

# 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

## 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 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 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



## 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 24Vdc to 110V series

Technical Index(VA)		1KVA	2KVA	3KVA	
INPUT	24Vdc input Max current (A)	41.66A	83.33A	125A	
	Voltage Range 22Vdc—28Vdc		Rate Voltage 24Vdc, Power off voltage≤20Vdc, ≥30Vdc		
	By-pass	Voltage Range	90Vac~132VAC		
		Rate Voltage	110Vac		
		Current(A)	9.09A	18.18A	27.27A
		By-pass Transient time	≤ 5 ms		
	frequency		60Hz/50Hz		
AC OUTPUT	Rated output Power(W)	800W	1600W	2400W	
	Rated Output current(A)	7.27A	14.54A	21.81A	
	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	< 8 ms			
	Output Frequency precision	60Hz±0.1%			
	Output Frequency	50-60Hz(auto sync with bypass input)			
	THD	≤3%			
Dimensions	482mm/347mm/88mm W/D/H 2U				

# Technical Parameters

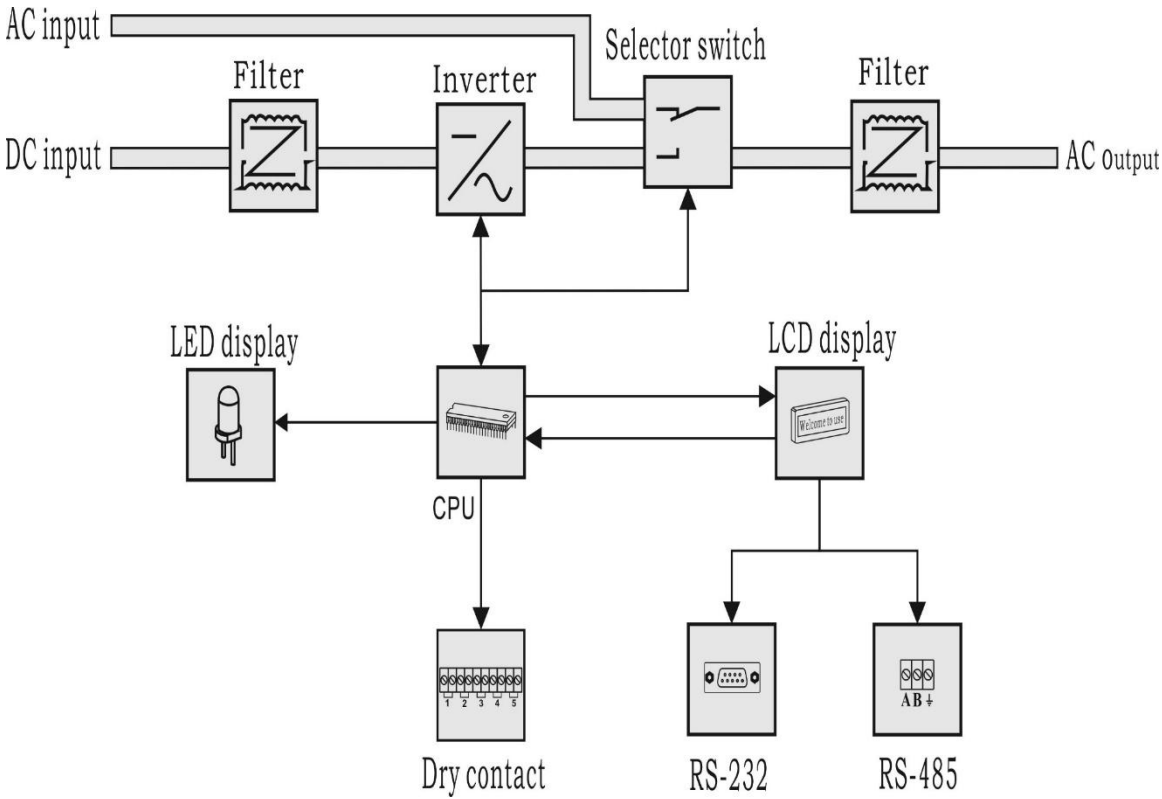
Technical Index(VA)		1KVA	2KVA	3KVA
Protection	Internal Protection	Overload /Over temperature /Short circuit protection, Input ac voltage limit protection ,Reverse polarity on dc input side		
	Input DC Voltage Alarm	Battery Under-voltage,		
	LCD Audible and visual alarm	false Red LED light and Beebe		
	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	0~95%, No moisture condensation		
	Operating Altitude (m)	Altitude Full power up to 2000m.derating -2% / 100m, max altitude 5000m		
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
Color	Black /Customizable			



# Inverter Management software

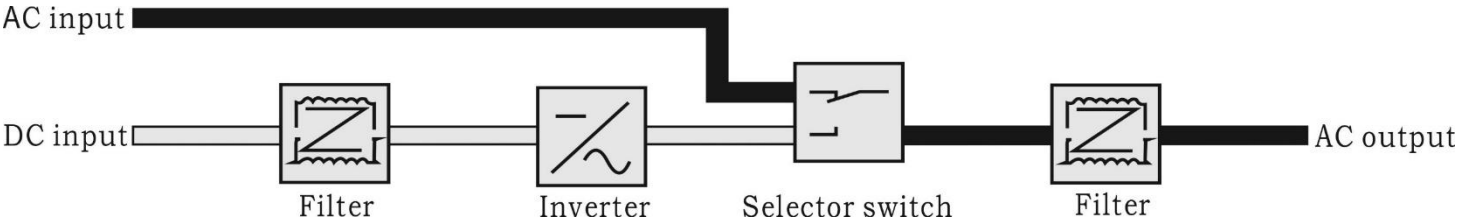


# Hardware structure and working principle



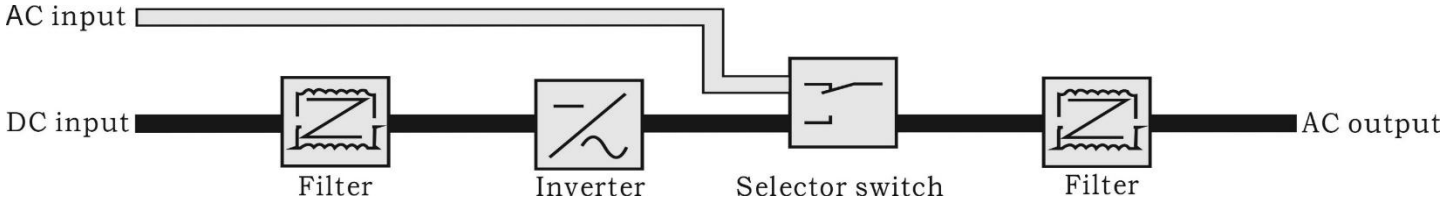
## AC power supply mode

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.



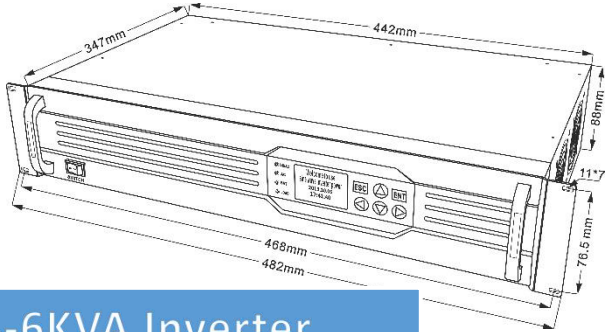
## DC power supply mode

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.

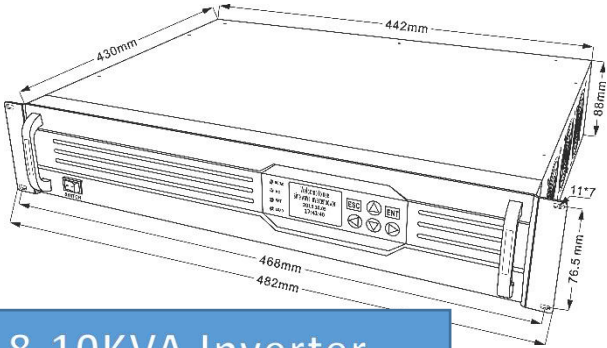


# Appearance

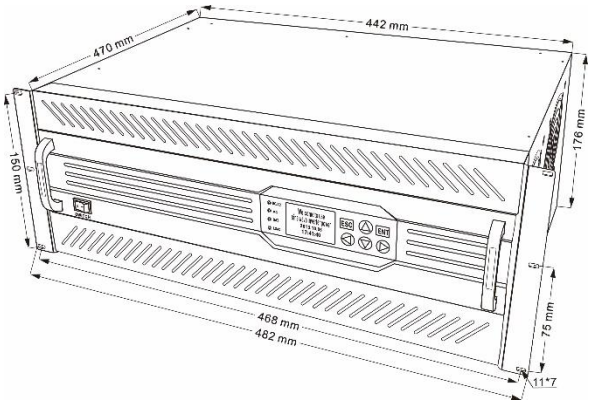
## 1-3KVA Inverter



## 4-6KVA Inverter

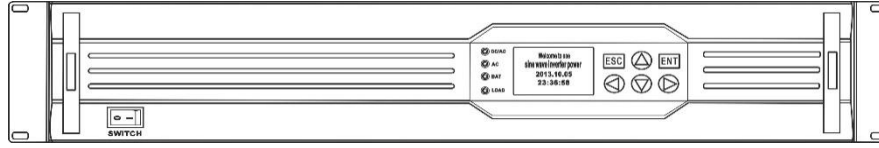


## 8-10KVA Inverter

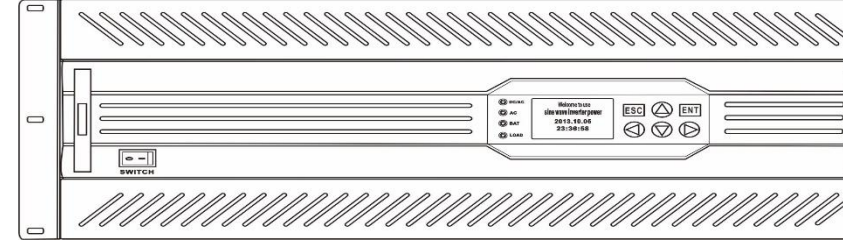


## Front Panel

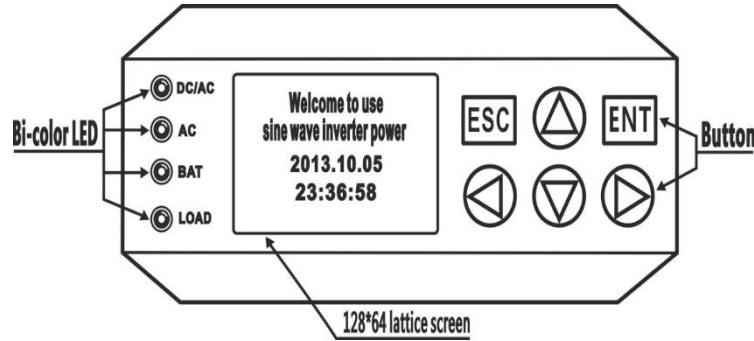
### 1-6KVA



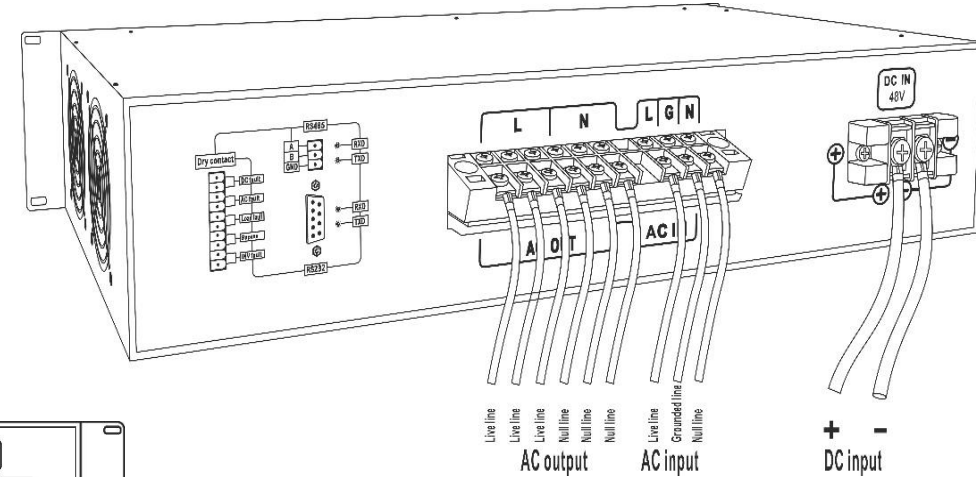
### 8-10KVA



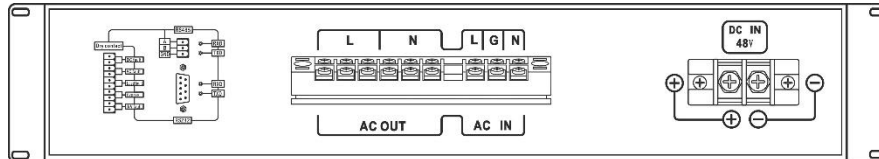
## LCD Display



## Connecting cable



## Back Panel



## Live Photos

