

# LOW FREQUENCY POWER INVERTER/CHARGER



## ION3000 LV Series



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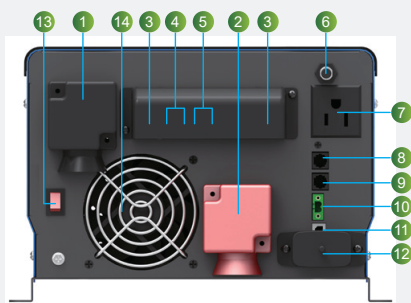
1~6KW | AC120V | WIFI | BAT-CAN

EP3000 LV series is very economical pure sine wave inverter, special in north & south america market, and AC charger from 35A to 70A .Solar/AC priority configurable . When solar priority , in case its charge current lower than inverter's charger from AC , AC will supplement to charge the batteries , to optimize charging. With low frequency transformer ,it enable the inverter to operate with all kinds of home appliances.

- 3 Steps charging
- MFD (multi-function display)
- Overload and short-circuit protection
- Set charging voltage/charging current.
- Battery low voltage shutdown point can be set to 10/10.5/11/11.5/12V
- Power-save mode
- Set utility priority/ Battery priority
- Set utility input wide/narrow range
- Inverter voltage can be set to 110V/115V/120V
- Inverter frequency can be set to 50/60Hz
- Set utility charging on/off switch
- Acid or Lithium Select
- WIFI monitoring function (optional)
- With BMS lithium battery communication function (CAN port)

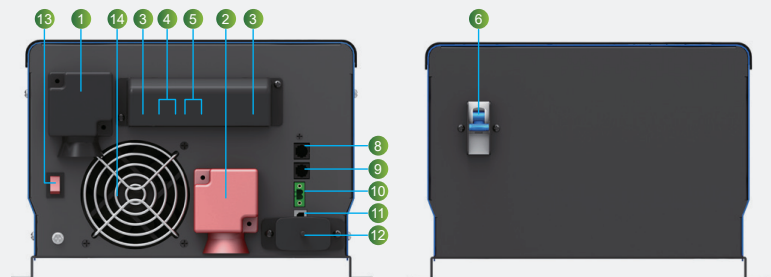
## Back panel description

● 1~3KW



- |              |                       |
|--------------|-----------------------|
| 1. BAT -     | 6. AC input protect   |
| 2. BAT +     | 7. AC Output 10A(MAX) |
| 3. GND       | 8. Remote port        |
| 4. AC input  | 9. BAT CAN            |
| 5. AC output | 10. AGS               |

● 4~6KW



- |                         |
|-------------------------|
| 11. USB                 |
| 12. WiFi                |
| 13. Power on/off switch |
| 14. FAN                 |

# Low frequency power inverter/charger

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### Specifications

| MODEL                                | ION30-1012 LV   | ION30-1024 LV | ION30-1512 LV | ION30-1524 LV | ION30-2012 LV | ION30-2024 LV | ION30-3024 LV | ION30-3048 LV | ION30-4024 LV | ION30-4048 LV | ION30-5048 LV | ION30-6048 LV |
|--------------------------------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Nominal Battery System Voltage       | 12VDC   | 24VDC         | 12VDC         | 24VDC         | 12VDC         | 24VDC         | 24VDC         | 48VDC         | 24VDC         | 48VDC         | 48VDC         | 48VDC         |
| <b>INVERTER OUTPUT</b>               |   |               |               |               |               |               |               |               |               |               |               |               |
| Rated Power                          | 1.0KW   | 1.5KW         | 2KW           | 3KW           | 4KW           | 5KW           | 6KW           |               |               |               |               |               |
| Surge Rating                         | 3000VA  | 4500VA        | 6000VA        | 9000VA        | 12000VA       | 15000VA       | 18000VA       |               |               |               |               |               |
| Capable Of Starting Electric Motor   | 1HP   |               |               | 2HP           |               |               | 3HP           |               |               |               |               |               |
| Waveform                             | Pure sine wave/ same as input (bypass mode)   |               |               |               |               |               |               |               |               |               |               |               |
| Nominal Output Voltage RMS           | 110V/115V/120VAC ± 10% (RMS)  |               |               |               |               |               |               |               |               |               |               |               |
| Output Frequency                     | 50Hz / 60Hz±0.3 Hz  |               |               |               |               |               |               |               |               |               |               |               |
| Inverter Efficiency(Peak)            | >88%  |               |               |               |               |               |               |               |               |               |               |               |
| Line Mode Efficiency                 | >95%  |               |               |               |               |               |               |               |               |               |               |               |
| Power Factor                         | 1.0   |               |               |               |               |               |               |               |               |               |               |               |
| Typical Transfer Time                | 10ms(max)   |               |               |               |               |               |               |               |               |               |               |               |
| 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) |               |               |               |               |               |               |               |               |               |               |               |
| <b>AC INPUT</b>                      |   |               |               |               |               |               |               |               |               |               |               |               |
| Voltage                              | 120VAC  |               |               |               |               |               |               |               |               |               |               |               |
| Selectable Voltage Range             | 75~135VAC(For Personal Computers)   |               |               |               |               |               |               |               |               |               |               |               |
| Frequency Range                      | 50Hz/60Hz (Auto sensing) 40~80Hz  |               |               |               |               |               |               |               |               |               |               |               |
| <b>BATTERY</b>                       |   |               |               |               |               |               |               |               |               |               |               |               |
| Minimum Start Voltage                | (10V/ 10.5V/ 11V/ 11.5V/ 12V)+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)  |               |               |               |               |               |               |               |               |               |               |               |
| Low battery voltage alarm            | (10V/ 10.5V/ 11V/ 11.5V/ 12V )+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)   |               |               |               |               |               |               |               |               |               |               |               |
| Low battery voltage cut off          | 10V/ 10.5V/ 11V/ 11.5V/ 12V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)   |               |               |               |               |               |               |               |               |               |               |               |
| High battery voltage alarm           | (12-14.5V)+1V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)   |               |               |               |               |               |               |               |               |               |               |               |
| High battery voltage recover         | (12-14.5V)+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)   |               |               |               |               |               |               |               |               |               |               |               |
| Energy saving mode                   | Load ≤50±20W(120V)  |               |               |               |               |               |               |               |               |               |               |               |
| <b>CHARGER</b>                       |   |               |               |               |               |               |               |               |               |               |               |               |
| Output Voltage                       | Depends on battery type   |               |               |               |               |               |               |               |               |               |               |               |
| Charger AC Input Breaker Rating      | 1K/30A  |               |               | 3K/40A        |               |               | 4-6KW/63A     |               |               |               |               |               |
| Overcharge Protection S.D.           | 15.7VDC for 12VDC mode (*2 for 24VDC mode, *4 for 48VDC mode)   |               |               |               |               |               |               |               |               |               |               |               |
| Maximum Charge Current               | 30A   | 20A           | 45A           | 25A           | 60A           | 30A           | 40A           | 20A           | 60A           | 30A           | 35A           | 40A           |
| <b>BYPASS &amp; PROTECTION</b>       |   |               |               |               |               |               |               |               |               |               |               |               |
| Input Voltage Waveform               | Sine wave (grid or generator)   |               |               |               |               |               |               |               |               |               |               |               |
| Nominal Input Frequency              | 50Hz or 60Hz  |               |               |               |               |               |               |               |               |               |               |               |
| Overload Protection (SMPS Load)      | Circuit breaker   |               |               |               |               |               |               |               |               |               |               |               |
| Output Short Circuit Protection      | Circuit breaker   |               |               |               |               |               |               |               |               |               |               |               |
| AC Input Breaker                     | 30A   |               |               | 40A           |               |               | 50A / 63A     |               |               |               |               |               |
| <b>MECHANICAL SPECIFICATIONS</b>     |   |               |               |               |               |               |               |               |               |               |               |               |
| Mounting                             | Wall Mount  |               |               |               |               |               |               |               |               |               |               |               |
| Machine Dimension (W*H*D)(mm)        | 303*493*200   |               |               |               |               |               | 305*531*202   |               |               |               |               |               |
| Package Dimension (W*H*D)(mm)        | 615*319*400   |               |               |               |               |               | 686*319*400   |               |               |               |               |               |
| N.W(kg)                              | /   |               |               |               |               |               |               |               |               |               |               |               |
| G.W(kg)                              | /   |               |               |               |               |               |               |               |               |               |               |               |
| <b>OTHER</b>                         |   |               |               |               |               |               |               |               |               |               |               |               |
| Operation Temperature Range          | 0°C to 40°C   |               |               |               |               |               |               |               |               |               |               |               |
| Storage Temperature                  | -15°C to 60°C   |               |               |               |               |               |               |               |               |               |               |               |
| Audible Noise                        | 60dB MAX  |               |               |               |               |               |               |               |               |               |               |               |
| Display                              | LED+LCD   |               |               |               |               |               |               |               |               |               |               |               |
| Standard Warranty                    | 2 year  |               |               |               |               |               |               |               |               |               |               |               |
| <b>CERTIFICATION &amp; STANDARDS</b> |   |               |               |               |               |               |               |               |               |               |               |               |