





LINE INTERACTIVE TOPOLOGY

	LINE INTERA
Functions	
Brownout Protection	This unit boosts the output voltage (or transfers to Battery) during Brownout or Low input line conditions and returns to Normal when input power stabilizes and returns to Normalcy. These values for Transfer / Retransfer, To / From Battery / Boost mode are user programmable
Generator Compatibility	Generator mode allows for more variations in input voltage and frequency for use with an AC generator
Battery Charger 10A	PFC switch-mode charger is temperature- compensated (-2.5 to -5 mV/C/Cell) with automatic shut off above 50 deg C
Inverter Mode	Capable of running continuously in inverter mode
Inverter Mode Current Limit	Continuous electronic current limit is provided
Measurements available for remote monitoring	- Input and output voltages - Input line frequency - Battery voltage and current - Battery and heat sink temp
Mechanical Specific	ations
Dimensions (H x W x D)	TRTC-2005-N1/N2: 133 mm x 432 mm x 254 mm 3U 5.3" x 17.0" x 10"
Weight	TRTC-2005-N1/N2: 21 kg / 46 lbs
Input Connection	3 Position Terminal Block OR Anderson PP45 Quick connector OR IEC socket
Output Connection	3 Position Terminal Block OR Anderson PP45 Quick connector OR IEC socket
Mounting	19" (483 mm) or 23" (584 mm) rack/shelf mount

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Cooling (Ext. Fan)	Microprocessor controlled, DC Fan TRTC-2005-N1/N2: 48VDC
Audible Noise Level	<40 dBA
Operating Temperature	-37° C to + 74°C / -35° F to +165° F
Storage Temperature	-50° C to + 75°C / -58° F to +167° F
Humidity	Less than or equal to 95%, Non-Condensing
Altitude	10,000 ft / 3048 meters (See Note 1)

Note: De-rate operating temperature above 4900 ft (1500m) by 2° C per 1000 ft (300m). Due to ongoing product improvements, specifications are subject to change without notice.

Electrical Specification	ns
Output Apparent Power	TRTC-2005-N1/N2:
	2000VA (Inverter Mode)
	2000VA (Line Mode)
Output Active Power	TRTC-2005-N1/N2: 2000W
Inverter Mode and	11(1C-2003-11/11(2, 2000))
Line Mode	
Power Factor	1.0
Input Frequency +/- 3Hz	120V: 60Hz
Output Frequency +/- 0.3Hz	220/230/240V: 50/60Hz
Input Voltage Range	120V: 85 to 150 VAC
	User programmable 220V: 168 to 275 VAC
	User programmable
	230V: 175 to 287 VAC User programmable
	240V:183 to 300 VAC
	User programmable
Output Voltage	120/220/230/240 VAC
Inverter Mode	(Tolerances are User programmable) 120/220/230/240 VAC+/-5%
Maximum Input Current	120V:
	TRTC-2005-N1: 30A 220/230/240V:
	All Models: 20A
	7
Transformer	Linear (Non-Isolated)
Transfer Time	
	Linear (Non-Isolated) 4 to 10 ms <30
Transfer Time UPS	4 to 10 ms
Transfer Time UPS PTS	4 to 10 ms <30
Transfer Time UPS PTS TOTAL	4 to 10 ms <30 <65
Transfer Time UPS PTS TOTAL Inrush Current	4 to 10 ms <30 <65 Load Dependent
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load)
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio	4 to 10 ms <30 <65 Load Dependent < 3 % (Resistive Load) 3:1
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 >95% (Resistive Load)
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode	4 to 10 ms <30 <65 Load Dependent < 3 % (Resistive Load) 3:1 > 95% (Resistive Load) > 80% (Resistive Load)
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Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 > 95% (Resistive Load) > 80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response	4 to 10 ms <30 <65 Load Dependent < 3 % (Resistive Load) 3:1 > 95% (Resistive Load) > 80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC:
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 >95% (Resistive Load) >80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC: TRTC-2005-N1: 30A
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Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 >95% (Resistive Load) >80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC: TRTC-2005-N1: 30A
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Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 >95% (Resistive Load) >80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC: TRTC-2005-N1: 30A 220/230/240 VAC: All Models: 20A DC Bus:
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 >95% (Resistive Load) >80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC: TRTC-2005-N1: 30A 220/230/240 VAC: All Models: 20A DC Bus: 60Amp Circuit Breaker
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 > 95% (Resistive Load) > 80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC: TRTC-2005-N1: 30A 220/230/240 VAC: All Models: 20A DC Bus: 60Amp Circuit Breaker TRTC-2005-N1/N2
Transfer Time UPS PTS TOTAL Inrush Current Output Waveform THD Load Crest Ratio Efficiency, Line Mode Efficiency, Inverter Mode Nominal Battery String Voltage Step Load Response Over current Protection	4 to 10 ms <30 <65 Load Dependent <3 % (Resistive Load) 3:1 >95% (Resistive Load) >80% (Resistive Load) TRTC-2005-N1/N2: 48VDC 1 Cycle Full recovery. Single pole circuit breaker for input 120VAC: TRTC-2005-N1: 30A 220/230/240 VAC: All Models: 20A DC Bus: 60Amp Circuit Breaker TRTC-2005-N1/N2 90Amp Circuit Breaker

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