UPS

Uninterruptible Power Supply

Professional Manufacturer

INVT Power System (Shenzhen) Co., LTD

Company Profile

Assiduously seeking, consistently sincere, accomplishing the most brilliant pursuing

As the leading total power solution manufacturer in China, INVT is committed to offer high quality products and service to global customers. The powerful R&D ability insures that our products and solutions are the best choice for critical power applications.

The product lines cover modular UPS, high frequency UPS, low frequency UPS, inverter, telecom rectifier and lead-acid maintenance-free battery. With our own complete intellectual property rights, the power ranges from 0.5kVA to 800kVA. INVT owns advanced power supply technologies including DSP intelligent control system, fully digital parallel technique, fully IGBT technology UPS, advanced protection technique, etc.

INVT established the most powerful R&D platform for power supply development in China. The platform includes Components Lab, Performance Lab, Mechanical Environmental Lab, Climate Environmental Lab, EMC Lab, and Safety Lab. Due to all of these technologies and platform, INVT products are considered to be the most advanced and reliable in China.

Warmly welcome to be our distributor and partner. Meanwhile, we can provide OEM and ODM production and service for the clients all around the world.






Honors

The fruits abound in sweat and wisdom has faded away, the dream is always ahead of us.

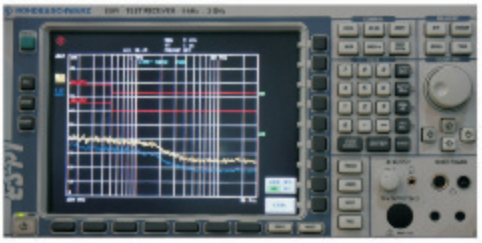
- National Hi-Tech enterprise
- The key software enterprise in Shenzhen
- Top ten influential brand in electric industry
- Certificate of energy-conserving products
- Top 500 industry enterprise
- Top ten satisfied brand in professional customer in China
- Innovation industrialization demonstration base

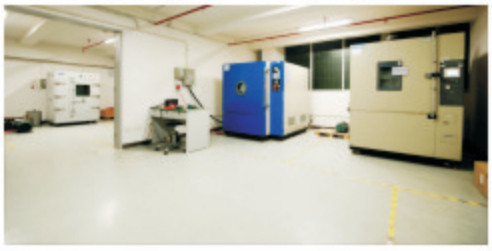
Powerful Technical Strength

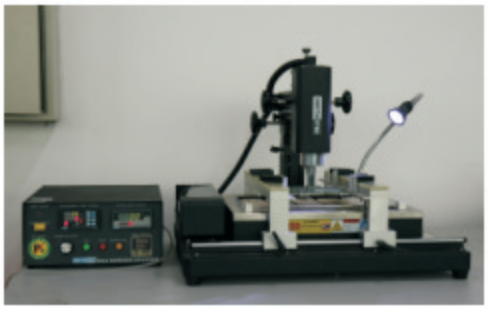
With untiring efforts in innovation, professional team drives the further development of INVT

- Reach the top international standard with control function
- Achieve the advanced international level with original technology of IGBT and integrated parallel technique
- Approach the high-class technology of modular UPS
- 20 patents
- The only company in china obtains on-the-scene certificated laboratory of TUV and the advanced testing platform for EMC, reliability, safety.










Total Quality Guarantee

Quality is the key to success in enterprise competition.Quality management starts from every detail in the whole flow

- Practice total quality management which starts from customers' requirement and ends with customers' satisfaction, carry out complete quality control during the product whole lifetime
- Comply with Quality Management System of ISO9000:2008, Environment Management System of ISO14001:2004 and Occupational Health and Safety Management System of OHSAS18001:2007, obtain TVU Certification, take strict control on process and product quality, promote green environmental protection, energy conservation and sustainable development.
- Obtain CE certification and get into European market with safe and reliable product

TÜV SUD Management Service

采用国际标准产品

CE

Efficient Supply Capacity

Meet the customer's requirements efficiently thanks to powerful supply capacity and perfect system products supply

- At present the annual production is 280 thousand of small power rating UPS and 2 thousand of medium and high power rating. In near future, INVT will become a larger-scale industrial base with rapid development of specialization.
- The supply chain promotes integrated management pattern and adopts management styles of JIT and LEAN, which makes operation efficient and supply timely.

Systematic Marketing Service

Hold great ambition,provide remarkable service

- The stereoscopic-cover and quick-response marketing service provides high-level products and service for users from more than 60 countries all over the world.
- Professional technical support
- Customized solution
- Standard after-sale service, quick response in 2 hours

Green And Energy Saving Product, State Of The Art Design

RM Series Modular UPS System

10KVA to 200KVA Advanced Modular Design and Redundant Power System

RM series is modular and online double conversion UPS for sensitive equipments. The power rating covers from 10KVA to 200KVA which delivers the best of combination of reliability, functionality, hot-swappable and flexibility at a competitive price. It is designed specifically for data centers, computer systems or critical equipments. As the result of state of the art design, this innovative and reliable power system absolutely commits to satisfy and meet the market requirements.

RM series modular UPS combines the latest IGBT three-level technology together with DSP control arithmetic. Along with high input power factor, low THDi and high system efficiency, this product achieves very high load adaptability for all kinds of load. The modular design ensures reliable and trouble free operation for the critical loads. Power expansion is very easy to achieve by adding power modules to the system and reach 200KVA power in single frame. It is possible to connect two frames in parallel in order to reach maximum 400KVA power.

Modular Construction Design

Each power module is designed to be hot swappable which makes the power expansion and system maintenance easily. Each module is controlled independently, thus avoiding single point failure risk. If any module fails or disconnected, the system keeps continuing to operate and supply the power without interruption. It ensures to provide a high level of reliability and protection.

Easy Operation And Installation

This product offers flexibility to install that reduces installation time. Consequently, it is very easy to maintain and control that provides the highest reliability and best protection for supplying power. With the large touch screen LCD panel, the user can easily access to the information of the power module and the system.

Intelligent Battery Management

Each UPS module builds in with super charger and the power reaches 3200W. With 10 installed UPS modules, the total charging power rating is up to 32KW. The charger is controlled by DSP with intelligent digital arithmetic thus to prolong the life time of the battery.

Intelligent Protection System

All the power modules and the system are protected simultaneously by the hardware and the software. All kinds of protection functions are realized, including current and voltage abnormal, thermal abnormal, short circuit, etc. The reliability of the power module and the system reaches an incredible high level through all of these technologies.

Additional Outstanding Features

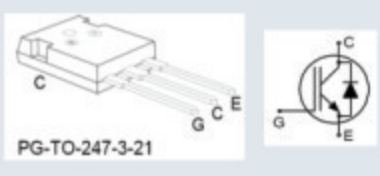
- High input power factor (>0.99), low input THDi (<3%).
- Strong load adaptability for linear and nonlinear load.
- Intelligent module and system protection design.
- Incredible low noise system design.
- Double DSP controller for individual power module.
- Digital control for the whole parts including rectifier, inverter, charger and discharger.
- IGBT modules rather than discrete components are applied in the power module.
- Digital controlled independent charger, intelligent battery management system.
- Inbuilt switch for cabinet input, output and maintenance connection.
- Large touch screen LCD with plenty of information.
- Independent charger for batteries, intelligent battery management system.
- Digital paralleling technology, very low circle current between modules.
- Totally front access, top and bottom cable connection.
- Each individual module is configured with independent controller, avoid single point failure risk.
- Friendly generator interface.

Plenty Of Options

- SNMP communication card
- Battery cold start module
- BCB box for battery
- Lightning protection module
- Battery temperature compensation module
- Alarm and message module for mobile phone

High Reliability Design

Integrated IGBT modules are used in the power module. Comparing to discrete chips, system reliability and manufacturing consistency are much improved. Low-loss integrated three-level IGBT modules help to increase system efficiency. Meanwhile reliability is increased due to lower temperature rising on IGBTs and heatsink. More chips need to be paralleled to realize high current rating if using discrete IGBT chips. Clamped Diodes should be placed around IGBTs which brings risk for voltage/current stress issues and manufacturing process.



Discrete IGBT chip used in Other modular UPS

Integrated IGBT module used in RM series modular UPS

Specification

Capacity	10-200KVA		
Main Input			
Input voltage	380V/400V/415V(line to line)		
Input frequency	50/60Hz		
Power factor	>0.99		
Input cuurent THD(Total Harmonic Distortion)	<3%		
Input voltage window	-40%~+25%		
Frequency window	40-70HZ		
Battery			
Battery voltage	±240VDC		
Charger power	20%*Power		
Charger voltage precision	1%		
Bypass			
Bypass voltage	380V/400V/415V, three phase		
Bypass voltage window	-20%-+15%, full load, settable		
Bypass overload capabiltiy	150%, long time operation		
	180%, shut down after 10 minutes		
	>180%, shut down after 200ms		
Output			
Output voltage	380V/400V/415V, three phase		
Voltage precision	±0.5%(balance load),±1%(unbalance load)		
Voltage THD(Total Harmonic Distortion)	THD<1%(linear load),THD<3%(nonlinear load)		
Power factor	0.8		
Phase tolerance	120°±0.5°(balance and unalance load)		
Crest factor	3:1		
Overload capabiltiy	110%, transfer to bypass after 1hour		
	125%, transfer to bypass after 10 minutes		
	150%, transfer to bypass after 1 minute		
	>150%, transfer to bypass after 200ms		
System			
System efficiency	Normal mode: 95%		
	ECO mode: 99%		
Battery mode efficiency	95%		
Display	LCD+LED, Touch screen and keyboard		
IP class	IP20		
Interface (Communication Ports)	RS232,RS485,Dry contacts,SNMP card,EPO,Generator interface		
Installation/Connection	Top or bottom cable connection		
Operation temperature	0-40℃		
Storage temperature	-25℃~70℃		
Relative humidity	0-95% (non-comdensing)		
Noise(dB)	<55dB		
Weight(kg)	6-module Cabinet	RM060/10,RM090/15,RM120/20	150KG
	10-module Cabinet	RM100/10,RM150/15,RM200/20	180KG
	PM10	10KVA: 20KG	
	PM15	15KVA: 21KG	
	PM20	20KVA: 22KG	
Dimension(W*D*H)(mm)	6-module Cabinet	600*900*1600	
	10-module Cabinet	600*900*2000	
	Module	440*600*134 (10KVA/15KVA/20KVA)	

Specification

Capacity	6-100KVA		
Main Input			
Input voltage	200V/208V(line to line)		
Input frequency	50/60Hz		
Power factor	>0.99		
Input cuurent THD(Total Harmonic Distortion)	<3%		
Input voltage window	-40%~+25%		
Frequency window	40-70HZ		
Battery			
Battery voltage	±240VDC		
Charger power	20%*Power		
Charger voltage precision	1%		
Bypass			
Bypass voltage	200V/208V, three phase		
Bypass voltage window	-20%-+15%, full load, settable		
Bypass overload capabiltiy	150%, long time operation		
	180%, shut down after 10 minutes		
	>180%, shut down after 200ms		
Output			
Output voltage	200V/208V, three phase		
Voltage precision	±0.5%(balance load),±1%(unbalance load)		
Voltage THD(Total Harmonic Distortion)	THD<1%(linear load),THD<3%(nonlinear load)		
Power factor	1		
Phase tolerance	120°±0.5°(balance and unalance load)		
Crest factor	3:1		
Overload capabiltiy	110%, transfer to bypass after 1hour		
	125%, transfer to bypass after 10 minutes		
	150%, transfer to bypass after 1 minute		
	>150%, transfer to bypass after 200ms		
System			
System efficiency	Normal mode: 94%		
	ECO mode: 99%		
Battery mode efficiency	94%		
Display	LCD+LED, Touch screen and keyboard		
IP class	IP20		
Interface (Communication Ports)	RS232,RS485,Dry contacts,SNMP card,EPO,Generator interface		
Installation/Connection	Top or bottom cable connection		
Operation temperature	0-40℃		
Storage temperature	-25℃~70℃		
Relative humidity	0-95% (non-comdensing)		
Noise(dB)	<55dB		
Weight(kg)	6-module Cabinet	RM036/06L	150KG
	10-module Cabinet	RM060/10L,RM100/10L	180KG
	PM06L	6KVA: 20KG	
	PM10L	10KVA: 22KG	
Dimension(W*D*H)(mm)	6-module Cabinet	600*900*1600	
	10-module Cabinet	600*900*2000	
	Module	440*600*134 (6KVA/10KVA)	

HT33 Series Tower UPS

10KVA to 200KVA

Product Introduction

INVT HT33 serial three phase UPS offers advanced technology that increase performance and reliability: three high speed DSPs with completed digital control fully ensure high quality of power supply, high input power factor makes UPS green energy saving power. It also offers humanization design: full front access of serviceability, user-friendly interface.

Application: ISP(Internet Service Provider), IDC(Internet Data Center),computing center, bank , server center, precise equipment and etc.

Features:

1. Three phase in and out system , compatible with utility of 380/400/415V, 50/60Hz
2. Online double conversion, offering load with best power quality
3. Support all kinds of load, high overload capability
4. Fully digital control with three DSPs including IGBT rectifier, inverter, charger
5. Digital circulating current control technology, increasing the parallel reliability
6. Wide input voltage window, compatible with different utilities
7. Green power technology, high input power factor, low current THD, high efficiency
8. Intelligent battery management, extending battery lifetime
9. Intelligent self-diagnose function, all kinds of fault protection, large capability of history record storage.
10. Full front maintenance, saving space.
11. Redundant design of power model fans, increasing the system reliability
12. Modularized design of subsystem, convenient field maintenance
13. High MTBF(mean time before failure)(>200,000h), low MTTR(mean time to repair)(<0.5h)
14. Large LCD display, friendly human machine interface
15. Configured with top and bottom cable connection
16. Parallel up to 6 units.
17. All kinds of option include main back feed protection, bypass back feed protection, battery leakage protection, battery start kit and output isolation transformer lighting protection kit.

Model	HT3310	HT3315	HT3320	HT3330	HT3340	HT3360	HT3380	HT33100	HT33120	HT33160	HT33200
Capacity	10KVA	15KVA	20KVA	30KVA	40KVA	60KVA	80KVA	100KVA	120KVA	160KVA	200KVA
Main Input											
Input voltage	380V/400V/415V(line to line), 50/60Hz										
Input connection	3Ph+N+PE										
Power factor	>0.99										
Input cuurent THD(Total Harmonic Distortion)	<3%										
Input voltage window	+20%~-20%, full load										
	-20%~-40%, power derating between 100% to 70%										
Frequency window	40-70HZ										
Bypass input											
Bypass voltage	380V/400V/415V										
Bypass voltage window	+20%~-20%, full load										
Frequency window	±3Hz (adjustable)										
Output											
Voltage precision	±0.5% (balance load),2% (unbalance load)										
Output voltage transient	2%(0~100% load step)										
Voltage THD (Total Harmonic Distortion)	THD<0.5%(linear load),THD<4%(nonlinear load)										
Power factor	0.8										
Frequency tracking range	50/60Hz±3Hz, adjustable										
Frequency precision (free running)	±0.01%										
Phase tolerance	120°±0.5° (balance and unalance load)										
Voltage unbalance degree (100% unbalance load)	±3%										
Frequency tracking speed	0.5Hz/s to 5Hz/s, adjustable										
Crest factor	3:1										
Overload capabiltiy	105% long time operation										
	110%, transfer to bypass after 1hour										
	125%, transfer to bypass after 10 minutes										
	150%, transfer to bypass after 1 minute										
	>150%, transfer to bypass after 200ms										
Bypass overload capability	150%, long time operation										
	150%< load <180%, last for more than 1 minute										
	>1000%, last for more than 100ms										
System											
System efficiency	Normal mode: 95%										
	ECO mode: 99%										
Battery mode efficiency	95%										
Battery configuration	12V, 40PCS (38~42pcs acceptable)										
Display	LCD+LED, Touch screen and keyboard										
EMI	IEC62040-2										
EMS	IEC61000-4-2(ESD)										
	IEC61000-4-3(RS)										
	IEC6100-4-4 (EFT)										
	IEC6100-4-5 (Surge)										
Insulation resistance	>2M (500VDC)										
Dielectric strengh	(input,output to PE)2820Vdc, leakage current lower than 3.5mA, no flashover in 1 minute										
Surge protection	Comply with IEC60664-1 class IV, endure surge of1.2/50us + 8/20us higher than 6KV/3KA										
IP class	IP20										
Interface (Communication Ports)	RS232,RS485,Dry contacts,SNMP card,EPO,Generator interface										
Installation/Connection	Top or bottom cable connection										
Operation temperature	0-40℃										
Relative humidity	0-90% (non-comdensing)										
Noise(dB)	<55dB										
Weight(kg)	100	105	115	120	224	246	268	290	312	356	400
Dimension(W*D*H)(mm)	520*700*1100 (Internal battery)				600*900*1400			600*900*1700		600*900*2000	

Model	HT3306L	HT3310L	HT3312L	HT3320L	HT3325L	HT3340L	HT3350L	HT3360L	HT3380L	HT33100L
Capacity	6KVA	10KVA	12KVA	20KVA	25KVA	40KVA	50KVA	60KVA	80KVA	100KVA
Main Input										
Input voltage	200V/208V(line to line), 50/60Hz									
Input connection	3Ph+N+PE									
Power factor	>0.99									
Input cuurent THD(Total Harmonic Distortion)	<3%									
Input voltage window	+20%~-20%, full load									
	-20%~-40%, power derating between 100% to 70%									
Frequency window	40-70HZ									
Bypass input										
Bypass voltage	200V/208V									
Bypass voltage window	+20%--20%, full load									
Frequency window	±3Hz (adjustable)									
Battery										
Battery voltage	±240VDC									
Charger power	20%*Power									
Charger voltage precision	1%									
Output										
Voltage precision	±0.5%(balance load),2%(unbalance load)									
Output voltage transient	2%(0~100% load step)									
Voltage THD(Total Harmonic Distortion)	THD <0.5%(linear load),THD <4%(nonlinear load)									
Power factor	1									
Frequency tracking range	50/60Hz±3Hz, adjustable									
Frequency precision (free running)	±0.01%									
Phase tolerance	120°±0.5°(balance and unalance load)									
Voltage unbalance degree (100% unbalance load)	±3%									
Frequency tracking speed	0.5Hz/s to 5Hz/s, adjustable									
Crest factor	3:1									
Overload capabiltiy	105% long time operation									
	110%, transfer to bypass after 1hour									
	125%, transfer to bypass after 10 minutes									
	150%, transfer to bypass after 1 minute									
	>150%, transfer to bypass after 200ms									
Bypass overload capability	150%, long time operation									
	150%< load <180%, last for more than 1 minute									
	>1000%, last for more than 100ms									
System										
System efficiency	Normal mode: 94%									
	ECO mode: 99%									
Battery mode efficiency	94%									
Battery configuration	12V, 40PCS (38~42pcs acceptable)									
Display	LCD+LED, Touch screen and keyboard									
EMI	IEC62040-2									
EMS	IEC61000-4-2(ESD)									
	IEC61000-4-3(RS)									
	IEC6100-4-4 (EFT)									
	IEC6100-4-5 (Surge)									
Insulation resistance	>2M(500VDC)									
Dielectric strengh	(input,output to PE)2820Vdc, leakage current lower than 3.5mA, no flashover in 1 minute									
Surge protection	Comply with IEC60664-1 class IV, endure surge of 1.2/50us + 8/20us higher than 6KV/3KA									
IP class	IP20									
Interface (Communication Ports)	RS232,RS485,Dry contacts,SNMP card,EPO,Generator interface									
Installation/Connection	Top or bottom cable connection									
Operation temperature	0-40℃									
Relative humidity	0-90% (non-comdensing)									
Noise(dB)	<55dB									
Weight(kg)	100	105	115	120	224	246	268	290	312	356	400
Dimension(W*D*H)(mm)	520*700*1100				600*900*1400			600*900*1700		600*900*2000	

HT11 Series Online UPS

Power rating: 1KVA～3KVA

1:1 phase

Features:

1. Wide input voltage range.
2. Cold start.
3. Advanced battery management.
4. Automatic battery charging on off mode.
5. Lighting and surge protection.
6. Fan speed adjustment automatically.
7. Complete protection function.
8. Network/fax/modem surge protection.
9. LCD/LED display option.
10. EMI/RFI noise filter.
11. Smart RS232 port with monitoring software.
12. PFC technology.

Model		HT1K	HT1KL	HT2K	HT2KL	HT3K	HT3KL
Capacity		1KVA/800W		2KVA/1600W		3KVA/2400W	
Input	Voltage	115- 300Vac					
	Current	6A(max)		12A(max)		16A(max)	
	Frequency	50Hz±5%					
	COS Φ	≥0.95(According to EN60555-2)					
Output	Voltage	220Vac±3%					
	Current	4.55A		9.1A		13.6A	
	Frequency	50Hz ±0.2%(battery mode)					
	COS Φ	0.8(lag)					
	Waveform	Sine wave					
	WaveForm distortion	Linear load<3%					
		Non linear load<6%		Non linear load<5%			
Overload protection		>130%→200ms >150%→10ms					
Transfer time		0ms					
Battery		Sealed lead acid maintenance-free battery					
External battery voltage		12V7AH*3PCS	36Vdc	12V7AH*6PCS	72Vdc	12V7AH*8PCS	96Vdc
Ambient	Temperature	0 - 40℃					
	Humidity	0 -95%					
Communication		9Pin D type connector (RS232)					
Size (WxDxH) mm		350*144*236		425*190*336		425*190*337	
Weight(kg)		12	5.7	22.2	10	26.3	10
*(L) - long backup Version							

HT11 Series Online UPS

Power rating: 6KVA～20KVA
1:1 phase and 3:1 phase

Features:

1. True online double conversion technology
2. IGBT PFC technology.
3. Wide input range.
4. Zero transfer time.
5. Compete protection function.
6. Paralleling up t0 4 units.
7. Smart communication port.
8. LCD/LED display.
9. Cold start function.

Function & Characteristic:

- AVR
- True online UPS
- IGBT technology
- Overload and short circuit protection
- LED/LCD status display
- N + X parallel connection(optional)
- Cold start
- Intelligent slot for SNMP adaptor(optional)
- Online maintenance service

Model		HT6K	HT6KL	HT10K	HT10KL	3HT10KL	3HT15KL	3HT20KL
Capacity		6KVA/4800W		10KVA/8000W		10KVA/7000W	15KVA/10500W	20KVA/14000W
Input	Voltage	115Vac~300Vac				304Vac~478Vac		
	Current	1P2W + G				3P4W + G		
	Frequency	50Hz(60Hz) ±5%				50Hz(60Hz) ±5%		
	COS Φ	≥ 0.95(According to EN60555-2)				≥ 0.95(According to EN60555-2)		
Output	Voltage	220Vac±1%				220Vac(230Vac) ±3%	220Vac(230Vac) ±2%	
	Frequency	50Hz ±0.2Hz(BATTERY MODE)				50Hz±5%		
	COS Φ	0.8(lag)				0.7(lag)		
	Waveform	Sine wave				Sine wave		
	WaveForm distortion	Linear load<3%				Linear load<3%	Linear load<4%	
		Non linear load<6%				Non linear load<6%	Non linear load<5%	
Overload protection		>125%→1MIN >150%→10ms				>125%→200ms >150%→10ms		
Transfer time		0ms				0ms		
Battery		Sealed lead acid maintenance-free battery				Sealed lead acid maintenance-free battery		
External battery voltage		12V7AH*16PCS	192Vdc	12V7AH*16PCS	192Vdc	240VDC		
Ambient	Temperature	0 ~ 43℃				0 ~ 43℃		
	Humidity	0 ~ 95%				0 ~ 95%		
Communication		9 Pin D type connector (RS232) or intelligent slot for SNMP adaptor(optional)				9 Pin D type connector (RS232) or intelligent slot for SNMP adaptor(optional)		
Size (WxDxH) mm		250x500x620	240*500*460	250*500*620	240*500*460	250*500*620		
Weight(kg)		58	18	68	20	35	55	56

*(L) - long backup Version

HR Series Online UPS

Power rating: 1KVA~6KVA
1:1 phase rack mounted

Characteristics:

1. 19 inch rack mounted design.
2. Online double conversion technology.
3. IGBT PFC technology.
4. Wide input range.
5. Zero transfer time.
6. Compete protection function.
7. Advanced battery management.
8. Cold start.
9. Compete protection function.
10. Fan speed adjustment automatically.
11. Optional external battery bank.
12. EMI/RFI noise filter.
13. Shutdown and restart schedule.

Model	HR111K	HR112K	HR113K	HR116K
Rated Power				
Power	1kVA/0.7kW	2kVA/1.4kW	3kVA/2.1kW	6kVA/4.2kW
Input				
Nominal voltage	110VAC/220VAC			220VAC
Voltage range	60-138VAC/115-300VAC			176-276VAC
Frequency range	46-54Hz(default), user adjustable within 40-60Hz			46-54Hz
Power factor	0.97			0.98
Output				
Voltage	110VAC/220VAC ± 2%			220VAC ± 1%
Frequency	50/60Hz ± 0.2Hz			50/60Hz ± 0.05Hz
Waveform	Pure sine wave			
Distortion	Less than 2% under linear load			
Overload capability	110%-150% for 30 seconds, 150% for 300 mS			105%-130% for 10min, 130% for 1min
Crest factor	3:1			
Battery				
Nominal DC voltage	36VDC	96VDC		240VDC
Bypass				
Automatic transfer	Overload time up and UPS failure			
Transfer time	0mS			
LCD/LED information and audible alarm				
Status	Load percentage, battery state, utility state, inverter and bypass state, overload, system fault.			
Audible alarm	Bypass mode, battery mode, battery low, overload, fault			
Communications				
DB9 port	RS232			
Intelligent slot	WebPower, AS400 card and WinPower CMC			
Environment				
Operating Temperature	0-40°C			
Operating humidity	20-90 non-condensing			
Weight				
Net(kg)	15.3	10.3	11.2	18.3
Dimension				
W*D*H(mm)	482*450*88(2U)			482*600*130(3U)

BU Series Offline UPS

Power rating: 400VA～1200VA

1:1 phase

Characteristics:

- Advanced wide AVR perform
- Boost and buck voltage
- Spike, surge ,RFI noise protected
- Advanced PWM mosfet technology
- Advanced power failure detection
- Advanced shutdown for overload and low battery
- UPS auto on when AC back

Optional function

- LCD status display
- Night charging
- Line surge protection:RJ11 or RJ12 or RJ45
- Communication Interface:RS232 or USB port (New)

MODEL		BU400VA	BU500VA	BU650VA	BU750VA	BU800VA	BU1000VA	BU1200VA
Capacity	VA/W	240W	300W	390W	450W	480W	600W	720W
Input	Voltage	110Vac/220Vac/230Vac/240Vac						
	Voltage range	75-145V or 145-280V						
	Frequency	50Hz/60Hz						
Output	Frequency	50Hz /60Hz						
	Voltage	110Vac/220Vac/230Vac/240Vac						
	Transfer time	<10ms including direction time						
	Wave form	Sine wave under mains supply, square wave under battery operation						
Battery	BAttery Type and Number	12v4.5ah*1pc	12v7ah*1pc		12v9ah*1pc		12v7ah*2pcs	12v9ah*2pcs
	Backup Time(at a pc load with 17" monitor)	5-7 minutes	8-15 minutes		15-28minutes		25-40minutes	30-50 minutes
	Recharge Time	10 hours						
Transfer Time	Typical	<10MS						
Indicator	AC mode	The 1st green LED lighting						
	Battery mode	The 2nd red LED flashing						
	Fault	Red led lighting						
Audible Alarm	Battery Mode	Sounding everey 4 seconds						
	Low battery	Sounding everey seconds						
	Overload	ups off						
PROTECTION	Overload	As load over 130%, UPS is protected in 3 seconds						
	AC input	Fuse for overload & short circuit protection						
	Short circuit	UPS output cut off immediately						
Battery	Type	Sealed, lead acid maintenance-free						
	Protection	Auto-inspection, discharge protection and battery fault caution						
	Battery	Normally battery is charged once every three months,it isn't less than 6 hours once a time.						
Physical	Weight(kg)	4.75	6	6.5	7.5	8	11	12
	Size (LxWxH)mm	275*90*138	335*103*152				345x122x190	

DIV Series Telecom and Electric Power Inverter

Pure sine wave output
DC voltage: 12/24/48/110/220V
AC output: 220/230/240V, 50/60Hz

Features :

1. With CPU digital control technology, DIV Series inverter is an intelligent and reliable product with state of the art design.
2. DIV series inverter is adopting SPWM technology, with the output of stabilized voltage and frequency, pure sine-wave.
3. DIV series inverter has good load compatibility, built-in by-pass switch, and high overload feature for reliable and continuous power supply application.
4. DIV series inverter can be AC power mode and DC power mode: AC power mode means when the utility is normal, theinverter will select the utility as the power source, when the utility fails, inverter turns to DC input power source. DC power mode means when the DC power source is normal, the inverter will select the DC input as the power source, when the DC input fails, inverterturns to utility power source.
5. DIV series inverter can be switched to bypass on the running state, it's easy to maintain and replace the battery without effecting load power supply.
6. DIV series inverter was designed with all kinds of intelligent fault protection functions. The system will deal with the fault automatically due to inbuilt software logic.
7. DIV series inverter can support net work communication system, the working state can be monitored by the supervision software.
8. DIV series inverter provides dry contacts which can be used for DC input fault warning or AC output fault warning.

Model		DIV500VA	DIV1000VA	DIV2000VA	DIV3000VA	DIV4000VA	DIV5000VA	DIV6000VA
DC Input	Input Voltage (Vdc)	12V/24V/48V/110V/220V						
	Reverse Noise Current	≤10%						
AC Bypass	Bypass Volt (Vac)	265V-185V(±10V)						
	Input Current (A)	2.3	4.5	9.1	13.6	18.2	22.7	27.3
	Transfer Time (ms)	≤5ms						
AC Output	Rated Capacity (VA)	500VA	1000VA	2000VA	3000VA	4000VA	5000VA	6000VA
	Output Power (W)	400W	800W	1600W	2400W	3200W	3500W	4200W
	Voltage and Frequency	220Vac、50HZ						
	Output Current (A)	1.8	3.6	7.2	10.8	14.5	16	19.1
	Voltage Precision (V)	220±1.5%						
	Frequency Precision (Hz)	50±0.1%						
	Output	Pure Sine Wave						
	Wave Distortion (THD) (Resistant Load)	≤3%						
	Dynamic Reaction Time (Load 0 ←→ 100%)	5%						
	Power Factor (PF)	0.8/0.7/0.6						
	Overload	220% 、30 sec						
	Inversion Efficiency (80% Resistant Load)	≥85%						
	Transfer Time(ms)	≤5ms						
Environment	Isolation(IN/OUT)	1500Vac 、1minute						
	Noise(1 meter)	≤40dB						
	Temperature	-25 ℃~+50 ℃						
	Humidity	0~90%						
	Sea Level (m)	≤2000						
Display	LCD	Input/output voltage , frequency, output current , temperatuer						
	LED	line , inverter, battery, output Load						
Mechanical	19 Inch Rack Type (DxWxH) (mm)	360*448*88 (DIV 24-1KVA; DIV 48-1KVA/2KVA; DIV 110-1KVA/2KVA; DIV 220- 1KVA/2KVA) 390*448*88 (DIV 24-2KVA ; 3KVA; 4KVA; 5KVA; 6KVA)						
	Weight (Kg)	7KG (1KVA); 8KG (2KVA); 11KG (3KVA); 12KG (4KVA); 13KG (5KVA); 14KG (6KVA)						

DR Series Telecom Rectifier System

Input: 220/230/240Vac

Output: 24/48Vdc

DR series telecom rectifier systems provide large power system features in cost effective, rack-mounted form. The system provide rectification, system management and power distribution while maintaining high reliability and offering flexibility for future expansion. The systems are based on hot-swappable rectifier modules with constant output power available at 1400 (24V) or 1600W (48V) per module. System management is accomplished through messages and alarms displayed on the system controller's LCD screen and can also be displayed remotely via the PC-based software package.

Features:

1. AC Input 185-275 VAC (85-185VAC at de-rated output)
2. 48VDC rectifier with up to 1600W output
3. 24VDC rectifier with up to 1400W output
4. Fan cooled rectifier modules
5. Front access design
6. Temperature hardened -40℃ to +65℃
7. 19" or 23" mounting arrangement
8. Extensive remote monitoring capabilities
9. Modular DC distribution with LVD
10. Power Factor Correction
11. ETSI Compatible
12. Modular system from 32A to 640A

Module Model		DR1400W	DR1600W
AC Input	Input range	185~300VAC 85~185VAC(output derating)	
	Power factor	⩾0.99	
DC Output	Output voltage	24V	48V
	Output current	55A	32A
	Voltage precision	⩽0.6%	
	Load regulation	⩽0.5%	
	Voltage regulation	⩽0.13%	
	Limited current	0~110% adjustable	
	Equalized current imbalance	⩽3%	
	Parallel units	32	
	Efficiency	⩾95%	
Protection	Over current protecion	Input: Fuse	
		Output: Fuse	
		PFC: Circuit Break	
	Short circuit protection	YES	
	Over & low voltage protecion	Input low-voltage protection 85±5V	
		Input over-voltage protection 290±5V	
		Output over-voltage protection 59±1V	
	Over temperature protection	YES	
Display	LED	Main power, communication, fault	
Environment	Wokring temperature	-25℃~+65℃	
	Storage temperature	-40℃~+85℃	
	Humidity	⩽97%	
	Noise	⩽45dB	
Mechanical	Dimention H*W*L (mm)	88*103*261	
	Weight	2.4KG	

MF Series Sealed Lead Acid Battery

Voltage range: 2V, 6V, 12V
Capacity range: 4AH to 3000AH

Features :

1. Long life technology with state of the art design.
2. Made of high quality pure material, realized super low self-discharging rate.
3. Maintenance free.
4. High reliability, safe for all direction applications.

Battery model	Voltage(V)	Capacity(Ah)	Dimension(±1mm)				Weight ±5%
			Length	Width	Height	Total height	Kg
			mm	mm	mm	mm	
MF4-12	12	4	195	47	71	76	1.52
MF7-12	12	7	151	65	94	100	2.15
MF9-12	12	9	151	65	96	100	2.5
MF12-12	12	12	151	98	95	101	3.4
MF17-12	12	17	181	77	167	171	5.2
MF24-12	12	24	166	175	125	129	7.6
MF38-12	12	38	197	165	170	170	12.4
MF65-12	12	65	350	167	179	179	19.6
MF100-12	12	100	328	171	214	220	30.5
MF120-12	12	120	410	176	227	227	33.5
MF150-12	12	150	482	170	242	242	44.5
MF200-12	12	200	522	238	218	222	60
MF250-12	12	250	520	269	220	224	69.5
MF4-6	6	4	70	47	101	107	0.65
MF7-6	6	7	151	34	94	100	1.08
MF9-6	6	9	98	56	117	117	1.35
MF12-6	6	12	151	50	94	100	1.7
MF100-6	6	100	195	170	207	213	16.5
MF150-6	6	150	260	180	247	251	23.5
MF200-6	6	200	250	125	362	366	31
MF300-6	6	300	295	178	345	350	47
MF100-2	2	100	171	72	206	211	6.3
MF150-2	2	150	172	102	205	227	8.1
MF200-2	2	200	173	111	330	364	13.5
MF250-2	2	250	173	111	330	364	15.5
MF300-2	2	300	171	151	330	364	18.5
MF350-2	2	350	171	151	330	364	21
MF400-2	2	400	210	176	330	367	25.5
MF450-2	2	450	210	176	330	367	28
MF500-2	2	500	241	175	330	365	32
MF600-2	2	600	302	175	330	367	37
MF800-2	2	800	410	175	330	367	52
MF1000-2	2	1000	475	175	330	367	61
MF1200-2	2	1200	475	175	330	367	71
MF1500-2	2	1500	400	350	345	382	92
MF2000-2	2	2000	490	350	345	382	119
MF2500-2	2	2500	490	350	345	382	140
MF3000-2	2	3000	710	350	345	382	184