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 220AC 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 AC220V 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

- 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

- 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



INDUSTRY FIELD 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 HF Rackmount Inverter 220Vdc to 220V series												
Technical Index(VA)			1KVA	2KVA	ЗКVА	4KVA	5KVA	6KVA	8KVA	10KVA		
INPUT	220Vdc input Max current (A)		4.54A	9.09A	13.64A	18.18A	22.72A	27.27A	36.36A	45.45A		
	208Vdc—260Vdc		Rate Voltage 220Vdc, Power off voltage≤180Vdc, ≥275Vdc,									
	By-pass	Voltage Rage	180Vac~265VAC									
		Rate Voltage	220Vac									
		Current(A)	4.54A	9.09A	13.63A	18.18A	22.72A	27.27A	36.36A	45.45A		
		By-pass Transient time	≤5ms									
	frequency		60Hz/50Hz									
AC OUTPUT	Rated output Power(W)		800W	1600W	2400W	3200W	4000W	4800W	5600W	7000W		
	Rated Output current(A)		3.63A	7.27A	10.9A	14.54A	18.18A	21.8A	25.5A	31.82A		
	Output Voltage		220Vac(±10V)Adjustable LCD display									
	Output Voltage precision (V)		220V±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/50Hz±0.1%									
	Output Frequency		50-60Hz(auto sync with bypass input)									
	THD		≤3%									
Dimensions	nensions			482/347/88mm W/D/H 2U			482/430/88mm W/D/H 2U			482/470/176mm W/D/H 4U		

Technical Parameters

Technical Index(VA)		1KVA	2KVA	3KVA	4KVA	5KVA	6KVA	8KVA	10KVA	
	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								
	Humidity	0~90%, No moisture condensation								
	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								
Cooling	Temperature control & Force Cooling	2Fai	ns	4 Fans		6Fans		4 F	ans	
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.



Appearance

1-3KVA Inverter

1117



8-10KVA

Front Panel

Live Photos







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