# TL series lithium battery energy storage integrated cabinet

## Products Features

- Power frequency, adapt to various types of loads；
- Toroidal transformer, low load loss；
- Perfect protection function, safe and reliable；
- Double function mode,more flexible for daily use；
- Choice of industry high-end lithium iron phosphate cell,
- low internal resistance, high rate, high safety,  High cycle times,
- long service life, low comprehensive operation cost.
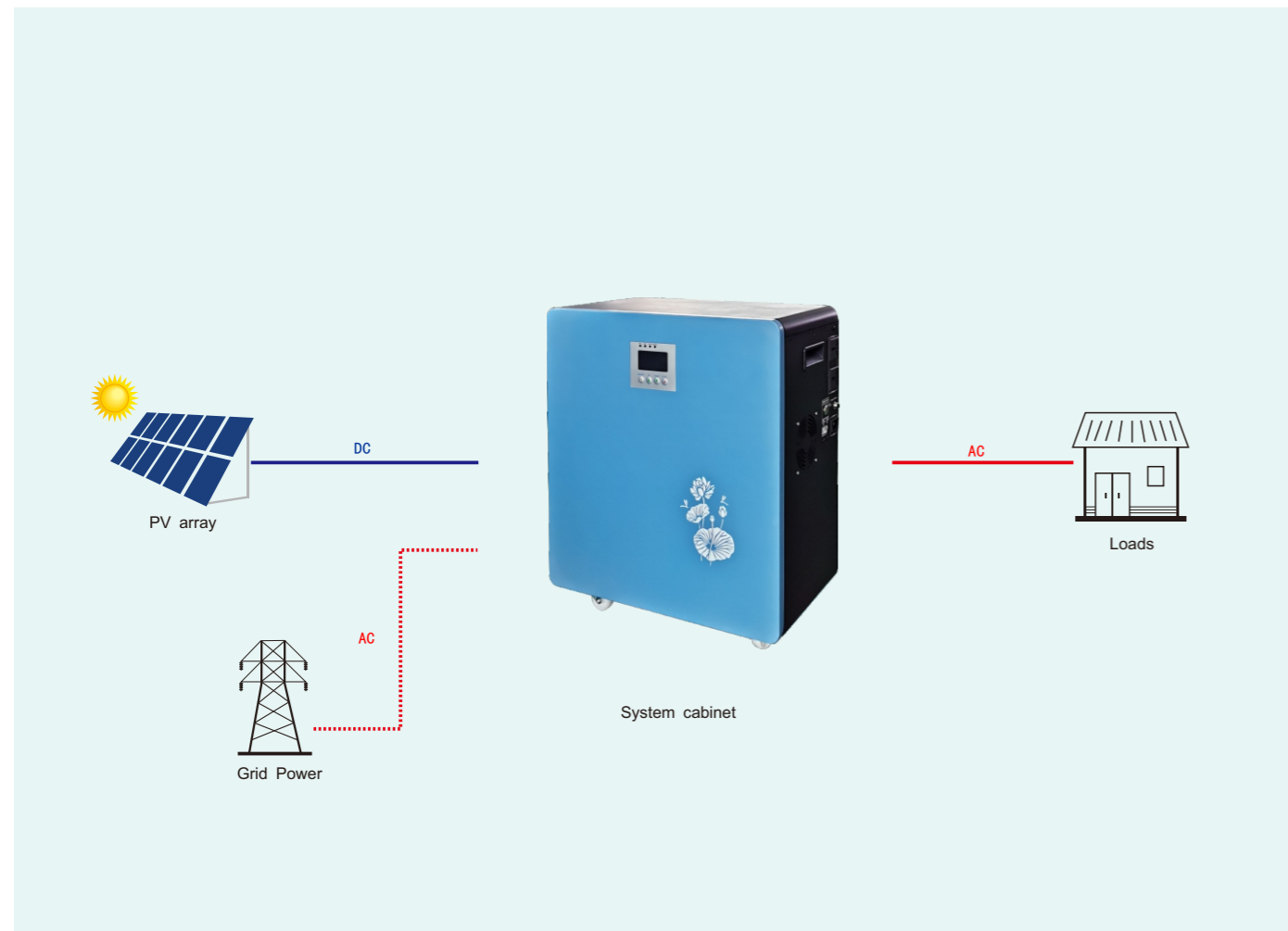- Built-in MPPT controller, higher charging efficiency；

## Application

| Residential | Base station | Ship/Island | Farm | No electricity eara | Field equipment |
|---|---|---|---|---|---|

## Application diagram

PV array

DC

AC

AC

Grid Power

System cabinet

Loads

| Technical Parameters | | | |
|---|---|---|---|
| Mode | TL300 | TL500 | TL800 |
| Rated power | 3000W | 5000W | 8000W |
| Battery voltage | 48V | | |
| Battery type | LiFePO4 Battery | | |
| Battery capacity | 48V60Ah 2.8KWh | 48V100Ah 4.8KWh | 48V200Ah 9.6KWh |
| **Input** | | | |
| Phase | L+N+G | | |
| AC input range | 110V：85-138VAC；220V：170-275VAC | | |
| Input frequency | 45Hz～55Hz | | |
| **Output** | | | |
| Output voltage | inverter mode：110VAC/220V±5%;AC mode：110VAC/220VAC±10%; | | |
| Frequency range (AC mode) | Automatic tracking | | |
| Frequency range (inverter mode) | 50Hz/60Hz±1% | | |
| Over load capacity | AC mode:(100%～110%:10min;110%～130%:1min;>130%:1s;) inverter mode:(100%～110%:30s;110%～130%:10s;>130%:1s;) | | |
| Peak current ratio | 3:1max | | |
| Conversion time | <10ms(Typical loads) | | |
| Waveform | Pure sine wave | | |
| Efficiency | >98% | | |
| Protection functions | Battery overvoltage protection,battery undervoltage protection,overload protection, short circuit protection,overtemperature protection,etc. | | |
| **built in solar charge controller(adjust)** | | | |
| Max charge current | 40A | 60A | 100A |
| Battery voltage | 48V | 48V | 48V |
| PV input voltage range | 48V：65V-150V | | |
| Max PV input | 1920W | 2880W | 4800W |
| Cooling method | Fans cooling | | |
| **environmental conditions** | | | |
| Operating temperature | 0℃-40℃ （Battery life decreases at ambient temperatures above 25 degrees Celsius） | | |
| Operation humidity | <95%（without condesing） | | |
| Operating altitude | <1000m(with increase of 100m,it will reduce output of 1%)max5000m | | |
| Noise | <58dB(distance to machine 1m) | | |
| **Management** | | | |
| Display | LCD+LED | | |
| Computer communication interface | RS232(adjust) | | |

*The above data is for reference. If there is any change, please refer to the real object.