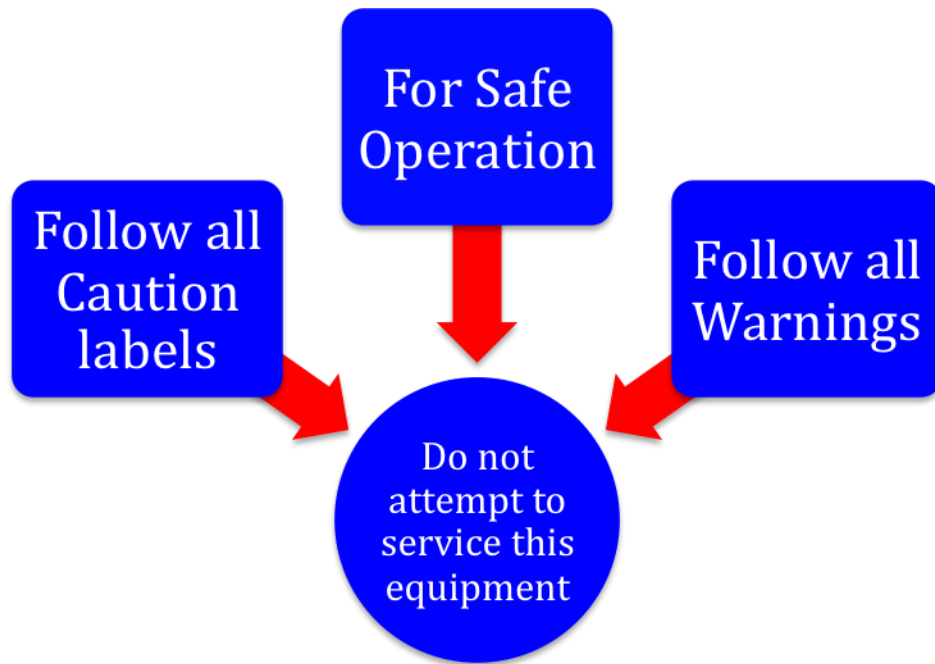


# American Micro Detection Systems, Inc.

2800 West March Lane, Suite 200

Stockton, CA 95219

<http://www.amdsinc.com>



## NOTE:

1. High levels of ionizing radiation are produced by this instrument. Direct exposure will cause radiation damage to body parts.
2. High voltage is present in this instrument. There is an Electric Shock Hazard WHICH CAN RESULT IN DEATH.
3. Flowing fluids are present in this instrument which, if fluid lines are disturbed, can cause electrical short circuits.

**There are no user serviceable components located within the REX enclosure.**

**Do Not Attempt To Remove the Enclosure.** Attempting to do so will void the warranty and cause the system to shut down. The REX System **cannot** be re-started without first contacting **AMDS service personnel**. A service charge of \$2,500.00 USD will be levied for any required re-starting of the unit caused by un-authorized service or attempt to service instrument components. All components are safety interlocked to include the cover. Attempting to bypass or negate the operation of any safety interlock will cause the system to shut down necessitating a service call.

Contact AMDS Service personnel at: 1-209-985-1705

**Prior to operating this instrument read the “Safe Operation Warnings and Cautions” document which is attached to the instrument power cable and also included as an appendix to this document.**

## **Danger X-ray Radiation Hazard**

### **Do Not Open the Unit or Tamper with Installation**

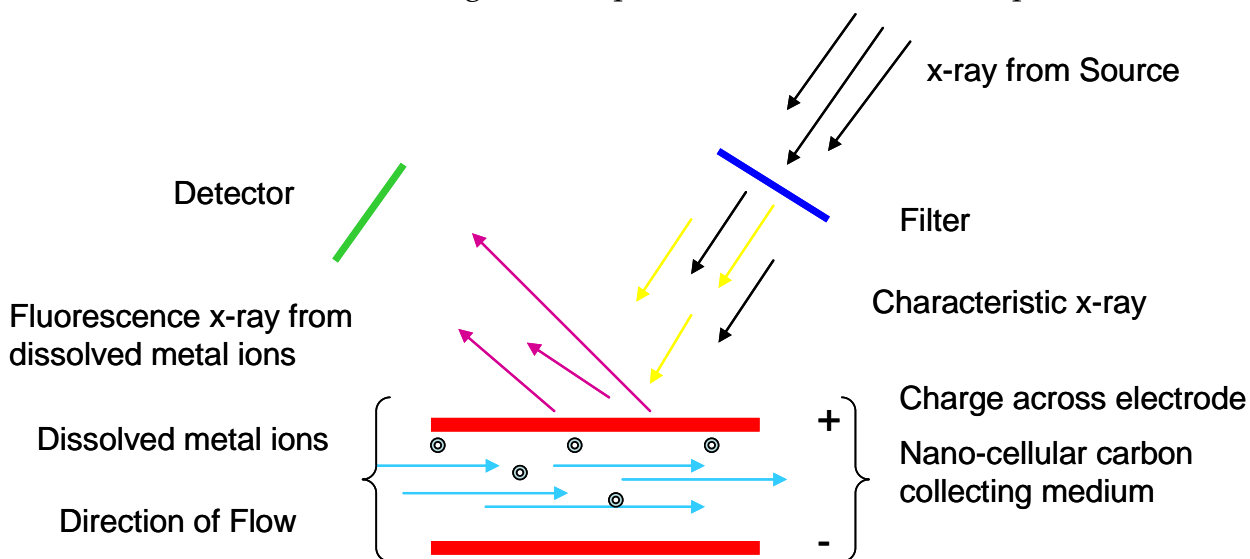
**(Note: Under no circumstances should an end user attempt to tamper or adjust anything within the REX Unit. Any attempt to disable or otherwise bypass safety interlocks will shut down the instrument voiding the warranty.)**

#### **REX**

##### **Basic Theory of Operation**

Dissolved metals in liquid flow streams maintain a charge based on their chemical makeup, for example elemental zinc ions carry a charge of 2+. By operating the flow cell with a top plate potential of a negative voltage, positively charged ions are attracted; and conversely negatively charged ions are attracted to the positively charged plate. Once there are enough ions present in the NCC matrix for detection, x-ray spectra are acquired and analysis results are reported via text file (ASCII, etc.) to any user selected location. The REX instrument operates by a two spectrum method. The first spectrum is acquired with no voltage being applied to the flow cell and is labeled as a blank spectrum. The second spectrum is acquired with voltage applied to the cell, and is referred to as an analytical spectrum. At the end of the analysis period the blank spectrum is subtracted from the analytical spectrum. Analysis is performed by proprietary software and reports are generated and transferred to the end user's location of choice as a text file by default.

Below is a schematic illustrating how the patented AMDS Flow Cell operates.



By regulating the flow, cell voltage, excitation energy, and detector parameters, an accurate analysis of a fluid's dissolved metals content can be ascertained to the part per billion (ppb) level.

## **Safety Mechanisms**

**There is no more important safety mechanism than user common sense and knowledge.** The REX instrument produces harmful levels of x-rays at the x-ray source flange and within 6 inches of the x-ray tube itself when it is operating at 25 kV and 0.3 mA. The instrument utilizes a graded 'Z' beam stop to absorb and re-radiate all primary beam energy at a level below United States federal standards for general public exposure levels (<0.5 mrem/hr @ 30 cm from enclosure) and there is internal collimation of the primary x-ray beam to ensure all scattered radiation also meets US standards for general public exposure levels. The interior of the enclosure housing is designed to shield against any leakage of x-rays beyond its internal boundary. As an additional safety measure, every component which is attached to the main attachment body (such as the x-ray source, detector, and flow cell) is safety switch interlocked. Fluid flow is electronically monitored and will automatically shut down all electrical systems should flow rates deviate from pre-set parameters. **The REX instrument is designed to operate at 40 mL/min and at 1.5 psig inlet pressure.** The high voltage power supply is safety-interlocked to prevent an accidental over-voltage or over-current situation. The outer housing is safety-interlocked. Any attempt to disable or otherwise bypass safety-interlocks will shut down the instrument. Changing the flow rate of fluids will shut off all systems. Unplugging the instrument will shut down all systems. The end user will not be able to restart the instrument without contacting AMDS, Inc. at 1-209-955-0172. **If the unit has been tampered with there will be a \$2,500.00 charge for re-starting and if necessary, resetting parameters.** Power failure(s) restarts are not charged to the end user. An inadvertent change in fluids flow rate will not incur a service charge. Moving of the unit by the end user to a new location will not incur a restart charge, however AMDS should be notified of any proposed move in order ensure that all data transfer mechanisms are operating properly and all appropriate laws are followed. **For installations in a mining environment the REX instrument must be enclosed in a Bureau of Mines approved enclosure.** Be sure to follow all applicable laws relating to operations of electrical equipment in explosive environments. **REX MUST BE ENCLOSED IN AN APPROVED CONTAINMENT SYSTEM IF IT IS TO BE USED IN A MINING ENVIRONMENT.** Contact your AMDS distributor for assistance with this.

Prior to leaving the factory each instrument is surveyed with calibrated and NIST traceable measuring instruments and fluids to ensure that it meets or exceeds all federal, state, and local requirements for the end users location. Equipment failure within the warranty period of 1 year from date of purchase does not incur a service charge. See warranty information or call AMDS.

## **Danger X-ray Radiation Hazard**

### **Do Not Open the Unit or Tamper with Installation**

(Note: Under no circumstances should an end user attempt to tamper or adjust anything within the REX Unit. Any attempt to disable or otherwise bypass safety interlocks will shut down the instrument voiding the warranty.)

#### **End User Adjustable Parameters**

All functions are pre-set at the factory to the end user's specifications. Should the end user wish to change factory settings, call AMDS, Inc. at 1-209-955-0172. Changes will be made immediately upon request via data uplink to the end user's facility. Typically there is no charge for this service.

There are certain end user adjustable parameters such as number of analyses per 24 hour period, destination of data transfer, and metals of interest inputs. Your installation technician will explain how to implement those parameters utilizing software downloaded to a PC.

Data are recorded as both raw spectral data and as a text file. These data can be sent to either a PC or to a printer of the end user's choice. The default data format is as an ASCII text file. An example of this file can be seen as appendix 1. An example of a spectral file can be seen as appendix 2.

Each instrument is individually serial numbered. Each serial number is matched to a company and instrument location. Should you need to move the instrument to a different facility or location call AMDS, Inc. at 1-209-955-0172 so that the new location can be recorded. Most states require that this information be stored at the end user's facility. AMDS will restart your instrument at no charge should this occur.

When your instrument was installed at your facility an AMDS representative made the fluids and data connections on the back of the instrument, tested the instrument, and reported the results of that test. Do not allow untrained personnel to make fluids or data connections. AMDS is happy to assist in giving instructions to your service personnel for the proper installation of fluids, power, and data lines. There is no charge for this service. AMDS will, for a nominal fee, train end user personnel in the safe operation of the REX instrument and inputting of operating parameters. Contact your local AMDS distributor for more information.

## Installation criteria (See appendix 3 for specifications)

REX is a rugged instrument designed for an industrial environment however it is important to follow the below listed criteria for safe operation.

1. Instrument should be installed on a solid, level surface
2. Keep REX away from direct contact with fluids such as rain, backwash or spray from hoses.
3. To avoid frequent filter changes install in a dust free environment. Air filter should be checked once per month.
4. The operating environment should be clean and vibration free. REX is vibration isolated and designed to operate with a maximum vibrational frequency of 100Hz.
5. The instrument must be powered by a grounded electrical source.
6. The red LED on top of the instrument must be clearly visible within 50 feet. When the red LED is lit REX is powered and operating.

AMDS will provide installation and instructions for operation of the REX instrument on an application-specific basis. An example of one type of installation is a gravity-feed setup as pictured below. Required for this setup are liquid supply and drain vessels, with a recommended minimum volume of 5 L and composition of HDPE or LDPE. The supply vessel should be outfitted with a ¼" barbed bulkhead fitting ("a" below) approximately 2" from the bottom of the vessel. A ¼" ID tube of a non-reactive composition (recommended: Tygon) is attached to the barbed bulkhead fitting and this tube must be connected to the REX instrument using a female ¼" barb to quick disconnect fitting (e.g. Omega part FT-PLCD230-04-12) which is provided by AMDS. A drain hose should be connected to the instrument using the male counterpart to the ¼" barb to quick disconnect fitting described above. This drain hose should be at least 18" long in order to provide sufficient negative backpressure and should be run into an appropriate drain vessel. The supply hose should be at least 24" long with the supply vessel located at least 18" above the supply hose connection on the back of the instrument.

An alternative gravity-feed configuration can be set up which does not require the barbed bulkhead fitting on the supply vessel. In this configuration, the supply hose is placed into the top of the supply vessel. In order to initiate liquid flow in this configuration the supply hose must first be primed by either prefilling the hose or by applying suction to the drain hose until a flow rate of ~40 mL/min is attained.



Example of supply vessel with barbed bulkhead fitting



Example of two complete systems with gravity-feed setup.

### Warranty

AMDS warrants that the instrument is free from manufacturers defects in materials and workmanship for a period of 1 year from date of installation by trained AMDS representatives. Individual components carry their own warranties. During the warranty period AMDS will send all defective components to their respective manufacturer for either repair or replacement on behalf of the end user's organization. In the interim, AMDS will place a new instrument into service at the end users location until their instrument is repaired and or replaced. There is no charge for this hot swap during the one year warranty period. Beyond the warranty period AMDS will charge a service fee which will include airfare or other transportation to the instruments location, man-hour charges at a rate of \$175.00 per hour from the time the technician arrives at the instruments location, and cost of materials either repaired or replaced. AMDS offers an extended warranty in the form of a monthly service contract. Please contact your AMDS distribution representative for more information.

## Danger X-ray Radiation Hazard

### Do Not Open the Unit or Tamper with Installation

(Note: Under no circumstances should an end user attempt to tamper or adjust anything within the REX Unit. Any attempt to disable or otherwise bypass safety interlocks will shut down the instrument voiding the warranty.)

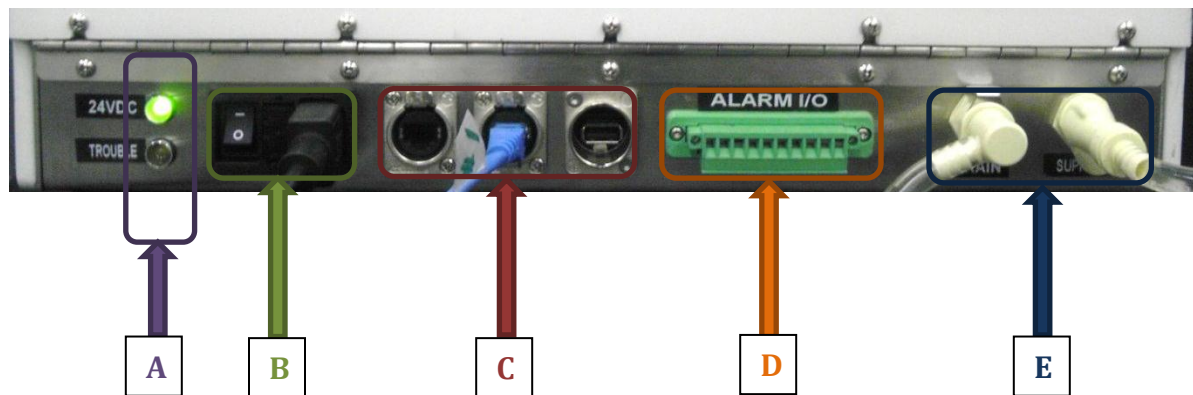
**Connections/Instrument Interface** There are three main connection types for the REX instrument: power, data, and fluids. All of the connection interfaces are located on the back side of the instrument, as seen in the image below. The back panel also contains two indicator lights ("A") which indicate that the instrument has power (top light) and indicate if there is a fault condition (bottom light) triggered by one or more of the many internal interlocks.

Next to the indicator lights is the power switch and power input plug (“B”). The power switch allows the end user to manually cut power to the instrument as desired. The power plug will accommodate line voltage at 110 V/60 Hz, and other power inputs can be utilized with minor modifications.

In the middle of the back panel is a set of data connections (“C”). On the left are two ethernet ports which allow for wired connections between the instrument and a local or wide-area-network (LAN/WAN). To the right of the ethernet ports is a USB port which allows the user to connect a wireless card for connection to a WiFi, 3G, or 4G network.

To the right of the USB port is the alarm I/O (“D”) which allows an end user to activate external hardware (e.g. water valves) in case of detection of elements above a set threshold level, or in case of any other predetermined event or data alert.

On the right of the back panel are the connections for the sample stream (“E”). The output is the female connection on the left, and the input is the male connection on the far right side of the back panel. These connections contain internal valves which prevent significant spillage of sample liquids. In order to prevent potentially hazardous pressure buildup within the instrument, one should always disconnect the input line before disconnecting the output line.



### Data Output

Typical data output is in the form of a text file which is emailed to the end user upon completion of an analysis cycle. This data file contains the calculated concentrations of the metals of interest, and indication of pass/fail where fail indicates that the concentration is above a pre-set level. In the case of a failing test, the serial alarm I/O (“D” above) can be set to trigger external hardware such as a shut-off valve. Raw data are always archived for regulatory purposes and can be accessed anytime by connection to the instrument’s local FTP server at ftp://10.200.3.3.



## REX Generation One Product Warranty

The following constitutes the full product warranty for the following AMDS, Inc. Instrument(s):

### **REX Generation One Dissolved Metals Analysis Instrument**

This Agreement applies to any order, purchase, receipt, delivery or use of any products and services (collectively, “purchase”) from American Micro Detection Systems, Inc. or any of its subsidiaries or affiliates or authorized reseller(s), unless you enter into a separate written agreement with American Micro Detection Systems, Inc. **THIS AGREEMENT APPLIES TO YOUR PURCHASE UNLESS YOU NOTIFY AMDS, Inc. IN WRITING THAT YOU DO NOT AGREE TO THIS AGREEMENT WITHIN 15 DAYS AFTER YOU RECEIVE THIS AGREEMENT AND YOU RETURN YOUR PRODUCT OR CANCEL SERVICES UNDER AMDS’S REFUND POLICY. THIS AGREEMENT CONTAINS A DISPUTE RESOLUTION CLAUSE. PLEASE SEE SECTION 8 BELOW.**

**1. Payment Terms.** Advertised prices are in U.S. dollars and exclude shipping, handling and taxes of any kind unless otherwise noted. You are responsible for paying all taxes associated with your order. AMDS, Inc. may change prices without notice to you before AMDS, Inc. enters your order and may modify and substitute products and components without notice to you prior to shipping. Payment is due at the time stated in your invoice or when product is shipped unless AMDS, Inc. has extended credit to you. Amounts not paid when due bear interest at the rate of 1.5% per month (18% per annum) or the highest rate allowed under applicable law, whichever is lower. If you financed your purchase, the loan or lease transaction is between you and your lender, independent of your purchase from AMDS, Inc., except that AMDS, Inc. may, at the request of your lender, withhold technical and warranty support and other services from you.

**2. Shipping and Title.** AMDS, Inc. will arrange to ship products to you. Title to products passes to you when AMDS, Inc. delivers them to the shipper and risk of loss passes to you when the shipper delivers products to the address you designate. You must notify AMDS, Inc. of damaged or missing items from your order within 15 days after you receive your product.



**3. Return Policy.** You may return products and cancel unused services within 15 days after you receive your product or are invoiced for services. To return products and cancel services you must follow AMDS, Inc.'s return procedures, including obtaining a return merchandise authorization (RMA) and returning products within 7 days after you receive an RMA. AMDS, Inc. will refund the original purchase price of products, unperformed services and related sales taxes. SHIPPING & HANDLING FEES (INCLUDING RELATED SALES TAXES) ARE NOT REFUNDABLE. YOU ARE RESPONSIBLE FOR PRODUCTS UNTIL AMDS, Inc. RECEIVES THEM. YOU WILL BE CHARGED SHIPPING AND HANDLING OR RESTOCKING FEES TO RETURN PRODUCTS. Returned products must be in the same condition as you received them. THIS RETURN POLICY IS NOT A WARRANTY. NOTE: AMDS, Inc. will not accept for return any products you purchased from an Authorized Reseller. You must contact your authorized reseller for return instructions.

**4. Technical Support.** AMDS, Inc. will provide technical support for products at no additional charge for 30 days from the date of shipment or invoice or, if longer, the period stated in your service package. Technical support for issues beyond the scope of this basic technical support may be available under other service packages. AMDS, Inc. provides technical support via on-line, telephone and other methods. AMDS, Inc. may change the means through which it provides technical support at any time.

**5. Product Warranty.** NOTE: **THERE ARE NO USER SERVICABLE COMPONENTS IN ANY AMDS, INC. PRODUCT. ANY ATTEMPT TO SERVICE, OPEN ENCLOSED SYSTEMS, OR OTHERWISE TAMPER WITH ANY COMPONENT IN ANY MANNER WILL IMMEDIATELY VOID THIS LIMITED WARRANTY WITHOUT EXCEPTION.**

All warranty service must be carried out by an AMDS, Inc. *authorized service provider*.

AMDS, Inc. warrants to the original purchaser or, for products purchased from a Reseller, to the original end-user that AMDS, Inc.-branded products will be free from defects in materials and workmanship from the date of shipment for 90 days from the date of shipment or invoice or, if longer, the period stated in the product manual or your service package. During the warrant period, AMDS, Inc. will, at its option: (1) provide replacement parts necessary to repair the product, (2) replace the product with a comparable product, or (3) refund the amount you paid for the product, LESS DEPRECIATION, upon its return. AMDS, Inc. or a third party service provider, under a separate agreement between you and the service provider, will provide labor to resolve warranty issues during your warranty period. Repair services are available at your location only if provided as part of the service package you purchased. AMDS, Inc. will determine how and where repair services are provided, and you may be required to deliver your product to an authorized service location. Replacement parts or products will be new, comparable in function and performance to the original part or product, and warranted for the remainder of the original warranty period or, if longer, 90 days after they are shipped to you. You authorize AMDS, Inc. to send replacement parts and products to an authorized third party service provider. Purchasing additional products from AMDS, Inc. does not extend your warranty period. To obtain service under this **limited warranty**, you must follow AMDS, Inc.'s warranty procedures. If AMDS, Inc. asks you to return defective parts or products, you

must do so within 7 days after you receive the replacement parts or products. AMDS, Inc. will charge you for replacement parts or products at their full retail value if you fail to do so. If you are a domestic U.S. customer who purchased a product directly from AMDS, Inc., AMDS, Inc. will arrange to ship replacement parts or products to and from you, and will pay the shipping costs. If you live outside the United States, the details of your warranty service may vary as described below.

**THIS LIMITED WARRANTY COVERS NORMAL USE FOR WHICH THE PRODUCT WAS INTENDED. AMDS, Inc. DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR DAMAGES CAUSED BY MISUSE, ABUSE, ACCIDENTS, VIRUSES, UNAUTHORIZED SERVICE OR PARTS, OR THE COMBINATION OF AMDS, Inc. BRANDED PRODUCTS WITH OTHER PRODUCTS. THIS LIMITED WARRANTY DOES NOT COVER SOFTWARE OR NON-AMDS, Inc. BRANDED PRODUCTS. ANY WARRANTY APPLICABLE TO SOFTWARE OR NON-AMDS, Inc. BRANDED PRODUCTS IS PROVIDED BY THE ORIGINAL MANUFACTURER.**

**6. Services and Service Warranty.** The terms of services provided to you by AMDS, Inc. consist of this Agreement and the additional terms stated in separate services descriptions provided by AMDS, Inc.. For a period of 30 days after services are performed, AMDS, Inc. warrants that services provided by it will be performed in a professional and workmanlike manner. You should back up all files before services are performed. **AMDS, Inc. IS NOT RESPONSIBLE FOR ANY LOSS OF YOUR DATA.**

**7. Disclaimer of Warranties; Limitation of Liability.** EXCEPT FOR THE WARRANTIES EXPRESSED IN THIS AGREEMENT, AMDS, Inc. DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OTHER THAN THOSE WARRANTIES IMPLIED BY AND INCAPABLE OF EXCLUSION, RESTRICTION OR MODIFICATION UNDER APPLICABLE LAW. THE TERM OF ANY IMPLIED WARRANTIES THAT CANNOT BE DISCLAIMED ARE LIMITED TO THE TERM OF THIS AGREEMENT. AMDS, Inc. AND YOUR MAXIMUM LIABILITY TO THE OTHER IS LIMITED TO THE PURCHASE PRICE YOU PAID FOR PRODUCTS OR SERVICES PLUS INTEREST AS ALLOWED BY LAW. NEITHER YOU NOR AMDS, Inc. IS LIABLE TO THE OTHER IF YOU OR IT ARE UNABLE TO PERFORM DUE TO EVENTS YOU OR IT ARE NOT ABLE TO CONTROL, SUCH AS ACTS OF GOD, OR FOR PROPERTY DAMAGE, PERSONAL INJURY, LOSS OF USE, INTERRUPTION OF BUSINESS, LOST PROFITS, LOST DATA OR OTHER CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES, HOWEVER CAUSED, WHETHER FOR BREACH OF WARRANTY, CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, OTHER THAN THOSE DAMAGES THAT ARE INCAPABLE OF LIMITATION, EXCLUSION OR RESTRICTION UNDER APPLICABLE LAW. THIS AGREEMENT GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

**8. Dispute Resolution.** You and AMDS, Inc. agree that any Dispute between You and AMDS, Inc. will be resolved exclusively and finally by arbitration administered by the National Arbitration Forum (NAF) and conducted under its rules, except as otherwise provided below. You and AMDS, Inc. will agree on another arbitration forum if NAF ceases operations. The arbitration will be conducted before a single arbitrator, and will be limited solely to the Dispute between You and AMDS, Inc.. The arbitration, or any portion of it, will not be consolidated with any other arbitration and will not be conducted on a class-wide or class action basis. The arbitration shall be held at any reasonable location near your residence by submission of documents, by telephone, online or in person whichever method of presentation You choose. If You prevail in the arbitration of any Dispute with AMDS, Inc., AMDS, Inc. will reimburse You for any fees you paid to NAF in connection with the arbitration. Any decision rendered in such arbitration proceedings will be final and binding on the parties, and judgment may be entered thereon in any court of competent jurisdiction. Should either party bring a Dispute in a forum other than NAF, the arbitrator may award the other party its reasonable costs and expenses, including attorneys' fees, incurred in staying or dismissing such other proceedings or in otherwise enforcing compliance with this dispute resolution provision. **You understand that, in the absence of this provision, You would have had a right to litigate disputes through a court, including the right to litigate claims on a class-wide or class-action basis, and that You have expressly and knowingly waived those rights and agreed to resolve any Disputes through binding arbitration in accordance with the provisions of this paragraph.** This arbitration provision shall be governed by the Federal Arbitration Act, 9 U.S.C. Section 1, et seq. For the purposes of this provision, the term "Dispute" means any dispute, controversy, or claim arising out of or relating to (i) this Agreement, its interpretation, or the breach, termination, applicability or validity thereof, (ii) the related order for, purchase, delivery, receipt or use of any product or service from AMDS, Inc., or (iii) any other dispute arising out of or relating to the relationship between You and AMDS, Inc.; the term "AMDS, Inc." means AMERICAN MICRO DETECTION SYSTEMS, Inc., its parents, subsidiaries, affiliates, directors, officers, employees, beneficiaries, agents, assigns, component suppliers (both hardware and software), and/or any third party who provides products or services purchased from or distributed by AMDS, Inc.; and the term "You" means you, or those in privity with you, such as family members or beneficiaries. Information may be obtained from the NAF on line at [www.arb-forum.com](http://www.arb-forum.com), by calling 800-474-2371 or writing to P.O.Box 50191, Minneapolis, MN, 55405.

**9. General.** You may not assign this Agreement without AMDS, Inc.'s written consent. AMDS, Inc. and its subsidiaries and affiliates are intended beneficiaries of this Agreement. If there is any inconsistency between this Agreement and any other agreement included with or relating to products or services purchased from AMDS, Inc., this Agreement shall govern. This Agreement may not be modified, altered or amended without the written agreement of AMDS, Inc.. Any additional or altered terms attached to your order shall be null and void, unless expressly agreed to in writing by AMDS, Inc.. If any term of this Agreement is illegal or unenforceable, the legality and enforceability of the remaining provisions shall not be affected or impaired. This Agreement shall be interpreted under the laws of the State of California, without giving effect to conflicts of law rules.

**10. Privacy Notice.** AMDS, Inc. respects our customers' right to privacy and will take all appropriate steps to keep your personal information confidential.

**For Residents of Canada:**

**1.** This Agreement is subject to the applicable provisions of Canadian consumer protection laws that cannot be derogated from by private agreement.

**2. Shipping and Title** You must comply with all applicable export laws and regulations of Canada, the United States and other relevant countries if you export the Product outside Canada.

**3. Return Policy.** AMDS, Inc. does not accept for return any products purchased from a reseller. To return products contact your authorized reseller and follow the instructions you receive. In all cases, AMDS, Inc. will not be responsible for any shipping and handling charges to and from AMDS, Inc., or paying or refunding customs fees or taxes that may be due.

**4. Language.** You confirm your request that this Agreement and all documents related directly or indirectly thereto be drafted in the English language. Vous reconnaissez avoir requis que la présente convention ainsi que tous les documents qui s'y rattachent directement ou indirectement soient rédigés en langue anglaise.

**For Residents of Mexico:**

**1. Shipping and Title.** You must comply with all applicable export laws and regulations of Mexico, the United States and other relevant countries if you export the Product outside Mexico.

**2. Return Policy.** AMDS, Inc. does not accept for return any products purchased from a reseller. To return products contact your authorized reseller and follow the instructions you receive. To return a product purchased directly from AMDS, Inc. in the United States, contact AMDS, Inc. at (209)955.1760 or AMDS, Inc., 2800 West March Lane, Suite 200, Stockton, Ca 95219 in the United States and follow the instructions you receive. In all cases, AMDS, Inc. will not be responsible for any shipping and handling charges to and from AMDS, Inc., or paying or refunding customs fees, taxes, or VAT that may be due.

**For All International Customers:**

The standard warranty stated above also applies to AMDS, Inc. products shipped to a country outside the United States, provided that customers outside the United States and Canada are responsible for paying all freight charges incurred in shipping, importing/exporting and receiving replacement products and parts and for arranging and paying for the shipment of any defective part(s) back to the AMDS, Inc.. All international customers are responsible for all customs duties, VAT and other associated taxes and charges.

Please send correspondence about this Agreement to:

**AMDS, Inc.**  
**Customer Services Department**

**2800 West March Lane  
Suite 200  
Stockton, Ca 95219  
Attn: Warranty Services**



## Appendix 3

# REX Specifications:

As of 24 February 2011



### Overall Dimensions

- Height 17.0 inches
- Length 16.4 inches
- Depth 18.5 inches

Weight: 40 lbs

### Processor Board

- 400 MHz real-time processor
- Dual-core 1.8 GHz CPU for automated data analysis
- 128 GB Storage Memory (solid-state disk)

### Electrical

- Standard Input: 110 V / 60 Hz (support for 220 V / 50 Hz with adapter)
- Peak Current: 15 amps
- Typical Power Usage: 90 W
- Internal
  - 5 VDC Smart power supply
  - 0-1 VDC Smart power supply

### Electrical output:

- Four AC/DC 7 amp relay contact sets
  - System Failure
  - Trouble / Service
  - 2x Inter-lock Programmable – Event or Data Alert



### Data interface:

- Standard Serial port
- USB port
  - WiFi, 3G/4G, satellite internet ready (with connection card)
- Ethernet ports
- Two levels of interaction with REX System
  - Service
    - Coordination of sub-systems
      - Intelligent Source Power Unit (direct feed to x-ray source)
      - Sensor Control
      - Data/Systems Controller Control

- Push data
  - Read 128 GB solid-state disk as a hard drive for data logging
    - Each REX run is recorded and data archived
  - System Push
    - Auto push routine that transmits last data recorded to a specified IP address
  - If the REX unit does not get confirmation (standard end-to-end handshake) on an attempted data transmission, it stores that data and tries to resend the data on the next data packet action.
    - At next REX test
    - At detection of reestablished network connection

Liquid flow:

- 40 mL per minute (nominal)
- Liquid viscosity: Water above freezing to SEA 5 weight 24 C

Elemental analysis:

To low ppb: 5-15 ppb @ 3 sigma Accuracy

