   |               | 45A           |               | 60A           |               | \             |               | \             |               | \             | \             |
|                                    | 24V                         | 20A                                                                                                                                                                                                   |               | 25A           |               | 30A           |               | 40A           |               | 60A           |               | \             | \             |
|                                    | 48V                         | \                                                                                                                                                                                                     |               | \             |               | \             |               | 20A           |               | 30A           |               | 35A           | 40A           |
|                                    |                             | Min charge current 10A. Change by every 5A                                                                                                                                                            |               |               |               |               |               |               |               |               |               |               |               |
| Dimensions                         | Dimensions (W*H*D)          | 277*196*466mm                                                                                                                                                                                         |               |               |               |               |               |               |               | 277*186*621mm |               |               |               |
|                                    | Ship Dimensions (W*H*D)     | 376*306*592mm                                                                                                                                                                                         |               |               |               |               |               |               |               | 376*296*747   |               |               |               |
|                                    | Warranty                    | One year (standard), 2 years optional (IP20)                                                                                                                                                          |               |               |               |               |               |               |               |               |               |               |               |