并机逆变器 BWT-DT2000 Serial

01 / Product style

110VDC
PARALLEL INVERTER

220VDC
PARALLEL INVERTER

02 / Overview

The 110V/220V standalone parallel connection inverter is an inversion device that converts 110V/220V DC power supplied by DC power supply into 220V/50Hz sinusoidal AC power. It is designed with complete isolation of input and output, and allows hot plugging and parallel connection redundancy. It is a product specially designed for users with high requirements for power supply reliability and maintainability.

03 / Main characteristics

- **Digital control**
  Using 32-bit DSP digital and high-frequency SPWM technology, it is characterized by strong anti-interference ability, high operational speed, high intelligence, high control precision and high quality of output waveform.
- **N+1 parallel connection redundancy design**
  It can form an N+1 parallel connection redundancy power supply system, in which the modules are backed up with each other, leading to high reliability and flexible configuration.
- **Parallel connection technology without master/slave definition**
  Operation and parallel connection of each module are independently controlled by the built-in DSP, so that there is no single-point failure and the current is automatically and equally distributed among the modules.
- **Allowing hot plugging**
  It allows "plug-and-play" without any parameter setting or operation, and the module automatically enters into normal working state, leading to simple and convenient maintenance and change.
- **Built-in bypass**
  User may choose inverter priority or bypass priority.
- **Monitoring management**
  The indicator lamp panel can give out sound and light alarm upon fault, and RS485 communication and fault dry contact are provided.
- **Protection function**
  It has protection against input overvoltage/under-voltage, output overvoltage/under-voltage, overtemperature, and short circuit.

04 / Performance parameters

Product form	Rated power	1kVA	2kVA	3kVA	5kVA	6kVA	8kVA	10kVA
	Dimension (h×w×d) (mm)	19"2U					19"3U	
		446×85×390					495×126.5×405	
Input parameters	Max. quantity of parallel connection	12					9	
	DC input voltage	110V/220VDC					220VDC	
	DC input range	92~142VDC/185~285VDC						
	Bypass input range	176~264VAC						
	Bypass switchover time	8~12mS						
AC output	Rated output voltage	220VAC						
	Rated output frequency	50Hz						
	Load adjustment rate	<1%						
	Frequency accuracy	<0.1%						
	Peak factor	3:1						
	Waveform distortion	Resistive full load<3%, non-linear full load<5%						
	Dynamic response	Voltage transition range<3%, transition response recovery time≤60ms (load from 0 to 100)						
	Current non-uniformity under parallel connection	<3% effective value of rated current						
	Overload capacity	Overload current<105%, continuous operation Overload current 105~125%, shutdown after 10min Overload current 125~150%, shutdown after 1min Overload current>150%, shutdown in 20ms						
	Protection function	Protection against opposite connection of input, input under-voltage/overvoltage, output overload, output short circuit, and overtemperature						
Communication	Communication interface	RS485						
Ambient environment	Dielectric strength	2kVac，1min						
	Noise (1m)	<45dB						
	Ambient temperature for operation	-10~50℃						
	Ambient temperature for transport and storage	-40~70℃						
	Relative humidity	0~90%, without condensation						
	Relative altitude (M)	≤3000m; at 1500~3000m, an output derating of 1% for each 100m of altitude increase						

Note: The above specs are subject to change without notice.