

## Users Manual



### EnduraNode Fanless Computer

# User Manual EnduraNode Computer

Thank you for purchasing a Comark Corporation EnduraNode Computer. We at Comark appreciate your business and strive to ensure you receive the highest quality product available to the Rugged Computer Industry.

## **About Comark Corporation**

Comark Corporation has been a leading provider of military computers, LCD displays, enclosures, and distributed I/O platforms for over 35 years.

## **Our Commitment To Quality**

Comark Corporation designs standard systems suitable for shipboard and mobile automation environments and excels at custom solutions for unique and challenging applications. We utilize high-performance, low-power processing, efficient thermal designs and rugged vibration-resistant enclosures and chassis. We thoroughly test all system designs for EMI, shock, vibration and thermal properties in our on-site testing facilities to ensure that the products we manufacture will function reliably in your application.

Our dedicated team provides in-depth product testing, new product design and part qualification. Comark has the equipment, facilities and experience to design solutions that operate reliably in tough conditions where dust, dirt, water, extreme temperatures, high shock and vibration are part of everyday operations.

With our quality products and outstanding service, we want to guarantee your success.

## **Contact Information**

**For sales, service and technical support, please contact us at:**

**By Phone:** 508-359-8161  
**Toll Free within the US:** 800-280-8522  
**Fax:** 508-359-2267  
**Email:** [support@comarkcorp.com](mailto:support@comarkcorp.com), [sales@comarkcorp.com](mailto:sales@comarkcorp.com)  
**Website:** [www.comarkcorp.com](http://www.comarkcorp.com)

## **Disclaimers**

This manual contains specifications for the electrical, mechanical and input/output signals required for the Comark EnduraNode Computer. Specifications are subject to change without notice. Please visit our website [www.comarkcorp.com](http://www.comarkcorp.com) for the latest electronic versions of this manual

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**Package Contents:**

EnduraNode Computer with (2) RS232 Ports  
or  
EnduraNode Computer with (4) RS232 Ports  
CPU Driver/Manual CD  
Quick Start Installation Guide  
Checklist of components

**Optional Equipment:**

Operating System CD  
Strain Relief Bracket  
AC to DC Power Adapter  
DC Power Cable XX Feet Long  
CD/DVD Drive Attachment  
High Temp Blower Cooling Attachment

## Installation

### Unpacking Unit:

Carefully remove EnduraNode and accessories from shipping container.  
Verify contents.  
Inspect unit for any damage.

### Mounting

The preferred mounting for the EnduraNode is with the CPU I/O connectors facing to the LEFT. Refer to EnduraNode Technical Drawing section.  
Ensure to leave room around the unit for airflow.

### Setup

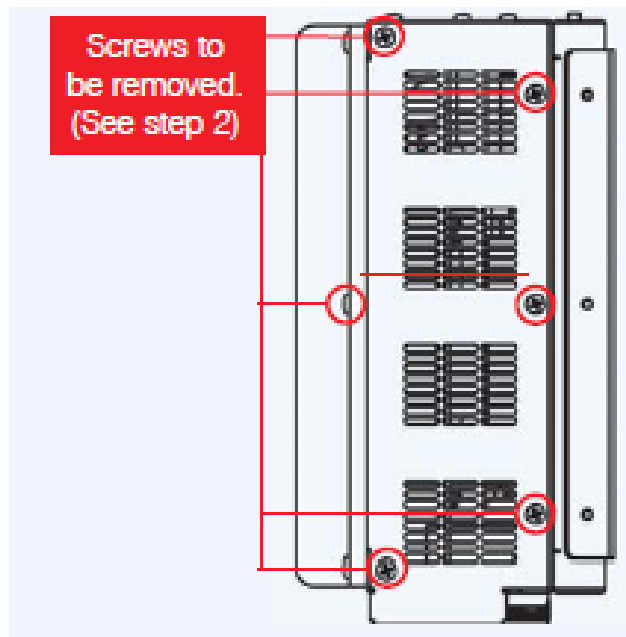
1. Install PCI cards as needed. (See PCI Installation section)
2. Place mounting template (QuickStart Guide supplied with unit) to desired mounting location.
3. Mark and Drill FOUR (4) #8 mounting holes. (Refer to "A" Locations on QuickStart Guide)
4. Install four (4) #8 mounting screws. Do not install completely.
5. Place EnduraNode over mounting screws in desired location.
6. Secure four (4) mounting screws.
7. Connect Video, Keyboard, and Mouse Cables.
8. Connect DC input power cable. (From Ac to DC Adapter or from DC input power cable.
9. Unit will boot.
10. Perform desired set up and software installations.

## PCI Card Installation

### CAUTION:

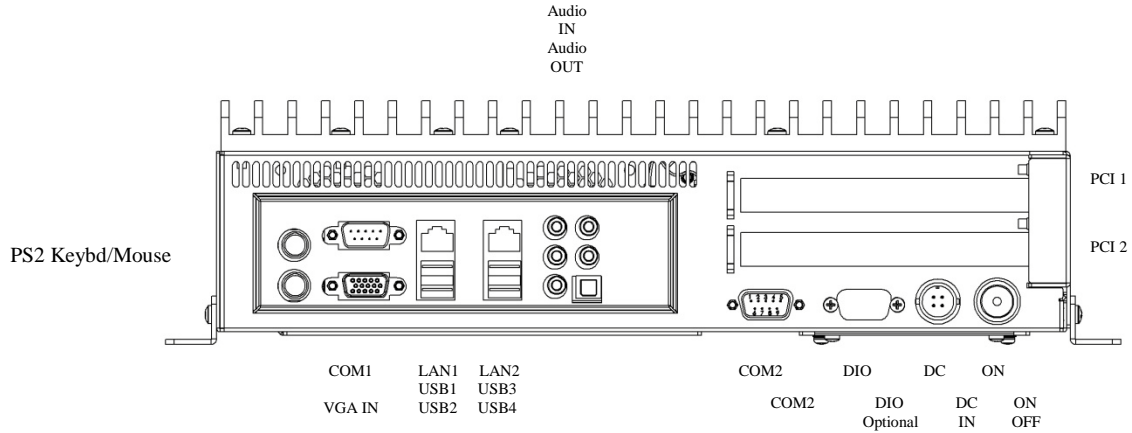
1. If the heatsink cover is removed from the unit, new thermal grease **MUST** be installed on the CPU copper slug. Failure to use thermal grease will cause failure of the unit.
2. Observe ESD Precautions when installing PCI cards

1. Disconnect power from chassis
2. Remove six (6) mounting screws from the right side of the chassis.
3. Remove Right bracket.
4. Remove two (2) blank PCI Brackets
5. Install PCI cards in desired locations
6. Secure PCI card bracket(s) with screws removed from PCI bracket (step 4).
7. Replace blank PCI bracket if needed.
8. Reinstall right bracket and mounting bracket (if removed).

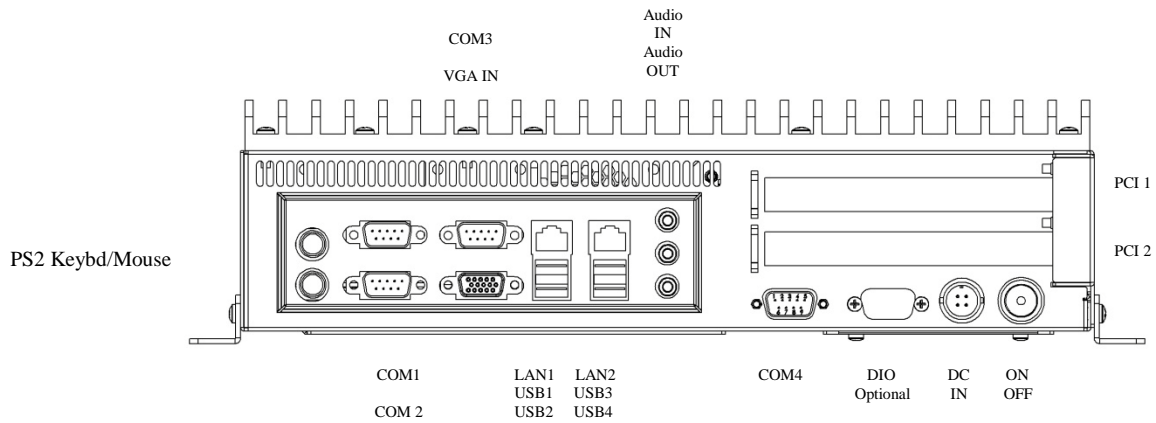


# EnduraNode I/O Connections

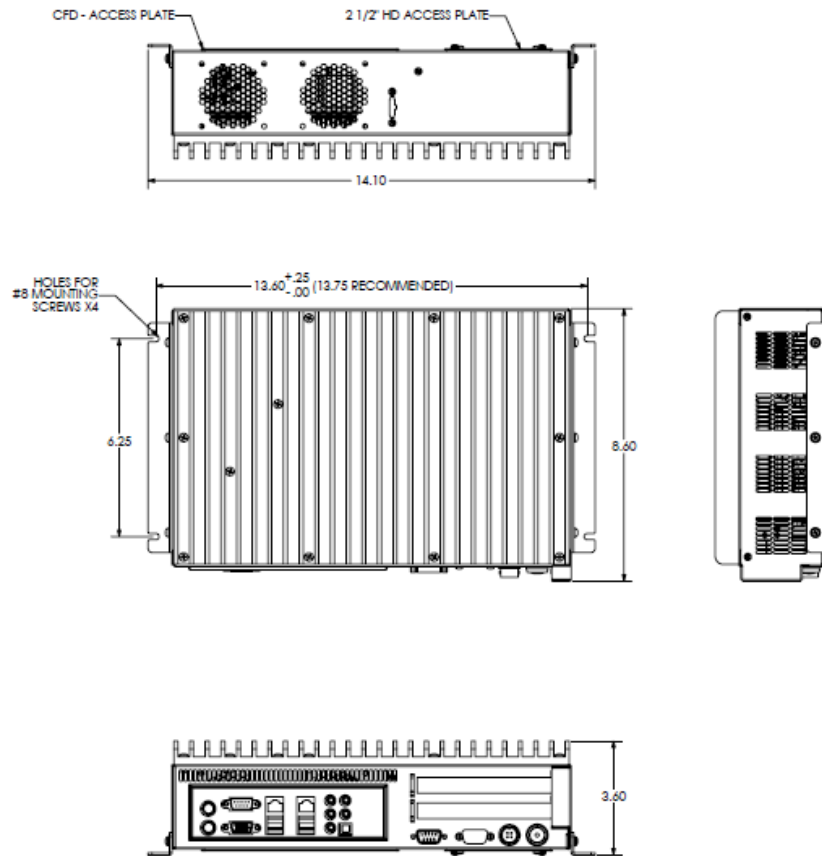
## EnduraNode with TWO (2) RS232 Ports



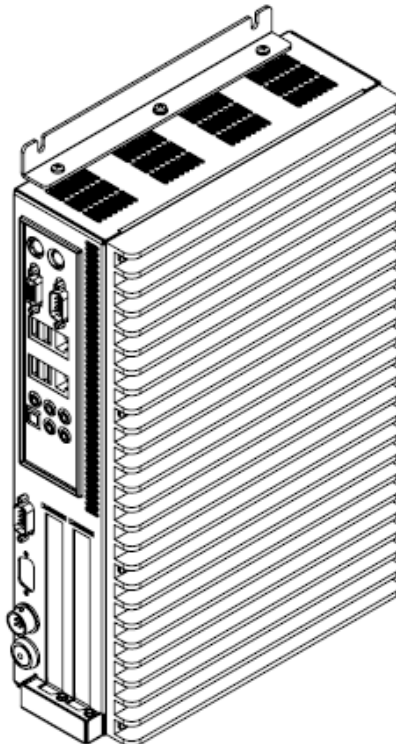
## EnduraNode with FOUR (4) RS232 Ports



# EnduraNode Technical Drawing



Preferred Mounting



## Warranty & Technical Support

### Warranty and Returns

Comark Corporation warrants products to be in good working order for a period of one year from the date of shipment as a new product (90 days for out-of warranty repairs). Should products fail to perform properly anytime within that period, Comark Corporation will, at its option, repair or replace the products at no cost except as set forth in this warranty. Replacement parts or products will be furnished on an exchange basis only. Replacement parts and/or products become the property of Comark Corporation. No warranty is expressed or implied for products damaged by accident, abuse, misuse, natural or personal disaster, or unauthorized modification. All warranties for product, expressed or implied, including merchantability and fitness for a purpose, are limited to a one-year duration from date of purchase; no warranties, expressed or implied, will apply after that period. If product does not perform as warranted herein, the owner's sole remedy shall be repair or replacement as provided above. In no event will Comark Corporation be liable to any purchaser for damages, lost revenue, lost wages, lost savings, or any other incidental or consequential damages arising from purchase, use, or inability to use this product, even if Comark has been advised of the possibility of such damages.

### Return Material Authorization (RMA)

All return items must be accompanied by an RMA number (obtained from Technical Support), and a purchase order to process repairs. (This covers cost of misuse, improper packing and incorrect setup for in-warranty work.) For out-of-warranty repairs, a flat fee of \$100 for evaluation, inspection, and minor repairs is charged. If major subassemblies are found to be defective, a flat fee for major repairs has been established (consult factory for fee structure). Method of Comark shipment corresponds to method used by customer.

### NOTE:

**ALL MATERIAL RETURNED SHALL BE SHIPPED PREPAID, TAGGED WITH PART NUMBER, FAILURE MODE, TECHNICAL CONTACT, TELEPHONE, AND FAX NUMBER TO EXPEDITE RESOLUTION OF TECHNICAL PROBLEMS.**

For Pricing, Applications and Delivery, contact Sales: 1-800-280-8522

For Technical Questions, System Use or Problems contact Technical Support: 1-800-280-8522 (ext 130)