



**TRC2002**  
**2U RACKMOUNT**  
**COMPUTER**

No. TRC2002-xx    Revision A

**INSTALLATION GUIDE**

Publication No. 8402002-11110



## **WARRANTY**

The following is an abbreviated version of Trenton Systems's warranty policy for rackmount computer products. For a complete warranty statement, contact Trenton or visit our website at <http://www.trentontechnology.com/>.

All boards used in systems delivered by Trenton are covered under a pass-through warranty. For example, if Trenton PICMG 1.3 or AdvancedMC boards are used in the system then these boards will carry a five-year warranty. All other system sub-components including but not limited to power supplies, DVDs, CD-ROMS, etc. are covered under their original manufacturer's warranty. All systems built by Trenton are warranted against defects in material, workmanship and design for a period of one year from date of delivery. Repair or replacement products will be warranted for a period of three months from the date of shipment or for the remainder of the original warranty period for that particular product, whichever is longer. Any software or firmware that is delivered by Trenton will be warranted for a period of one year to perform in accordance with published specifications prepared, approved and issued by Trenton and/or the appropriate 3<sup>rd</sup> party vendor. Contact Trenton for the complete system warranty policy.

Buyer agrees that if a Trenton product proves defective, Trenton is only obligated to repair, replace or refund the purchase price of this product at Trenton's discretion. The warranty is void if the product has been subjected to alteration, neglect, misuse, or abuse; if any repairs have been attempted by anyone other than Trenton; or if failure is caused by accident, acts of God, or other causes beyond the control of Trenton. Trenton reserves the right to make changes or improvements in any product without incurring any obligation to similarly alter products previously purchased.

In no event shall Trenton Systems Inc. be liable for any defect in hardware or software or loss or inadequacy of data of any kind, or for any direct, indirect, incidental or consequential damages arising out of or in connection with the performance or use of the product or information provided. Trenton Systems Inc.'s liability shall in no event exceed the purchase price of the product purchased hereunder. The foregoing limitation of liability shall be equally applicable to any service provided by Trenton Systems Inc.

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Products returned for repair must be accompanied by a Return Material Authorization (RMA) number, obtained from Trenton Systems prior to return. Freight on all returned items must be prepaid by the customer, and the customer is responsible for any loss or damage caused by common carrier in transit. Items will be returned from Trenton Systems via Ground, unless prior arrangements are made by the customer for an alternative shipping method

To obtain an RMA number, call us at (800) 875-6031 or (770) 287-3100. We will need the following information:

- Return company address and contact
- Model name
- Serial number from chassis label
- Description of the failure

An RMA number will be issued. Mark the RMA number clearly on the outside of each box, include a failure report for each item and return the product(s) to our Gainesville, GA facility:

TRENTON  
2350 Centennial Drive  
Gainesville, GA 30504  
Attn: Repair Department

Contact Trenton for our complete service and repair policy.

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## ***Handling Precautions***

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**WARNING:** This system has internal components which may be damaged by electrostatic discharge.

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To protect internal components from electrostatic damage, be sure to observe the following precautions when handling or storing the backplane:

- The rackmount computer has a net chassis weight of approximately 23.8lbs. (10.81kg) not including any added system option cards. Use proper lifting techniques when moving and installing the system.
- When removing or installing boards and sub-components, keep these components in their static-shielded bag and/or packaging until you are ready to for component installation.
- Handle the sub-components by their edges.
- Do not touch any sub-component I/O connector pins. Do not apply pressure or attach labels to the board-level sub-components.
- Use a grounded wrist strap at your system or ground yourself frequently by touching the metal chassis of the system before handling any sub-components.
- Ensure the systems external power source has a solid connection to an earth ground.
- Use antistatic padding on all work surfaces when installing or removing sub-components.
- Avoid static-inducing carpeted areas.

## ***Before You Begin***

### **INTRODUCTION**

It is important to be aware of the system considerations listed below before installing your Trenton rackmount computer. Overall system performance may be affected by incorrect usage of these features.

### **EXTERNAL POWER SOURCE**

Incoming AC power must be supplied to both of the receptacles located on the rear of the chassis. This dual AC power connection ensures that the main system power supply as well as the N-1 fail-over supply are each connected to a power source with a solid earth ground and is capable of delivering 110-240VAC at 50 to 60Hz. The typical maximum current draw of the rackmount computer is 6A per incoming power receptacle.

### **INTERNAL 5V CURRENT LIMIT**

The maximum current limits for the +5V, +3.3V and +12V outputs from the system power supply are 25A, 20A and 28A respectively. The system's power monitoring circuits will shut the system down if these maximum current limits are drawn from the power supply.

### **CHASSIS AIRFLOW**

When installing the chassis, ensure that a minimum free air space is available around the system. The installation should have a minimum of 4-6 inches (101-152mm) behind the chassis and 1-3 inches (25-75mm) in front of the chassis. Any front cabinet doors or access aisles must accommodate a TRC2002 front chassis clearance of at least 4.0" (102mm) in order to provide proper cable clearances for any front panel I/O port connections and to gain access to the system air filter for maintenance. Ideally, a chassis clearance of 0.5-1.5 inches (13-38mm) above the system is desirable, but not required.

### **CHASSIS RACK MOUNTING**

The TRC2002 system can be installed in a rackmount cabinet that conforms to EIA standards for computer equipment with 19-inch wide panels. The cabinet must be tall enough to accommodate the computer's height and deep enough to accommodate the system's depth, while providing the proper clearances for air flow and cabling. A cabinet with a standard depth of 31.5 inches (800mm) should be sufficient; however, a rack with a non-standard depth dimension of at least 26 inches (660mm) will provide the suggested minimum front and rear chassis clearances needed for an installation.

## Chapter 1 - System Overview

### DESCRIPTION

The Trenton TRC2002-xx is a CE-compliant\*, 2U rackmount computer chassis that offers many choices in HDD and media drive bay configurations with system support for 2U butterfly form factor backplanes and a variety of PICMG 1.3 system host boards (SHBs) or PICMG 1.0 single board computers (SBCs). This rackmount system can be configured with a single or dual-processor SHBs/SBCs to deliver the multi-core performance needed in advanced communication systems.

The TRC2002-xx rackmount chassis supports a front access and removable HDD carrier tray, removable rear-access power supplies and a front access air filter. These components maximize power delivery and cooling to ensure long-life system reliability with minimal Mean-Time-To-Repair (MTTR) times. PICMG 1.3 system host board or PICMG 1.0 single board computer options are supported in this chassis.

*\*Refer to the TRC2002-xx Certificate Of Compliance document in chapter six for a complete listing of the Council Directive: 2004/108/EC-EMC Directive standards to which conformity is declared.*

### BACKPLANE & SHB/SBC MODELS

**NOTE:** The chart below illustrates potential backplane and SHB/SBCs that are supported in the current configuration of the Trenton TRC2002-xx. The two characters to the right on the hyphen indicate the specific backplane and SHB/SBC combination with the first character indicating the system's backplane.

System Model Number	Backplane Model	SHB Model Numbers	Description of Backplane and SHB Combination
TRC2002-01	3 <sup>rd</sup> Party PCIe Butterfly Backplane	506966-125-xG, 506966-425-xG, 506966-053-xG, 506966-224-xG, 506966-222-xG	Backplane: 1 SHB Slot, 1 x16 PCIe and 4 x1 PCIe card slots  SHB: Dual processor JXT6966 board (model #s 6696-125, -425, -053, -224 and -222)  See <a href="#">JXT</a> web page for more details on specific SHB model numbers
TRC2002-02	3 <sup>rd</sup> Party PCIe Butterfly Backplane	506966-165-xG, 506966-465-xG, 506966-093-xG, 506966-264-xG, 506966-262-xG	Backplane: 1 SHB Slot, 1 x16 PCIe and 4 x1 PCIe card slots  SHB: Single processor JXTS6966 board (model #s 6966-165, -465, -093, -264 and -262)  See <a href="#">JXTS</a> web pages for more details on specific SHB model numbers
TRC2002-03	3 <sup>rd</sup> Party PCIe Butterfly Backplane	506731-129-xG, 506731-405-xG	Backplane: 1 SHB Slot, 1 x16 PCIe and 4 x1 PCIe card slots  SHB: Single processor TQ9 board (model #s 6731-129 and -405)  See <a href="#">TQ9</a> web pages for more details on specific SHB model numbers
TRC2002-04	3 <sup>rd</sup> Party PCIe Butterfly Backplane	506731-129-xG, 506731-405-xG	Backplane: 1 SHB Slot, 1 x16 PCIe, 1 x4 PCIe and 3 PCIe card slots  SHB: Single processor TQ9 board (model #s 6731-129 and -405)  See <a href="#">TQ9</a> web pages for more details on specific SHB model numbers

System Model Number	Backplane Model Numbers	SHB Model Numbers	Description of Backplane and SHB Combination
TRC2002-05	3 <sup>rd</sup> Party PCIe Butterfly Backpane	506966-125-xG, 506966-425-xG, 506966-053-xG, 506966-224-xG, 506966-222-xG	Backplane: 1 SHB Slot, 1 x4 PCIe and 4 PCI-X card slots  SHB: Dual processor JXT6966 board (model #s 6696-125, -425, -053, -224 and -222)  See <a href="#">JXT</a> web page for more details on specific SHB model numbers
TRC2002-06	3 <sup>rd</sup> Party PCIe Butterfly Backpane	506966-165-xG, 506966-465-xG, 506966-093-xG, 506966-264-xG, 506966-262-xG	Backplane: 1 SHB Slot, 1 x4 PCIe and 4 PCI-X card slots  SHB: Single processor JXTS6966 board (model #s 6966-165, -465, -093, -264 and -262)  See <a href="#">JXTS</a> web pages for more details on specific SHB model numbers
TRC2002-07	506736-007, 506736-027  See <a href="#">BPX6736</a> web page for more details on specific 6736 backplane models	506966-125-xG, 506966-425-xG, 506966-053-xG, 506966-224-xG, 506966-222-xG	Backplane: 1 SHB Slot, 1 x8 PCIe electrical (x16 mech.), 1 x8 PCIe (x8 mech.), and 2 x1 PCIe (x8 mech.) card slots  SHB: Dual processor JXT6966 board (model #s 6696-125, -425, -053, -224 and -222)  See <a href="#">JXT</a> web page for more details on specific SHB model number
TRC2002-08	506736-007, 506736-027  See <a href="#">BPX6536</a> web page for more details on specific 6736 backplane models	506966-165-xG, 506966-465-xG, 506966-093-xG, 506966-264-xG, 506966-262-xG	Backplane: 1 SHB Slot, 1 x8 PCIe electrical (x16 mech.), 1 x8 PCIe (x8 mech.), and 2 x1 PCIe (x8 mech.) card slots  SHB: Single processor JXTS6966 board (model #s 6966-165, -465, -093, -264 and -262)  See <a href="#">JXTS</a> web pages for more details on specific SHB model numbers

System Model Number	Backplane Model Numbers	SHB Model Numbers	Description of Backplane and SHB Combination
TRC2002-09	506741-007, 506741-027  See <a href="#">BPG6741</a> web page for more details on specific 6741 backplane models	506966-125-xG, 506966-425-xG, 506966-053-xG, 506966-224-xG, 506966-222-xG	Backplane: 1 SHB Slot, 1 x16 PCIe electrical (x16 mech.), and 2 x1 PCIe (x8 mech.) card slots  SHB: Dual processor JXT6966 board (model #s 6696-125, -425, -053, -224 and -222)  See <a href="#">JXT</a> web page for more details on specific SHB model number
TRC2002-10	506741-007, 506741-027  See <a href="#">BPG6741</a> web page for more details on specific 6741 backplane models	506966-165-xG, 506966-465-xG, 506966-093-xG, 506966-264-xG, 506966-262-xG	Backplane 1 SHB Slot, 1 x16 PCIe electrical (x16 mech.), and 2 x1 PCIe (x8 mech.) card slots  SHB: Single processor JXTS6966 board (model #s 6966-165, -465, -093, -264 and -262)  See <a href="#">JXTS</a> web pages for more details on specific SHB model numbers
TRC2002-11	506741-007, 506741-027  See <a href="#">BPG6741</a> web page for more details on specific 6741 backplane models	506731-129-xG, 506731-405-xG	Backplane 1 SHB Slot, 1 x16 PCIe electrical (x16 mech.), and 2 x1 PCIe (x8 mech.) card slots  SHB: Single processor TQ9 board (model #s 6731-129 and -405)  See <a href="#">TQ9</a> web pages for more details on specific SHB model numbers

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**CAUTION:** Risk of explosion if the single board computer / system host board battery is replaced by and incorrect type. Dispose of used batteries according to the instructions.

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Consult with Trenton for other possible backplane and SHB/SBC combinations compatible with the TRC2002-xx rackmount computer.

Consult with Trenton for available storage drives and optical media drives compatible with the TRC2002-xx rackmount computer.

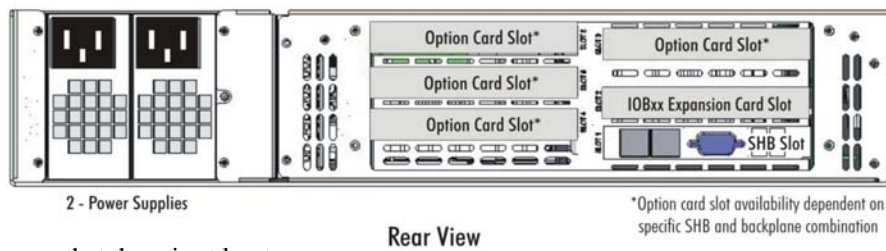
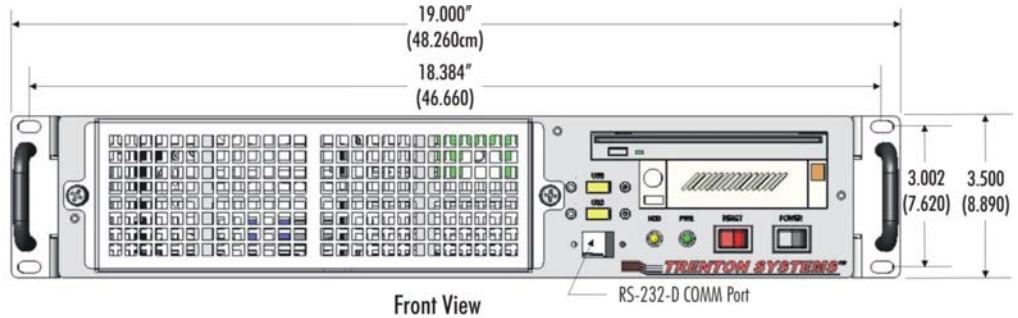
#### PACKING LIST

Trenton TRC2002 rackmount computers are shipped with the following

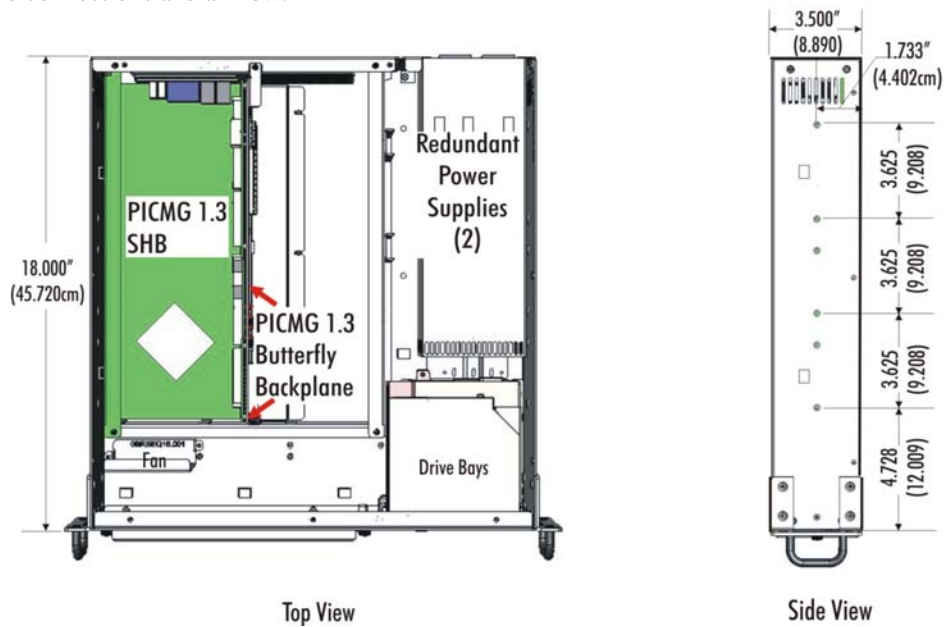
- Rackmount computer
- Two, 10ft. (3.1m) AC power cords

## Chapter 2 - Physical Dimensions & Layout Drawings

### LAYOUT DIMENSION DRAWING



Note: Ensure that there is at least 4-6 inches (101-152mm) front and rear chassis clearance for cable connections and airflow.



## ***Chapter 3 - Installation Instructions***

### **ENVIRONMENTAL CONSIDERATIONS**

When installing the chassis, ensure that a minimum free air space is available around the system. The installation should have a minimum of 4-6 inches (101-152mm) in front of and behind the chassis and 1-3 inches (25-75mm) in front of the chassis. Ideally, a chassis clearance of 0.5-1.5 inches (13-38mm) above the system is desirable, but not required. The computer is equipped with fans to help ensure proper cooling.

### **RACK MOUNTING**

The TRC2002 system can be installed in a rackmount cabinet that conforms to EIA standards for computer equipment with 19-inch wide panels. The cabinet must be tall enough to accommodate the computer's height and deep enough to accommodate the system's depth, while providing the proper clearances for air flow and cabling. A cabinet with a standard depth of 31.5 inches (800mm) should be sufficient; however, a rack with a non-standard depth dimension of at least 26 inches (660mm) will provide the suggested minimum front and rear chassis clearances needed for an installation.

The TRC2002 is designed to be supported in the cabinet with rack slides or placed on a cabinet shelf. The front flanges of the computer are designed to secure the TRC2002 to the rack cabinet's front mounting rails

### **RACKMOUNT INSTRUCTIONS**

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

F) Chassis Access – Use in a RESTRICTED ACCESS LOCATION only.

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**NOTE:** Only trained personnel shall install or operate this equipment

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## SLIDE RAIL INSTALLATION

Trenton offers a slide rail kit to help with the installation of a 2U Trenton Systems' computer chassis. Here are the installation instructions Trenton 18" Slide Rail kit.

1. Remove slide rails from the box along with the rail frames, optional rack frame mounting brackets and the mounting hardware. The Trenton 18" Slide Rail kit includes the following items.
  - 2, 18" slide rails
  - 4, rail frames
  - 4, rack frame mounting brackets (optional)
  - 1, mounting hardware bag number S-047-0 includes:
    - 10 mounting rail to computer chassis screws
  - 1, mounting hardware bag number S-017-1 includes
    - 36 rail frame to 19" rack mounting screws
    - 10 nuts
    - 10 flat washer
2. Take one of the slide rails and slide the inside portion of the rail completely out until you hear an audible click.
3. On the inside of the rail, you will see a rail stop hook, push the hook up to release and detach the inside portion of the slide completely from the outside portion of the rack slide.
4. Set aside this inside portion of the rack slide. You will be mounting this part of the rack slide to a side of the computer chassis later in this procedure.
5. Repeat steps 3 and 4 for the other rack slide. (Refer to figure 1 as necessary)

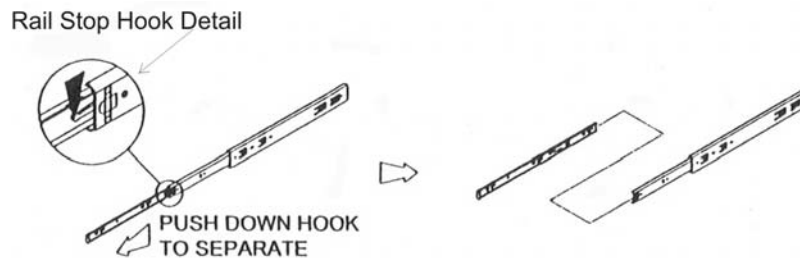


Figure 1 – Rail Stop Hook Detail

6. Using four mounting screws from hardware bag S-047-0, attach an inside rail to the left side of the computer chassis as shown in figure 2. Note – the rubber bumper on the inside rail slide needs to be facing toward the front of the computer and the cut-out portion of the rail release latch should be pointing downward indicating that the slide rail has been properly mounted to the correct side of the computer chassis.

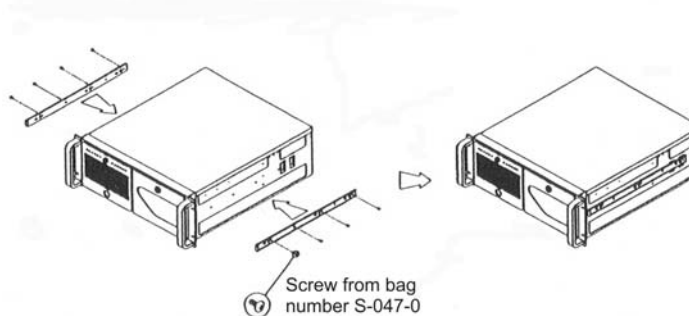


Figure 2 – Inside Rail Mounting Detail

7. Repeat step 6 for the right side on the computer and refer to figure 2 as necessary.

8. Standard 19" instrument racks have a wide variety of mounting hole types. Some mounting holes are threaded, but most of not, some mounting holes are located on side flanges rather than the front and back of the rack supports and finally some holes are round while others are rectangular. The following steps assume that your 19" instrument rack has round, non-threaded mounting holes for the slide rail frames. The optional rack frame mounting brackets accommodate the side flange rackmount hole placements. If your rack has other mounting hole types or placements, then you may need to consult with your rack supplier to obtain the correct slide rail mounting hardware.
9. The rubber bumper on the outside portion of slide rails are to be located toward the rear of the 19" rack.
10. Refer to figure 3 and attach two rail frames each to the outside portion of both rack slides using the hardware in bag number S-107-1.

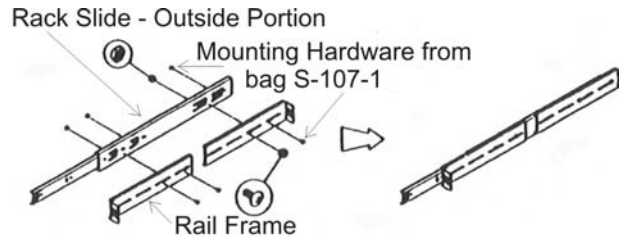


Figure 3 – Outside Rail and Frame Assembly

11. If the mounting holes are on the inside portions of your rackmount supports, then mount each assembly directly to the rack supports as shown in figure 4-A.

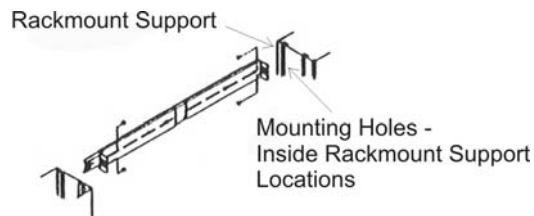


Figure 4A – Rail/Frame Mounting – Inside Rackmount Hole Locations

12. If the mounting holes are located on side flanges then you will need to use the optional rack frame mounting brackets.
13. Attach the optional brackets to the rack slides as shown in figure 4-B and attach the completed assembly to the rack supports.

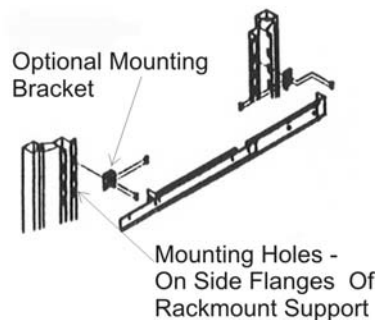


Figure 4B – Rail/Frame Mounting – Side Flange Rackmount Hole Locations

14. You will need to supply the hardware necessary to mount your completed rail and frame assemblies to the rackmount enclosure supports.

15. **CAUTION** – Ensure that when mounting the completed rail and frame assemblies to the 19” rack that the left and right assemblies are the same distance from the top or bottom of the rack. Failure to align the slide rails properly will result in the computer not being level inside the rack. If the slides are grossly misaligned then you may not be able to slide the chassis into the slide rails.
16. Refer to figure 5 and slide the chassis into the rails attached to the frame of the rackmount enclosure. (You should have another person help you lift and slide the chassis into the enclosure.)

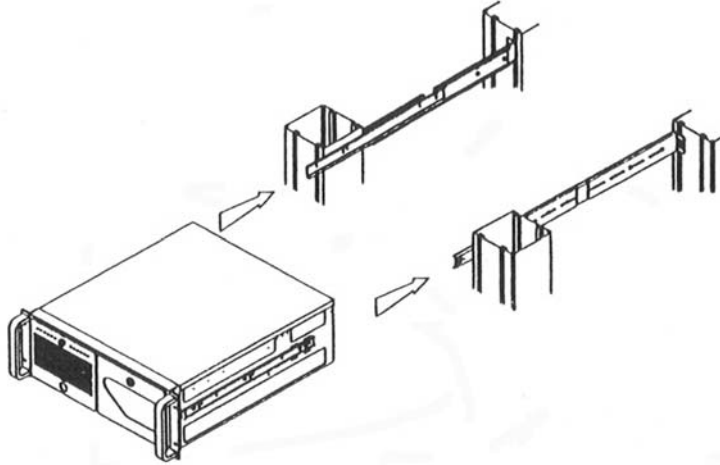


Figure 5 – Chassis Installation

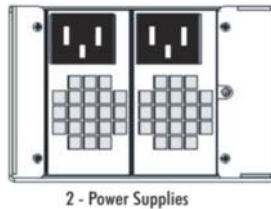
17. You should hear an audible “click” when the rail stop hooks on the slide engage with the chassis stops inside the rails mounted to the enclosure supports.
18. Push up on the rail stop hooks and push the chassis completely into the enclosure.
19. Each Trenton System chassis has two through holes on each chassis-mounting flange. Use these holes to secure your chassis to the enclosure. (Note: The hardware used in this step is highly dependent on your enclosure type; therefore, Trenton does not provide the hardware for this step.)
20. Contact Trenton Systems if you require additional assistance.

### CONNECTING AC POWER

The TRC2002-xx requires a single-phase power source providing 110-240VAC at 50 to 60Hz to both of the AC input power outlets located at the rear of the chassis. Two input power connections are needed for the main system power and N-1 fail over power. Power must be available at both of the three-pin AC input receptacles located on each supply at the rear of the system. The same over-current protection device shall protect both of the power cords.

To connect AC power to the computer:

1. Establish a chassis to earth ground connection to the TRC2002 chassis.



2. Connect the AC power cords to both AC receptacles.
3. Connect the plug end of the power cord into the main outlets.

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**NOTE:** The maximum current limits for the +5V, +3.3V and +12V outputs from the system power supply are 25A, 20A and 28A respectively. The system's power monitoring circuits will shut the system down if these maximum current limits are drawn from the power supply.

---

### INSTALLING SIGNAL CABLES

Ensure that cables connected to the TRC2002-xx rackmount computers are appropriate for the locality and are routed and secured properly in order to avoid cable or chassis damage. Coil and secure extra cable lengths in an out of the way location taking care to avoid blocking critical airflow paths such as the air intakes for the chassis fans.

## **Chapter 4 - Replacing System Components**

### **OPENING THE TRC2002-XX RACKMOUNT COMPUTER**

A trained electronics technician may need to remove the top cover of the TRC2002-xx rackmount computer to install or remove any option cards need for the application.

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**NOTE:** When installing option cards into the TRC2002 rackmount computer you must ensure that the card installation does not result in non-conformance to the safety or EMC requirements for this product.

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To open the computer:

1. Disconnect both AC power cords
  2. Remove the ten (10) screws attaching the cover to the chassis. There are three screws on the right and left-side of the chassis, two screws on the back of the chassis and one screw on the top securing the cover to the chassis
  3. Slide the cover back slightly and lift it off the chassis
  4. Ensure you are properly grounded before installing or removing option cards
  5. Remove the option card hold down bar to install or remove cards
- 

**NOTE:** NEVER install or remove any option card from a backplane if any +5V AUX / Standby LED is ON.

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### **REPLACING COMPONENTS**

The system fans and storage drives for the TRC2002-xx computer are designed for easy access. Make sure you have a top chassis clearance of at least 6" (152mm) to remove or install system cards.

### **COOLING FANS**

The three cooling fans of the TRC2002-xx are mounted along the top of the chassis. Each fan is secured to a fan carrier and can be removed by loosening the two thumbscrews and lifting out the assembly. A connector on the fan carrier connects each fan to the chassis' +12V supply line.

### **STORAGE DRIVES**

The storage drives of the TRC2002-xx are mounted to a slide carrier to allow easy insertion and removal from the chassis. The number of HDDs is dependent on your specific system requirements. The HDD and optical media drive bays are located above the system's power and reset switches. The HDD drive carrier is secured to the chassis with a thumbscrew. Loosen the thumbscrew grasp the drive carrier handle and pull to remove. Once the carrier is removed, you may mount or remove the drive or drives as necessary.

### **AIR FILTER**

As the system ages and depending on the installation you may need to periodically clean or replace the system's air filter. The filter cleaning/replacement frequency is highly dependent on the installation environment, but should be done at least once a year. Loosen the thumbscrews on either side of the filter guard and remove the filter located inside for cleaning or replacement.

## POWER SUPPLY

There are two power supplies in a Trenton TRC2002-xx rackmount computer as shown in the figure below.

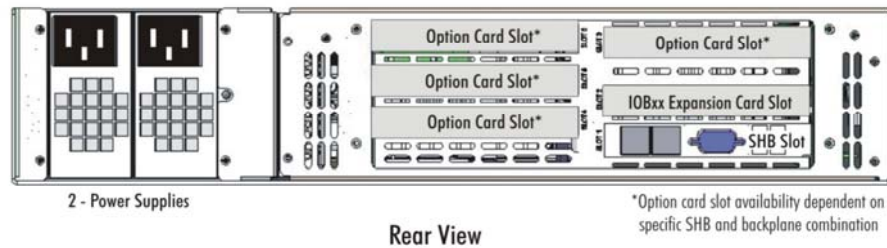


Figure 7 – System Power Supplies

Loosen the thumb latch on a power supply module and pull on the handle of the power supply to remove a failed unit from the TRC2002-xx computer.

**NOTE:** The maximum current limits for the +5V, +3.3V and +12V outputs from the system power supply are 25A, 20A and 28A respectively. The system's power monitoring circuits will shut the system down if these maximum current limits are drawn from the power supply.

**CAUTION:** Risk of explosion if the single board computer / system host board battery is replaced by and incorrect type. Dispose of used batteries according to the instructions.

## PREPARATION FOR SHIPMENT

The TRC2002-xx rackmount computer should always be removed from the rack cabinet if the unit must be shipped to another site. If possible, use the original computer shipping carton to ship the TRC2002-xx.

**NOTE:** Never ship the TRC2002-xx when it is mounted inside a rack. Damage to the rackmount computer and rack cabinet will likely result.

Reverse the installation steps in chapter three to remove the computer from the rack cabinet. Do not forget to remove the chassis' earth ground wire before attempting computer removal.

## Chapter 5 - Chassis Specifications

### ENVIRONMENTAL

Temperature	
Operating	5°C to 35°C typical
Storage	-20°C to 70°C
Cold Excursion Temp	-40°C for up to sixteen hours
Relative Humidity	5% to 90%, non-condensing

Specific operating temperature ranges for the TRC2002 rackmount computer are dependent on the components installed. Some SHBs offer extended operating temperature CPUs resulting in a system's achievable operating temperature range higher than what is stated here. The reverse can also be true in that a system subcomponent could have a lower operating temperature range that could lower the system's overall operating temperature range. Contact Trenton for more details.

### ELECTRICAL

Line Voltage	110-240VAC
Line Frequency	50-60Hz
Power Consumption	154W typical, 375W max.

### PHYSICAL

Approximate Dimensions (W x H x D)	19" x 3.5" x 18.0" 48.3cm x 8.9cm x 45.7cm
Net Weight	23.8 lbs. (10.81Kg) (doesn't include additional option cards)

### SHOCK & VIBRATION

Shock - Class 3M4 operational and non-operational under EN60721-3-3	10G operating; 100m/s <sup>2</sup> ; Type I
Vibration - Class 3M4 operational and non-operational under EN60721-3-3	Sinusoidal Vibration: 1G; 3mm; 10 m/s <sup>2</sup> ; 2-9 9-200Hz

### AGENCY APPROVAL

Environmental	IEC 60721-3-3:2002 including Class 3K3, 3Z3, 3Z4, 3M4 and 3S2 IEC 60721-3-2:1997 including Class IE23 and 2M3
CE – ECM Directive 2004/108/EC including EMI/EMC	IEC61000-6-4:2006 & IEC61000-6-2:2005 including: CISPR22:1997 + A1:2000 + A2:2002ClassA, IEC61000-3-2:2005, IEC61000-3-3:2008, IEC61000-4-2:2008, IEC61000-4-3:2008 + A1:2010, IEC61000-4-4:2004 + A1:2010, IEC61000-4-5:2005, IEC61000-4-6:2008, IEC61000-4-8:2009 & IEC61000-4-11:2004

## Chapter 6 - CE Certificate of Compliance

	
(Application of Council Directive: 2004/108/EC - EMC Directive)	
Standards to which Conformity is Declared:	
IEC 61000-6-4: 2006 & IEC 61000-6-2: 2005 including: CISPR 22: 1997 + A1: 2000 + A2: 2002 Class A, IEC 61000-3-2: 2005, IEC 61000-3-3: 2008, IEC 61000-4-2: 2008, IEC 61000-4-3: 2008 + A1: 2010, IEC 61000-4-4: 2004 + A1: 2010, IEC 61000-4-5: 2005, IEC 61000-4-6: 2008, IEC 61000-4-8: 2009 & IEC 61000-4-11: 2004	
<b>Applicant:</b> <b>Address:</b>	Trenton Systems, Inc. 2350 Centennial Drive, Gainesville, GA 30504 U.S.A.
<b>Product(s) Tested:</b> <b>Model(s) Tested:</b>	TRC2002-XX 2U
<b>Tested By:</b>	ITC Engineering Services, Inc. 9959 Calaveras Road, PO Box 543 Sunol, California 94586-0543 Tel: +(925) 862-2944 Fax: +(925) 862-9013 Email: itceme@itceme.com http://www.itceme.com
<b>Date of Issue:</b> <b>Report Number:</b>	October 8, 2010 20100901-01
I, the undersigned hereby declare that the model(s) listed above was tested and conforms to the Directives and Standards listed above.	
<b>Certified By:</b>	<b>Date</b> October 8, 2010
 Mr. Michael Gbadebo, PE (California License # 11303) Chief Engineer/Principal Consultant	
 NVLAP Accredited (code 200172-0)	
	