

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

www.bwitt.com.cn Thomas@bwitt.com

Building 8, Sunshine Industry Park, Xili town, Nanshan district, Shenzhen City, Guangdong, China

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 120AC power supply and a 48VDC 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 AC120V 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



COMMUNICATION FIELD POWER FROM 1-10KW

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



RAILWAY

8. City WIFI device
9. Emergency communication car
10. Railway & metro
11. Distributed Antenna Systems
12. Marine & offshore
13. Building Management Systems
14. Fire Alarm Systems



INDUSTRY FIELD MAXIMIM PROTECTION IN THE CORPORATED ENVIRONMENT

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 48Vdc to 120V series

Technical Index(VA)		1KVA	2KVA	3KVA	4KVA	5KVA	6KVA	
INPUT	48Vdc input Max current (A)	20.83A	41.66A	62.5A	83.3A	104.1A	125A	
	Voltage Range 45.5Vdc—57Vdc	Rate Voltage 48Vdc, Power off voltage≤40Vdc, ≥60Vdc						
	By-pass	Voltage Rage	100Vac~140VAC					
		Rate Voltage	120Vac					
		Current(A)	8.33A	16.66A	25A	33.33A	41.66A	50A
		By-pass Transient time	≤5ms					
	frequency	60Hz						
AC OUTPUT	Rated output Power(W)	800W	1600W	2400W	3200W	4000W	4800W	
	Rated Output current(A)	6.66A	13.33A	20A	26.66A	33.33A	40A	
	Output Voltage	120Vac(±5V)Adjustable LCD display						
	Output Voltage precision (V)	120V±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	≤5ms						
	Output Frequency precision	60Hz						
	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			

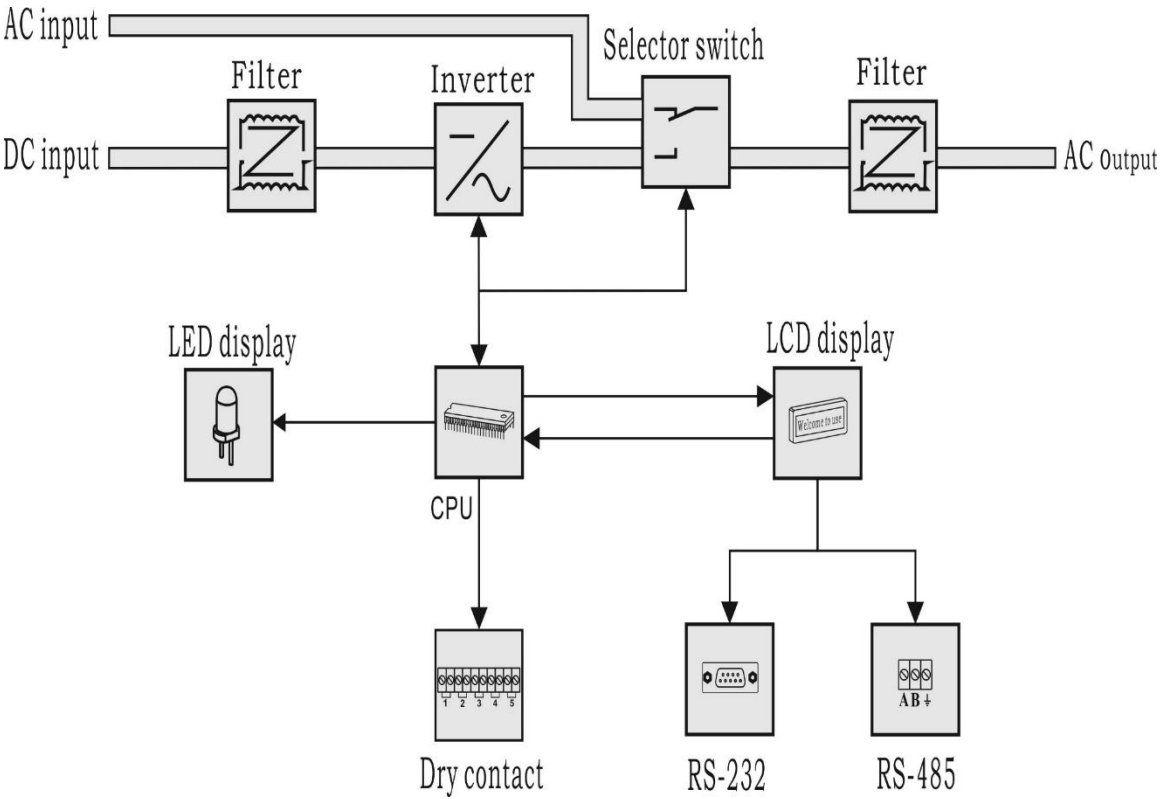
Technical Parameters

Technical Index(VA)		1KVA	2KVA	3KVA	4KVA	5KVA	6KVA
Protection	Internal Protection	Overload /Over temperature /Short circuit protection, Input ac voltage limit protection ,Reverse polarity on dc input side					
	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					
	Humidity	0~90%, No moisture condensation					
	Operating Altitude (m)	Altitude Full power up to 2000m.derating -2% / 100m, max altitude 5000m					
	Humidity	5...95%, 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					
Cooling	Temperature control	2Fans		4 Fans		6Fans	
Color	Black /Customizable						

Inverter Management software

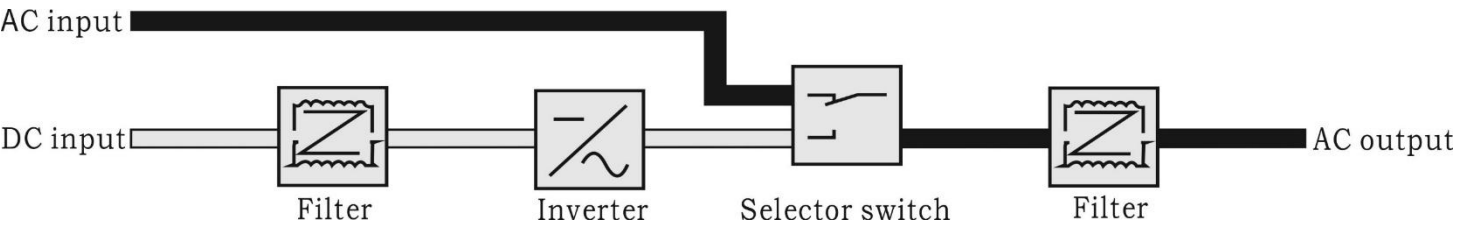


Hardware structure and working principle



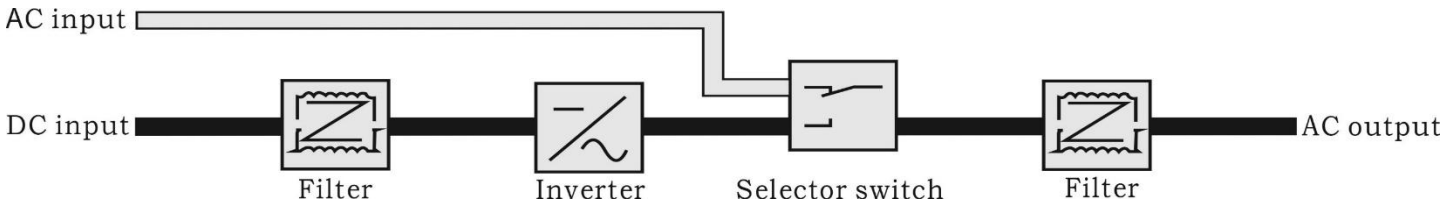
AC power supply mode

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.



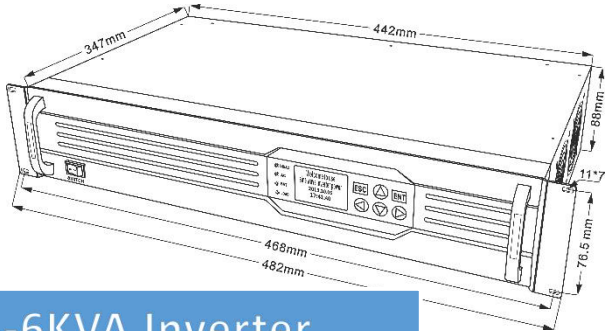
DC power supply mode

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.

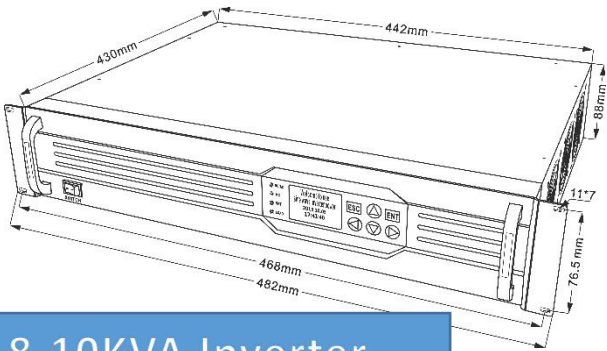


Appearance

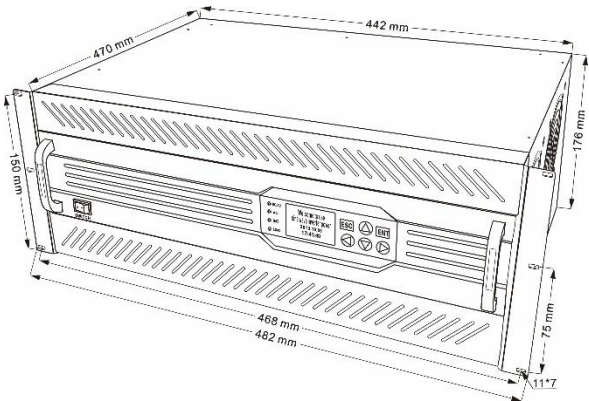
1-3KVA Inverter



4-6KVA Inverter

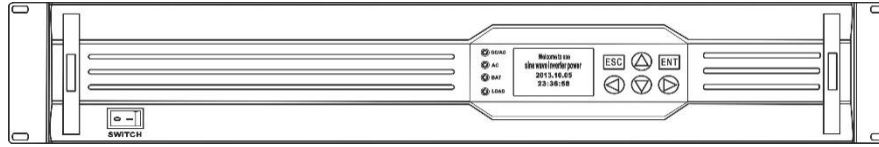


8-10KVA Inverter

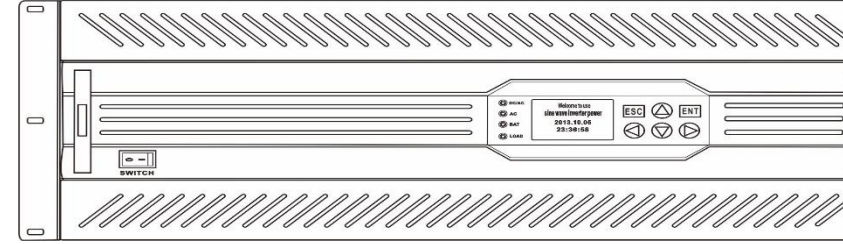


Front Panel

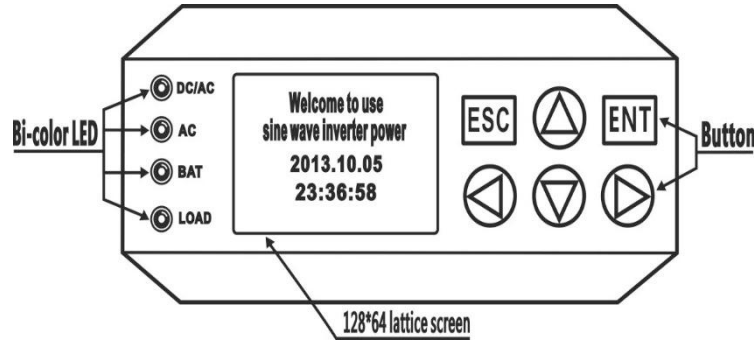
1-6KVA



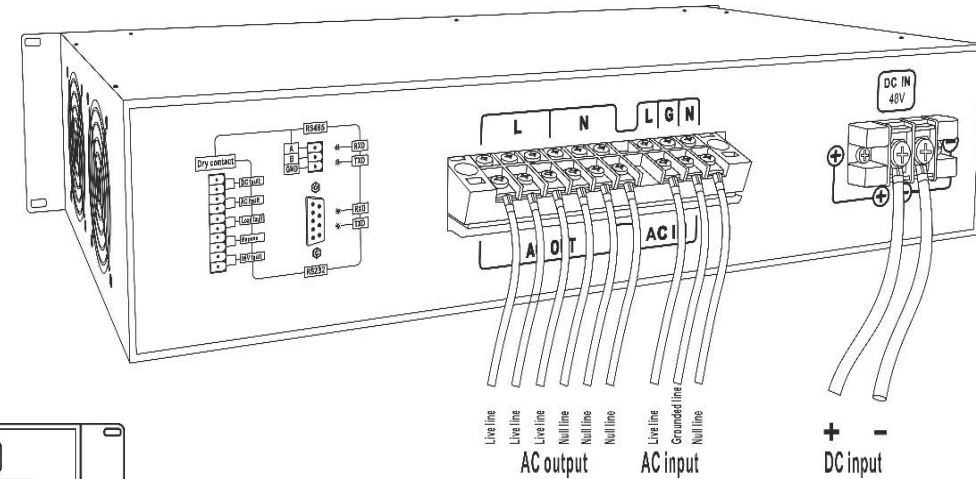
8-10KVA



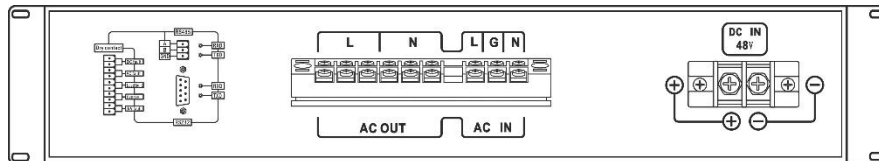
LCD Display



Connecting cable



Back Panel



Live Photos

