



## Modular Parallel Inverter

**BVT48/220-2KVAS**



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## Technical Parameter

|                           |  |   |
|---------------------------|--|---|
| <b>Product form</b>       | Rated power  | 2KVA  |
|                           | Size (W×H×D) (mm)  | 9.5"/2U<br>216*88*421   |
| <b>Input parameter</b>    | DC Input Voltage   | 48VDC   |
|                           | DC Input Range   | 42~59VDC  |
|                           | Bypass Input Range   | 176~264(Can be adjustable according customer)   |
|                           | Bypass Switch time   | 5~12ms  |
| <b>Ac output</b>          | Rate output Voltage  | 220VAC  |
|                           | Rate output Frequency  | 50Hz  |
|                           | Load regulation  | <1%   |
|                           | Frequency accuracy   | <0.1%   |
|                           | peak factor  | 3: 1  |
|                           | Waveform distortion  | Resistance full load<3%, nonlinear full load<5%   |
|                           | Dynamic response   | Voltage transient range<3%, transient response recovery time≤60ms (load from 0 to 100)  |
|                           | Parallel uneven flow   | <3% rated current RMS   |
|                           | Overload capacity  | Load current <105%, continuous work<br>Load current 105~125%, continuous work 10min shutdown<br>Load current 125~150%, continuous work after 1min shutdown<br>Load current >150%, after 20ms shutdown |
| Protection function       | Input connection protection, input under voltage and over-voltage protection, output overload protection, output short circuit protection, over temperature protection |   |
| <b>Communication</b>      | Communication interface  | RS485   |
| <b>Work environment</b>   | Insulation strength  | 2KVac, 1min   |
|                           | Noise (1 m)  | <45dB   |
|                           | Operating ambient temperature  | -10~50℃   |
|                           | Transport and storage temperature  | -40~70℃   |
|                           | Relative humidity  | 0~90%, no condensation  |
|                           | Relative altitude (M)  | ≤3000m, 1500~3000m, 1% decrease in output for every 100 m increase  |
| <b>Protection</b>         | Input under Voltage、Input over Voltage、Output Over load、Short circuit  |   |
| <b>Test Specification</b> | EN 61000-6-3:2007 EN 61000-6:2007 EN61000-3-2:2014<br>EN 61000-3-3:2013 EN IEC 62368-1:2020  |   |



## Function and Feature

- ✧ BVT-DT1500 series parallel inverters are the intelligent inverters. The 32-bit DSP digital control technology achieve control the line simply, reliably and quickly to respond to the changes of external environment.
- ✧ BVT-DT1500 series parallel inverters adopt SPWM pulse width modulation technology and output pure sinusoidal wave with stable frequency, stable voltage, noise filtering and low distortion.
- ✧ BVT-DT1500 series parallel inverters have strong carrying capacity and built-in bypass switch, which improves the continuity and reliability of power supply for inverters.
- ✧ BVT-DT1500 series parallel inverters adopt advanced back-injection noise suppression technology at DC input, and do not interfere with other communication equipment sharing DC power supply. AC input adopts multiple filtering to eliminate the interference of municipal power grid and meet the demand of main AC power supply in application system.
- ✧ BVT-DT1500 series parallel inverters can be flexibly set to AC main supply and DC main supply (through LCD screen field setting)。
- ✧ AC main power supply inverter power supply is in the city output when there is electricity, and switch to the inverter output automatically when the city power input fault.
- ✧ DC main power supply inverter power supply is in inverter output when there is power supply, and automatically switches to city power output when DC input fault.
- ✧ BVT-DT1500 series parallel inverter power supply when the failure of buzzer alarm, can be closed by silencing key
- ✧ BVT-DT1500 series parallel inverter power supply design is perfect, allowing to cut off DC in the state of start, automatically switch to power bypass, do not affect the load of power supply, convenient to battery maintenance and replacement;
- ✧ BVT-DT1500 series parallel inverters return to normal after high/low battery voltage and overload alarm turn-off. After eliminating overload phenomenon for 5 minutes, the inverters automatically recovery output.
- ✧ BVT-DT1500 series parallel inverter power supply supports AC boot function, which is used in DC fault situation.
- ✧ BVT-DT1500 series parallel inverter power supply provides two groups of passive dry junction points (with separate dry contact interface), which are respectively used for normal start-up and failure.
- ✧ Communication mode RS485,MODBUS protocol.