MARATHON POWER
PREMIUM UNINTERRUPTIBLE POWER SOLUTIONS

Ruggedized Traffic UPS / BBS

2000VA / 2000W High Power BBS

Traffic control and signal equipment consistently experience power interruptions. The Marathon Power Ruggedized Traffic UPS series are maximum performance systems suitable for a wide range of transportation applications and extreme temperature environments. Designed for extended run-times, these units also feature temperature-compensated charging to maximize battery life in harsh environments. The units are extremely versatile and fully programmable to give complete control of system programming and data acquisition. They can also be customized to meet the requirements of your transportation application, making our units the most versatile battery back-up solution for traffic control and public safety.

Our largest model in the series is a 2000VA / 2000 watt model with a 48VDC bus that is designed for today's modern traffic cabinets and the smaller loads that are now prevalent with the use of LED lighting for signals. The unit is contained in a rugged, low profile 3U, rack- or shelf-mount chassis and has 4-line LCD panel to display various data, parameters and settings. There is also a 12 amp internal charger to ensure that larger battery strings are recharged in an appropriate amount of time.

FEATURES & BENEFITS

- ❑ Line Interactive Topology
- ❑ NEMA TS2 Certified
- ❑ Backlit 4-line LCD Display and LED indicators.
- ❑ 12A selectable temperature-compensated charger.
- ❑ Recessed Anderson Powerpole connectors.
- ❑ Fits in all types of traffic enclosures, control panels and custom pedestals.
- ❑ Low harmonic AC sine wave output in backupmode.
- ❑ Fully programmable AC threshold voltages.
- ❑ Transient voltage protection from damaging spikes & surges.
- ❑ External connections accessible from front panel.
- ❑ Six fully programmable dry contacts for greater control.
- ❑ Remote access via RS-232, USB & Network.
- ❑ Time / Date stamp of events and alarms - up to 100 events.
- ❑ Designed with input relay with Anti-Back Feed Protection function, conforming to UL 1778.

APPLICATIONS

- ❑ Traffic Controls
- ❑ Signal Equipment
- ❑ Transportation Equipment
- ❑ Automated Parking Facilities
- ❑ Electronic Tolls
- ❑ Transportation Signs

Scan to view more

Marathon Power Inc. Marathon Power

2538 E. 54th Street Huntington Park, CA 90255 • 310-689-2328
sales@marathon-power.com • marathon-power.com

WE GO THE DISTANCE FOR YOU

LINE INTERACTIVE TOPOLOGY

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 Specifications	
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
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.

PART NUMBER: TRTC-2005-N1

Electrical Specifications	
Output Apparent Power	TRTC-2005-N1/N2: 2000VA (Inverter Mode) 2000VA (Line Mode)
Output Active Power Inverter Mode and Line Mode	TRTC-2005-N1/N2: 2000W
Power Factor	1.0
Input Frequency +/- 3Hz Output Frequency +/- 0.3Hz	120V: 60Hz 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 Inverter Mode	120/220/230/240 VAC (Tolerances are User programmable) 120/220/230/240 VAC+/-5%
Maximum Input Current	120V: TRTC-2005-N1: 30A 220/230/240V: All Models: 20A
Transformer	Linear (Non-Isolated)
Transfer Time UPS PTS TOTAL	 4 to 10 ms <30 <65
Inrush Current	Load Dependent
Output Waveform THD	< 3 % (Resistive Load)
Load Crest Ratio	3:1
Efficiency, Line Mode	> 95% (Resistive Load)
Efficiency, Inverter Mode	> 80% (Resistive Load)
Nominal Battery String Voltage	TRTC-2005-N1/N2: 48VDC
Step Load Response	1 Cycle Full recovery.
Over current Protection	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
DC Power	Drawn from batteries
Compliance	NEMA TS2 Certified. Conforms to UL 1778, CSA 107.1 Upstream back-feed voltage < 1VAC

2538 E. 54th Street, Huntington Park, CA 90255 • 310-689-2328 • sales@marathon-power.com • marathon-power.com