

24VDC T Series inverter



- 1.SPWM technology, pure sine wave AC output powers telecom equipment without performance degradation;
- 2.Continuous duty rated full output wattage maintained even during extended power outages;
- 3.User-friendly Status and Diagnostic LCD/LED displays, easy to operate
- 4.Utility bypass function with fast load transfer switch;

5.Remote Power Management optional via RS-232 port; Optional SNMP card;

6.Optional three working modes: AC mains first, DC inverter first, pure DC inverter;

MODEL		T24/220-XKS								
Technical Index(VA)		0.5K	1K	2K	3K	4K	5K	6K	8K	10K
DC input	Rated input voltage (Vdc)	24Vdc								
	Rated input current (A)	21	42	83	125	N/A	N/A	N/A	N/A	N/A
	Allowable range of input DC voltage (Vdc)	Cutoff voltage 20V—30V Startup voltage 22V—28V								
	Backward noise current	≤10%								
AC by-pass input	Allowable by-pass voltage (Vac)	260V-180V(±10V)								
	Rated input current (A)	2.3	4.5	9.1	13.6	N/A	N/A	N/A	N/A	N/A
	By-pass conversion time (ms)	≤5ms								
AC output	Rated capacity (VA)	500	1K	2K	3K	N/A	N/A	N/A	N/A	N/A
	Rated output power (W)	400	800	1600	2400	N/A	N/A	N/A	N/A	N/A
	Inverter output voltage and frequency	220Vac, 50HZ/60HZ								
	Inverter output current (A)	1.8	3.6	7.3	11	N/A	N/A	N/A	N/A	N/A
	Output voltage precision (V)	220±1.5%								
	Output frequency precision (Hz)	50±0.1% Or 60±0.1%								
	Waveform	Pure sine wave								
	Total harmonic distortion (THD)	≤3% (linear load)								
	Dynamic response time	5% (load 0←→100%)								
	Power factor (PF)	0.8								
	Overload capacity	100%-120% 60s 121%-150% 10s								
	Inversion efficiency (80% resistive load)	≥85%								
	By-pass conversion time (ms)	≤5ms								
Working environment	Dielectric strength (input and output)	1500Vac, 1 minute								
	Noise (1m)	≤40dB								
	Operating environment temperature	-20℃~+50℃								
	Humidity	0-90%, no moisture condensation								
	Operating altitude (m)	≤2000								
Communication	RS232 and RS485, SNMP optional									
Indication	LCD display	Input and output voltage, frequency, output current, temperature, percentage, etc.								
	inverter status	Normal mains, normal inversion, battery under-voltage and output overload								
Mechanical size (mm)	Standard rack									
	Depth × Width × Height	347*482*88				N/A			N/A	N/A
Protection function	DC input reverse polarity protection	Available				N/A			N/A	
	Normal protections	Input under-voltage and overvoltage, output overload and short circuit protections, etc.								

48VDC T Series inverter



- 1.SPWM technology, pure sine wave AC output powers telecom equipment without performance degradation;
- 2.Continuous duty rated full output wattage maintained even during extended power outages;
- 3.User-friendly Status and Diagnostic LCD/LED displays, easy to operate;
- 4.Utility bypass function with fast load transfer switch;

5.Remote Power Management optional via RS-232 port; Optional SNMP card;

6.Optional three working modes: AC mains first, DC inverter first, pure DC inverter;

MODEL		T48/220-XKS								
Technical Index(VA)		0.5K	1K	2K	3K	4K	5K	6K	8K	10K
DC input	Rated input current (A)	11	21	42	63	83	104	125	167	208
	Allowable range of input	Cutoff voltage 40V--60V								
	Backward noise current	≤10%								
AC by-pass input	Allowable by-pass voltage (Vac)	260V-180V(±10V)								
	Rated input current (A)	2.3	4.5	9.1	13.6	18.2	22.7	27.2	36.3	45.4
	By-pass conversion time	≤5ms								
AC output	Rated capacity (VA)	500	1K	2K	3K	4K	5K	6K	8K	10K
	Rated output power (W)	400	800	1600	2400	3200	4000	4800	6400	8000
	Inverter output voltage and	220Vac, 50HZ/60HZ								
	Inverter output current (A)	1.8	3.6	7.3	11	14.5	18.2	21.8	29	36.3
	Output voltage precision	220±1.5%								
	Output frequency	50±0.1% Or 60±0.1%								
	Waveform	Pure sine wave								
	Total harmonic distortion	≤3% (linear load)								
	Dynamic response time	5% (load 0←→100%)								
	Power factor (PF)	0.8								
	Overload capacity	100%-120% 60s 121%-150% 10s								
	Inversion efficiency (80%)	≥85%								
	By-pass conversion time (ms)	≤5ms								
	Working environment	Dielectric strength (input and output)	1500Vac, 1 minute							
Noise (1m)		≤40dB								
Operating environment temperature		-20℃~+50℃								
Humidity		0~90%, no moisture condensation								
Operating altitude (m)		≤2000								
Communication		RS232 and RS485, SNMP optional								
Indication	LCD display	Input and output voltage, frequency, output current, temperature, percentage, etc.								
	inverter status	Normal mains, normal inversion, battery under-voltage and output overload								
Mechanical size(mm)	Standard rack									
	(Depth * Width *Height)	347*482*88			430*482*88			436*482*176		
Protection function	DC input reverse polarity protection	Available							N/A	
	Normal protections	Input under-voltage and overvoltage, output overload and short circuit protections, etc.								

110VDC T Series inverter



- 1.SPWM technology, pure sine wave AC output powers telecom equipment without performance degradation;
- 2.Continuous duty rated full output wattage maintained even during extended power outages;
- 3.User-friendly Status and Diagnostic LCD/LED displays, easy to operate;

- 4.Utility bypass function with fast load transfer switch;
- 5.Remote Power Management optional via RS-232 port; Optional SNMP card;
- 6.Optional three working modes: AC mains first, DC inverter first, pure DC inverter;

MODEL		T110/220-XKS								
Technical Index(VA)		0.5K	1K	2K	3K	4K	5K	6K	8K	10K
DC input	Rated input voltage (Vdc)	110Vdc								
	Rated input current (A)	4.5	9	18	27	36	45	55	72.7	90.9
	Allowable range of input DC voltage (Vdc)	Cutoff voltage 90V—139V Startup voltage 104V—131V								
	Backward noise current	≤10%								
AC by-pass input	Allowable by-pass voltage (Vac)	260V-180V(±10V)								
	Rated input current (A)	2.3	4.5	9.1	13.6	18.2	22.7	27.2	36.3	45.4
	By-pass conversion time (ms)	≤5ms								
AC output	Rated capacity (VA)	500	1K	2K	3K	4K	5K	6K	8K	10K
	Rated output power (W)	400	800	1600	2400	3200	4000	4800	6400	8000
	Inverter output voltage and frequency	220Vac, 50HZ/60HZ								
	Inverter output current (A)	1.8	3.6	7.3	11	14.5	18.2	21.8	29	36.3
	Output voltage precision (V)	220±1.5%								
	Output frequency precision (Hz)	50±0.1% Or 60±0.1%								
	Waveform	Pure sine wave								
	Total harmonic distortion (THD)	≤3% (linear load)								
	Dynamic response time	5% (load 0←→100%)								
	Power factor (PF)	0.8								
	Overload capacity	100%-120% 60s 121%-150% 10s								
	Inversion efficiency (80% resistive load)	≥85%								
	By-pass conversion time (ms)	≤5ms								
Working environment	Dielectric strength (input and output)	1500Vac, 1 minute								
	Noise (1m)	≤40dB								
	Operating environment temperature	-20℃~+50℃								
	Humidity	0~90%, no moisture condensation								
	Operating altitude (m)	≤2000								
Communication	RS232 and RS485, SNMP optional									
Indication	LCD display	Input and output voltage, frequency, output current, temperature, percentage, etc.								
	inverter status	Normal mains, normal inversion, battery under-voltage and output overload								
Mechanical size(mm)	Standard rack	347*482*88			430*482*88			436*482*176		
	Depth × Width × Height	347*482*88			430*482*88			436*482*176		
Protection function	DC input reverse polarity protection	Available								N/A
	Normal protections	Input under-voltage and overvoltage, output overload and short circuit protections, etc.								

220VDC T Series inverter



- 1.SPWM technology, pure sine wave AC output powers telecom equipment without performance degradation;
- 2.Continuous duty rated full output wattage maintained even during extended power outages;
- 3.User-friendly Status and Diagnostic LCD/LED displays, easy to operate;

- 4.Utility bypass function with fast load transfer switch;
- 5.Remote Power Management optional via RS-232 port; Optional SNMP card;
- 6.Optional three working modes: AC mains first, DC inverter first, pure DC inverter;

MODEL		T220/220-XKS								
Technical Index(VA)		0.5K	1K	2K	3K	4K	5K	6K	8K	10K
DC input	Rated input voltage (Vdc)	220Vdc								
	Rated input current (A)	2.3	4.5	9	13.5	18	22.5	27	36.3	45.4
	Allowable range of input DC voltage (Vdc)	Cutoff voltage 180V--275V Startup voltage 208V—260V								
	Backward noise current	≤10%								
AC by-pass input	Allowable by-pass voltage (Vac)	260V-180V(±10V)								
	Rated input current (A)	2.3	4.5	9.1	13.6	18.2	22.7	27.2	36.3	45.4
	By-pass conversion time (ms)	≤5ms								
AC output	Rated capacity (VA)	500	1K	2K	3K	4K	5K	6K	8K	10K
	Rated output power (W)	400	800	1600	2400	3200	4000	4800	6400	8000
	Inverter output voltage and frequency	220Vac, 50HZ/60HZ								
	Inverter output current (A)	1.8	3.6	7.3	11	14.5	18.2	21.8	29	36.3
	Output voltage precision (V)	220±1.5%								
	Output frequency precision (Hz)	50±0.1% Or 60±0.1%								
	Waveform	Pure sine wave								
	Total harmonic distortion (THD)	≤3% (linear load)								
	Dynamic response time	5% (load 0←→100%)								
	Power factor (PF)	0.8								
	Overload capacity	100%-120% 60s 121%-150% 10s								
	Inversion efficiency (80% resistive load)	≥85%								
	By-pass conversion time (ms)	≤5ms								
Working environment	Dielectric strength (input and output)	1500Vac, 1 minute								
	Noise (1m)	≤40dB								
	Operating environment temperature	-20℃~+50℃								
	Humidity	0~90%, no moisture condensation								
	Operating altitude (m)	≤2000								
	Communication	RS232 and RS485, SNMP optional								
Indication	LCD display	Input and output voltage, frequency, output current, temperature, percentage, etc.								
	inverter status	Normal mains, normal inversion, battery under-voltage and output overload								
Mechanical size(mm)	Standard rack				430*482*88			436*482*176		
	Depth × Width × Height	347*482*88								
Protection function	DC input reverse polarity protection	Available							N/A	
	Normal protections	Input under-voltage and overvoltage, output overload and short circuit protections, etc.								

IP65 hybrid inverter



1. Bi-Directional Power Flow:

Hybrid inverters support bi-directional power flow, enabling energy to be both, imported from the grid and exported to the grid or stored in batteries.

2. Battery Energy Storage:

Hybrid inverters have built-in battery management systems that allow them to charge and discharge batteries, storing excess solar energy for use during peak demand or grid outages.

3. Grid Independence:

Hybrid inverters can operate independently of the grid during power outages,

allowing homeowners to have access to backup power when the grid is down.

4. Off-Grid Capability:

Hybrid inverters can operate in off-grid mode, making them suitable for remote locations or areas without access to the utility grid.

MODEL		SH48V6KWS	SH48V8KWS	SH48V10KWS	SH48V12KWS	SH48V6KWT	SH48V8KWT	SH48V10KWT	SH48V12KWT
Input									
PV	Max input power	7.8kW	10.4kW	13kW	15.6kW	7.8kW	10.4kW	13kW	15.6kW
	Input Voltage	370V (125V~500V)				550V (160V~800V)			
	Max input current	13+13	20+20	26+26+26	26+26+26	13+13			26+13
	Charge mode	MPPT				MPPT			
	No. of MPPT Trackers	2		3				2	
	No. of Strings Per MPPT Tracker	1+1		1+1+1				1+1	
	Rated input voltage	370Vdc				550Vdc			
Vmp Range	150~425Vdc				200~650Vdc				
Battery	Type	Lead-acid or Li-Ion				Lead-acid or Li-Ion			
	Battery Voltage Range(V)	40-60				40-60			
	Max discharge current(A)	135	190	220	250	120	160	200	240
AC&Generator	Input voltage	Single phase 220/230 Vac				Three phase 220/230/380/400 Vac			
	Frequency	50-60Hz				50-60Hz			
	Rated Current(A)	27.3	36.4	45.5	54.6	9.1	12.1	15.2	18.2
	Max Current(A)	30	40	50	60	10	13.4	16.7	20
Output									
AC output	Rated capacity	6kW	8kW	10kW	12kW	6kW	8kW	10kW	12kW
	Max capacity	6.6kW	8.8kW	11kW	13.2kW	6.6kW	8.8kW	11kW	13.2kW
	Output voltage	Single phase 220/230 Vac				Three phase 220/230/380/400 Vac			
	Frequency	50/60Hz				50/60Hz			
	Rated Current(A)	26.1	34.8	43.5	52.2	8.7	11.6	14.5	17.4
	Power factor	0.8							
	Waveform	Pure sine wave							
	Transfer time(AC to DC)	<10ms							
	Transfer time(DC to AC)	<10ms							
	Output voltage regulation	10%rms							
	Bypass Mode	Yes							
	Saver Mode	Yes							
On grid Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Efficiency	>95%	>95%	>95%	>95%	>95%	>95%	>95%	>95%	
DC output	Charging Strategy for Li Battery	Self-adaption to BMS				Self-adaption to BMS			
UPS mode	Max charging current	135	190	220	250	120	160	200	240
GENERAL									
Display	LCD display	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output	Input AC, Output Battery Alarm, Fault Battery Charge Output
	LED Indicator status	AC Line In: Green Inverter: Yellow Charging: Yellow Alarm: Red							
Interface	Communication Parallel Wifi Dry contact	CAN Max support 10pcs External For generator input				CAN Max support 10pcs External For generator input			
Environment	IP grade Temperature Cooling Acoustic Noise(db)	IP65 -25~60℃ Smart Cooling <55dB				IP65 -25~60℃ Smart Cooling <55dB			
Mechanical	Size	346*506*255mm	426*526*255mm	446*576*254mm	446*576*254mm	446*576*254mm			
	Carton dimension	530*600*300mm	530*600*300mm	630*900*380mm	630*900*380mm	630*900*380mm			
	Net Weight	24KG	29KG	31KG	32KG	37KG	39KG	41KG	42KG
	Gross weight	28KG	34KG	36KG	37KG	42KG	45KG	48KG	50KG

TK Series Industrial Solar Inverter



1. Comprehensive circuit and load protections over-current, over-temp, overload, reverse polarity, over voltage, low voltage;
2. Auto restart when AC in recovering;
3. Toroidal power transformers design ; power frequency transformer with high efficiency ;
4. Utility bypass function with fast load transfer switch;

5. Remote Power Management optional via RS-232 port; Optional SNMP card;

6. Optional three working modes: AC mains first, DC inverter first, pure DC inverter;

TK series 2K - 6K (x for number 2 - 6)				
Model		2K	3K	5K -6K
Power rating		2KW	3KW	5KW -6KW
Cell	cell voltage	24VDC/48VDC		48VDC
	Overdischarge protection voltage	21VDC / 42VDC (by default)		42V DC (Default)
	Battery type	Lead-acid or LiFePo4		
Municipal electricity input	Phase position	monophase +G		
	Input voltage	AC 220V/230V ±5%		
	frequency	50Hz /60Hz±5%		
	Umains charge current	10A -30A(MAX)		
MPPT controller	Enter the number of photovoltaic panels	1		
	input voltage range	DC36-180V/ DC60-180V		DC 60-180V
	Recommended operating voltage	108Vdc	108Vdc	108Vdc
	Maximum open -circuit voltage	180Vdc	180Vdc	180Vdc
	rated current	40A/60A/80A		
	Generalized voltage	14.2V/12V;28.4V/24V;56.8V/48V		
	Constant charge voltage	14V/12V;28V/24V;56V/48V		
	Floating charge voltage	13.5V/12V;27V/24V;54V/48V		
Inverse output	productive ness	≥96.5%		
	The AC output voltage	220VAC; + 5% (inversion mode)		
	Output frequency	50 / 60 HZ + 1% (inversion mode)		
	discharge waveform	pure sine wave		
	Inversion efficiency	>90%		
	Overload capacity	101%-120%/30s;>125%300ms:		
	Defensive function	Battery overvoltage protection, battery undervoltage protection, overload protection, short circuit protection, overtemperature protection, etc.		
	Switching period	0-5ms		
Isolation method	Power frequency transformer			
Complete performance	Working temperature	0-40°C		
	Storage temperature	-15 ~ +50°C		
	Relative humidity	0-90% (no condensation)		

48VDC Solar inverter



1. MPPT efficiency 98%;
2. Auto restart when AC in recovering;
3. RS232 communication port & BMS RS485;
4. WIFI and GPRS optional;
5. Built in transformer, avoid overload and over voltage protection.

Input	
Rated voltage & Frequency	220Vac ; 50Hz/60Hz
Voltage range	154~265Vac;185~264Vac
Charing mode	
DC input voltage & range	48Vdc ;
Battery type	Lithium battery ,lead acid battery , Gel battery , water battery
Charging current	21A
Floating charging Voltage	54Vdc
Charging protection	66Vdc
Solar charging mode(MPPT type)	
Efficiency	98% Max
Max PV array open cicuit voltage	150Vdc
PV voltage accuracy	±2V
MPPT	60~150Vdc
Default charging current	60A
Outputput	
Output voltage	220Vac
Output frequency	50Hz/60Hz
Parallel uneven flow	<3% rated current RMS
No load power sonsumptic	<67W @48V
Inversion Efficiency	80%
Transfer time (AC main to DC)	<10ms
Transfer time (Bypass switch time)	<20ms
Working Enviroment	
Dielectric strength	2000 Vac/10mA/60s
Humidity	5%~95%, no moisture condensation
Storage temperature	-20°C~+50°C
Noise(1m)	<55dB
Communication	RS232 and BMS RS485

Colorful LCD LED indicator



CONNECTION



24VDC Solar inverter



1. MPPT efficiency 98%;
2. Auto restart when AC in recovering;
3. RS232 communication port & BMS RS485;
4. WIFI and GPRS optional;
5. Built in transformer, avoid overload and over voltage protection.

Colorful LCD LED indicator



CONNECTION



MODEL	NT-24N3K
Phase	Single phase
Rated power	3000VA/2400W
Input	
Rated voltage & Frequency	220Vac ; 50Hz/60Hz
Voltage range	154~265Vac;185~264Vac
Charing mode	
DC input voltage & range	24Vdc ;
Battery type	Lithium battery,lead acid battery, Gel battery,water battery
Charging current	30A
Floating charging Voltage	27Vdc
Charging protection	29Vdc
Solar charging mode(MPPT type)	
Efficiency	98% Max
Max PV array open cicuit voltage	150Vdc
PV voltage accuracy	±2V
MPPT	30~150Vdc
Default charging current	60A
Outputput	
Output voltage	220Vac
Output frequency	50Hz/60Hz
Parallel uneven flow	<3% rated current RMS
No load power sonsumptic	<67W@48V
Inversion Efficiency	80%
Transfer time (AC main to DC)	<10ms
Transfer time (Bypass switch time)	<20ms
Working Enviroment	
Dielectric strength	2000Vac/10mA/60s
Humidity	5%~95%, no moisture condensation
Storage temperature	-20°C~+50°C
Noise(1 m)	<55dB
Communication	RS232 and BMS RS485