RACK MOUNT HIGH FREQUENCY INVERTER



------Designed for Industrial Application



- ---Pure sine wave
- ---High Frequency inversion
- ---Rack-mount cabinet type, 2U 19 inch
- ---RS485/RS232/Dry Contact Communication
- ----Double input & regulate AC-AC

Introduction

Description

Pure sine wave inverter is a new generation of dual input inverter solution designed for the field of communication applications, which is suitable for the high reliability of the communication system. The solution is equipped with 110AC power supply and a 220VDC power supply, which fills the gap between the traditional UPS power supply and common pure sine wave inverter solutions.

It uses a novel design structure that helps users to provide clean, stable and durable AC power for critical loads, and has the same high reliability as the DC power supply system. The design characteristics of the dedicated communication pure sine wave inverter ensure the seamless conversion between the AC and DC power supply, almost no conversion delay, and no need to use the static switch.

Feature

- True sine wave output (T.H.D < 3%)
- Large 128*64 digital Lcd display data information, 4 led display working,;
- Standard 19" Rack mount case
- 5 Routes Dry contact for system (DC input fault, AC input fault, overload information, by-pass information and output fault)
- RS232 and RS485 & Optional SNMP communication Port
- Power-on self-test, Soft output start
- Auto switch function: DC to AC, AC bypass, less than 5ms;
- By-pass AC110V input filtering;
- Real-time monitoring of the system operating status;
- Audible and visual alarm;
- Record the historical alarm message and can be queried;
- Start auto restart while Ac or Dc is recovering;
- Automatic start temperature control fan;
- Build in voltage regulator Stabilize AC voltage;
- Maintenance bypass /DC available;
- Protection :Short load protection, over load protection, battery over/under voltage protection, over current, over temperature
- Unattended operation: the system switches automatically to provide AC Power to the load between the DC input and AC input;

Application



- 8.City WIFI device
- 9. Emergency communication car

POWER FROM 1-10KW

- 10. Railway & metro
- 11. Distributed Antenna Systems
- 12. Marine & offshore
- 13. Building Management Systems
- 14. Fire Alarm Systems

- 1. Telecom station/base/ Cable Equipment
- 2. Communication Station.
- 3. Computer data center
- 4. SCADA Networks and Data Equipment
- 5. Phone /cell base
- 6. Radio Base stations/ Cell Sites
- 7. Monitoring center room



MAXIMIM PROTECTION IN THE CORPORATED ENVIRONMENT



- **RAILWAY**
- 15. power utilities System Control /field
- 16. power plant/station
- 17. Power monitoring system
- 18. Solar power system
- 19.Wind energy system

Technical Parameters High Frequency Pure Sine Wave inverter 220Vdc to 110V series

Technical Index(VA)		1KVA	2KVA	3KVA	4KVA	5KVA	6KVA		
INPUT	220Vdc input Max current (A)		4.54A	9.09A	13.63A	18.18A	22.72AA	27.27A	
	Voltage Range 208Vdc—260Vdc		Rate Voltage 220Vdc, Power off voltage≤180Vdc, ≥275Vdc						
	By-pass	Voltage Rage	90Vac~132VAC						
		Rate Voltage	110Vac						
		Current(A)	9.09A	18.18A	27.27A	36.36A	45.45A	54.5A	
		By-pass Transient time	<8ms						
	frequency		60Hz/50Hz						
	Rated output Power(W)		800W	1600W	2400W	3200W	4000W	4800W	
AC OUTPUT	Rated Output current(A)		7.27A	14.54A	21.81A	29.1A	36.36A	43.63A	
	Output Voltage		110Vac(±5V)Adjustable LCD display						
	Output Voltage precision (V)		110V±1.5%						
	Power factor		>0.8						
	Inversion efficiency (80%)		≥85%(80% liner Load)						
	Over load		100%-120% 60s ,121%-150% 10s						
	Dynamic response time		Dynamic response time: < 5% Vnom for load change 0% to 100%, transient time < 5ms						
	Waveform		Pure sine wave						
	By-pass Switch time		<10ms						
	Output Frequency precision		60Hz/50Hz±0.1%						
	Output Frequency		50-60Hz(auto sync with bypass input)						
	THD		≤3%						
Dimensions			482mm/347mm/88mm W/D/H 2U 482mm/430mm/88mm W/D/H 2U						

Technical Parameters

Technical Index(VA)		1KVA	2KVA	3KVA	4KVA	5KVA	6KVA		
	Internal Protection	Overload /Over temperature /Short circuit protection, Input ac voltage limit protection ,Reverse polarity on dc input side							
Protection	Input DC Voltage Alarm	Battery Under-voltage,							
	LCD Audible and visual alarm	false Red LED light and Beebe							
	Temperature	Temperature control fan							
	Alarm record	standard is 1000 events (alarms), minimum is 100							
Interface	5 Routes Dry relay contact	For remote indication of alarm / shut down conditions							
	RS232& RS485	Both of available, For remote operation and monitoring							
	Option	SNMP							
Dielectric strength	between output and input	3500Vdc/10mA//1min . No flashover, no breakdown							
	between input and chassis	3500Vdc/10mA//1min . No flashover, no breakdown							
	between output and chassis	750Vdc/10mA//1min. No flashover, no breakdown							
Working Environment	Noise(1m)	≤40dB							
	Operating Environment Temperature	-20~+50°C							
	Operating Altitude (m)	Altitude Full power up to 2000m.derating -2% / 100m, max altitude 5000m							
	Humidity	595%, non condensing							

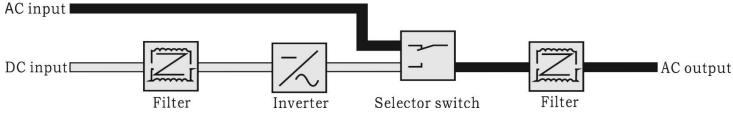
COMPLIANCE	LVD	EN 60950-1				
	EMC/EMI	EN 61000-6-3; EN 61000-6-1 ;IEC 61000-6-2 and IEC 61000-6-4				
	Rohs	IEC 62321-4 , IEC 62321-5,IEC 62321-6,IEC 62321-7,IEC 62321-8				
Cooling	Temperature control & Force Cooling	2Fans	4 Fans	6Fans		
Color	Black / Customizable					

Inverter Management software



AC power supply mode

Namely AC inverter working mode: the inverter employs mains for load when there is mains and switches to inverter working mode when the mains is abnormal.



AC input [

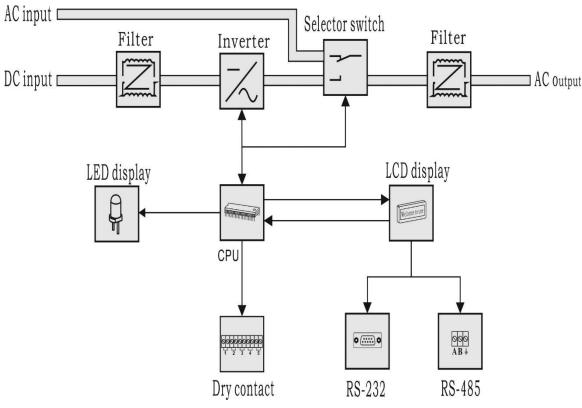
DC input

Filter

DC power supply mode

Namely DC-dominated inverter working mode: under normal condition, DC-dominated inverter is under inverter output status all the time; in case of DC fault, it switches to mains by-pass.

Hardware structure and working principle



Selector switch

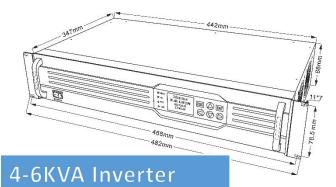
Inverter

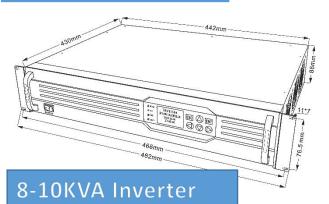
■AC output

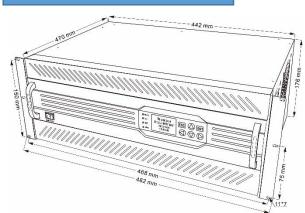
Filter

Appearance

1-3KVA Inverter

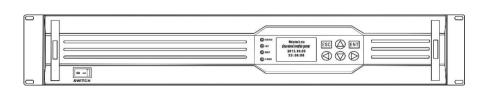




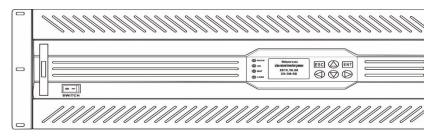


Front Panel

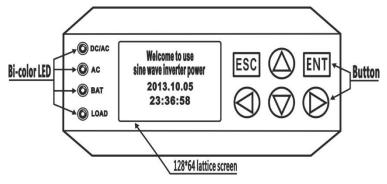
1-6KVA



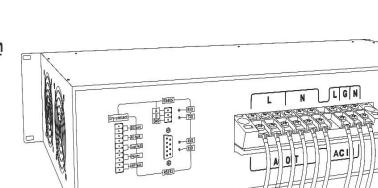
8-10KVA



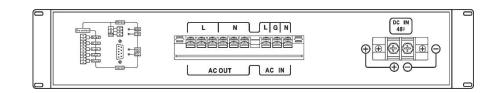
LCD Display



Connecting cable



Back Panel



Live Photos









Bwitt reserves the right to change the specification without notice Created: 23.04.2005/ Updated: 27.April.2019 .