

### RTI Series – Telecom Inverters High Frequency Pure Sine Wave Inverter (220V AC Output)

#### Feature:

- The advanced PWM an SPWM inverter control technology, back-up type single double conversion structure,
- Support 220/230V, 50/60Hz power system, adaptive frequency;
- Wide range of input voltage and frequency, strong ability to adapt power grid;
- Strong load adaptability, output overload and short circuit protection;
- The digital control CPU, higher stability;
- Built-in high power fan of the system, which greatly improves the reliability of the system;
- The built-in DC input soft start function, can greatly improve the impact of the input source which is more safe and reliable.



#### Application Diagram



AC



DC Power



Off Grid Inverter



Load

### TECHNICAL DATA

TECHNICAL INDEX (VA)		RTI-0.8	RTI-1.6	RTI-2.4	RTI-3.2	RTI-4	RTI-4.8	RTI-6.4	RTI-8
24V Allowable range of Input DC voltage		Cutoff voltage: $\leq 20\text{Vdc}$ , or $\geq 30\text{Vdc}$ Startup voltage: 22Vdc - 28Vdc							
48V Allowable range of Input DC voltage		Cutoff voltage: $\leq 40\text{Vdc}$ , or $\geq 60\text{Vdc}$ Startup voltage: 45.5Vdc - 57Vdc							
110V Allowable range of Input DC voltage		Cutoff voltage: $\leq 90\text{Vdc}$ , or $\geq 135\text{Vdc}$ Startup voltage: 104Vdc - 131Vdc							
220V Allowable range of Input DC voltage		Cutoff voltage: $\leq 180\text{Vdc}$ , or $\geq 275\text{Vdc}$ Startup voltage: 208Vdc - 260Vdc							
Maximum current	24 DC Input	42A	83A	125A	165A	208A			
	48 DC Input	21A	42A	63A	83A	104A	152A	167A	208A
	110 DC Input	9A	18A	27A	36A	45A	55A	72A	90A
	220 DC Input	4.5A	9A	13.5A	18A	22.5A	27A	36A	45A
AC by-pass input	Allowable by-pass voltage (Vac)	180Vac - 260Vac							
	Rated input current (A)	4.5A	9.1A	13.6A	18.2A	22.7A	27.2A	36.3A	45.4A
	By-pass conversion time (ms)	<5 ms							
AC output	Rated capacity (VA)	1KVA	2KVA	3KVA	4KVA	5KVA	6KVA	8KVA	10KVA
	Rated input power (W)	800W	1600W	2400W	3200W	4000W	4800W	6400W	8000W
	Output voltage	220Vac (+/-10V Adjustable LCD Display)							
	Output frequency	50-60Hz (Auto sync with bypass input)							
	Rated output current	3.6A	7.3A	11.0A	14.5A	18.2A	21.8A	29.0A	36.3A
	Output voltage precision (V)	220 Vac +/-1.5%							
	Output frequency precision (Hz)	50Hz +/- 0.1% or 60Hz +/-0.1%							
	Waveform	Pure sine wave							
	Total harmonic distortion (THD)	$\leq 3\%$ (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)	$\geq 85\%$ (80% linear load)							
	By-pass conversion time (ms)	$\leq 5\text{s}$							
Working environment	Dielectric strength (input and output)	1500Vac, 1 minute							
	Noise (1m)	$\leq 40\text{dB}$							
	Operating environment temperature	$-20^{\circ}\text{C} - +50^{\circ}\text{C}$							
	Humidity	0~90%, no moisture condensation							
	Operating attitude (m)	$\leq 2000\text{m}$							
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							