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INSTALLATION GUIDE FOR THE

ENVIROMUX-ACVD-xxx

AC Voltage Detector

INTRODUCTION

The NTI ENVIROMUX-ACVD-xxx detects voltage (70-250VAC) when connected to an ENVIROMUX-SEMS-16 or ENVIROMUX-MINI. A 2-wire sensor cable (6 foot cable included), is used to connect to an ENVIROMUX, which can be configured to send alerts based on the presence or lack of AC voltage.

Models available:

ENVIROMUX-ACVD-515 – For use with ENVIROMUX-SEMS-16
ENVIROMUX-ACVD-515**M –** For use with ENVIROMUX-MINI (**SEE NOTE BELOW**)
ENVIROMUX-ACVD-C14 **–** For use with ENVIROMUX-SEMS-16 but with universal 250V IEC C14 socket
ENVIROMUX-ACVD-C14**M –** For use with ENVIROMUX-MINI but with universal 250V IEC C14 socket

Note: The ENVIROMUX-ACVD-515M and ENVIROMUX-ACVD-C14M are only compatible with ENVIROMUX-MINI units made on or after 11/1/07 (see label on the bottom of your ENVIROMUX-MINI). If your ENVIROMUX-MINI was made prior to 11/1/07, please order model ENVIROMUX-ACVD-515 or ENVIROMUX-ACVD-C14. Failure to use the correct voltage detector will result in inaccurate alert reports.

Features:

- Monitors the presence of 70-250VAC
- 2-position screw-terminal connection
- Supports 2-wire sensor cable up to 1000 ft[1] (6 foot cable included)
- RoHS and CE certified

MATERIALS SUPPLIED

- ENVIROMUX-ACVD-xxx Power Monitor (xxx= 515,515M,C14, or C14M)
- ENVIROMUX-2W-6 (6 foot 2-wire sensor cable)
- Installation Guide

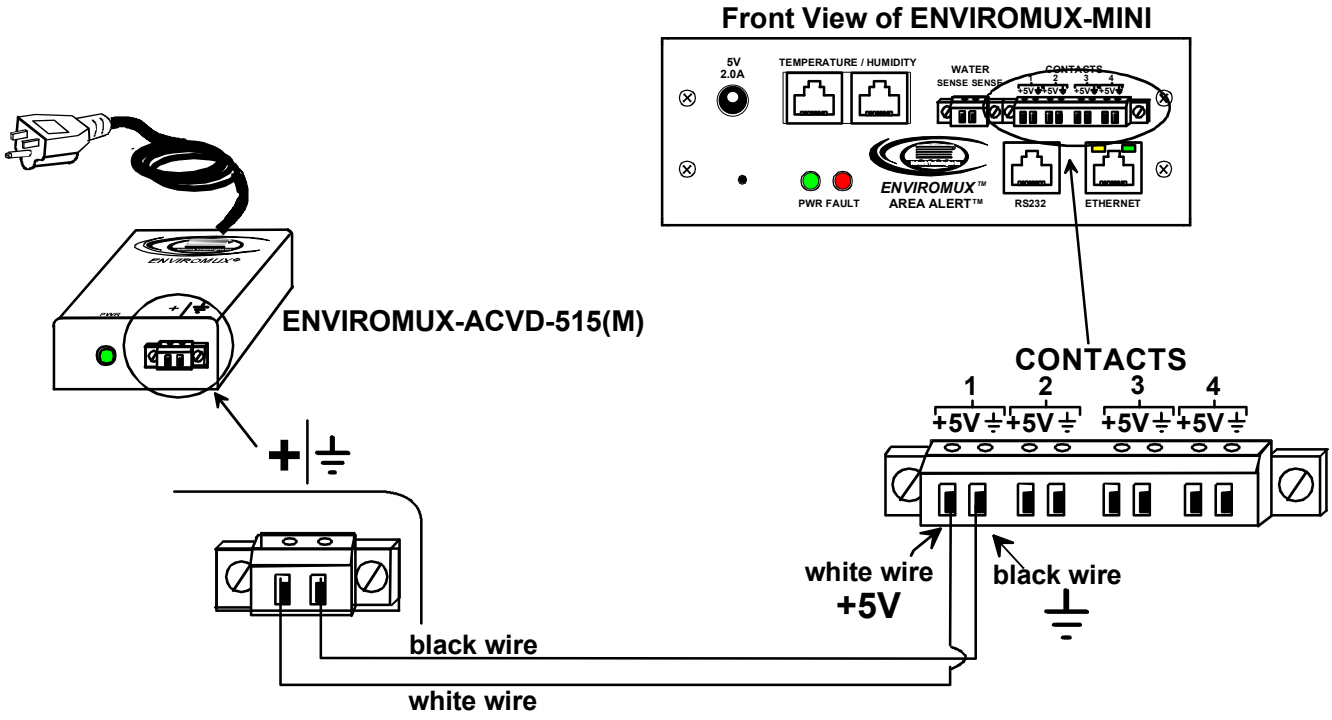
INSTALLATION

Place the ENVIROMUX-ACVD-xxx where it can be plugged into an AC power source (70-250VAC). Connect a 2-wire cable between the terminals on the ENIVROMUX-ACVD-xxx and the “CONTACTS” terminals on the ENVIROMUX-MINI, or the “DIGITAL IN” terminals on the ENVIROMUX-SEMS-16[2].

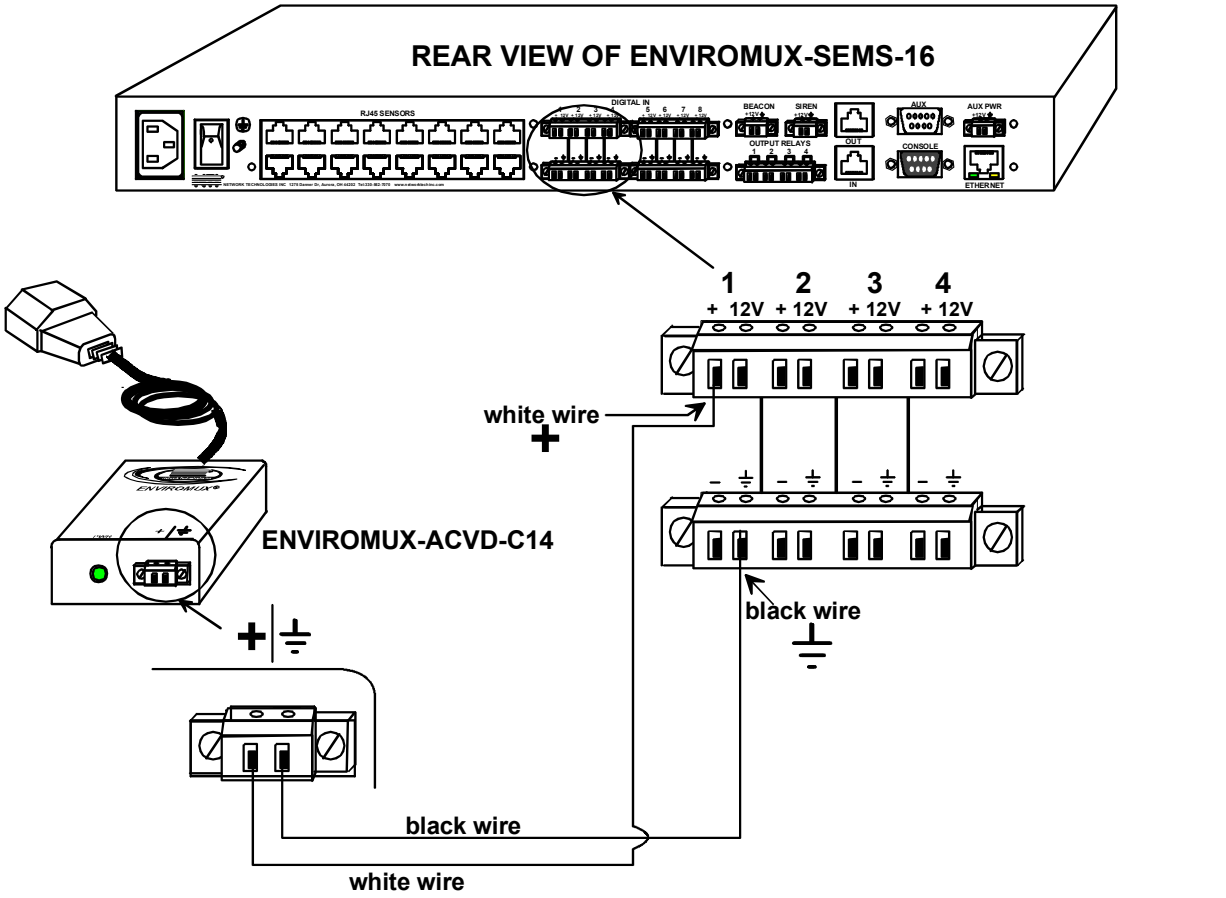
Use the chart below or see images on next page to make proper wire connections:

TERMINAL ON ENVIROMUX-ACVD-515	Wire Color		TERMINAL ON ENVIROMUX-MINI	TERMINAL ON ENVIROMUX-SEMS-16
+	White	→	+5V	+
⏚	Black	→	⏚	⏚ [3]

[1] When using 2-wire cables longer than 100 ft, be careful to route cables away from AC wiring, lighting sources, electric motors, or other electrical devices.
[2] The wire connection terminal blocks are easily removed from the ENVIROMUX-ACVD-xxx, ENVIROMUX-MINI, and ENVIROMUX-SEMS-16 for more convenient wire termination.
[3] In the event that the ground terminal is unavailable, the negative terminal (—) has the same potential and can be substituted.



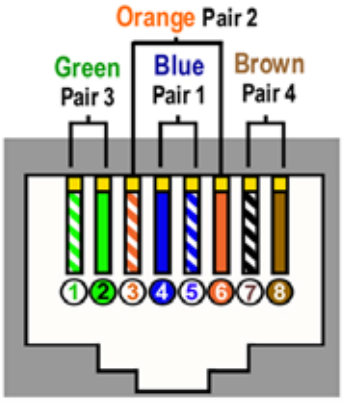
Wire connections for ENVIROMUX-MINI



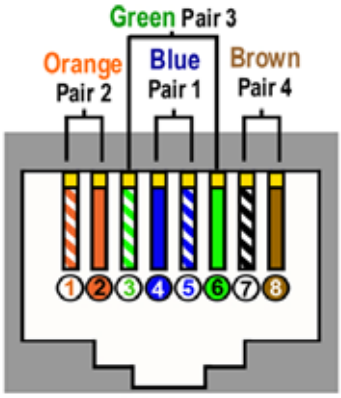
Wire connections for ENVIROMUX-SEMS-16

The ENVIROMUX-ACVD-xxx can also be connected to the “RJ45 SENSORS” sockets. When using a CAT5 patch cable to make connection, you must first determine what wiring standard the cable has been made to. Make connections based on the chart below.

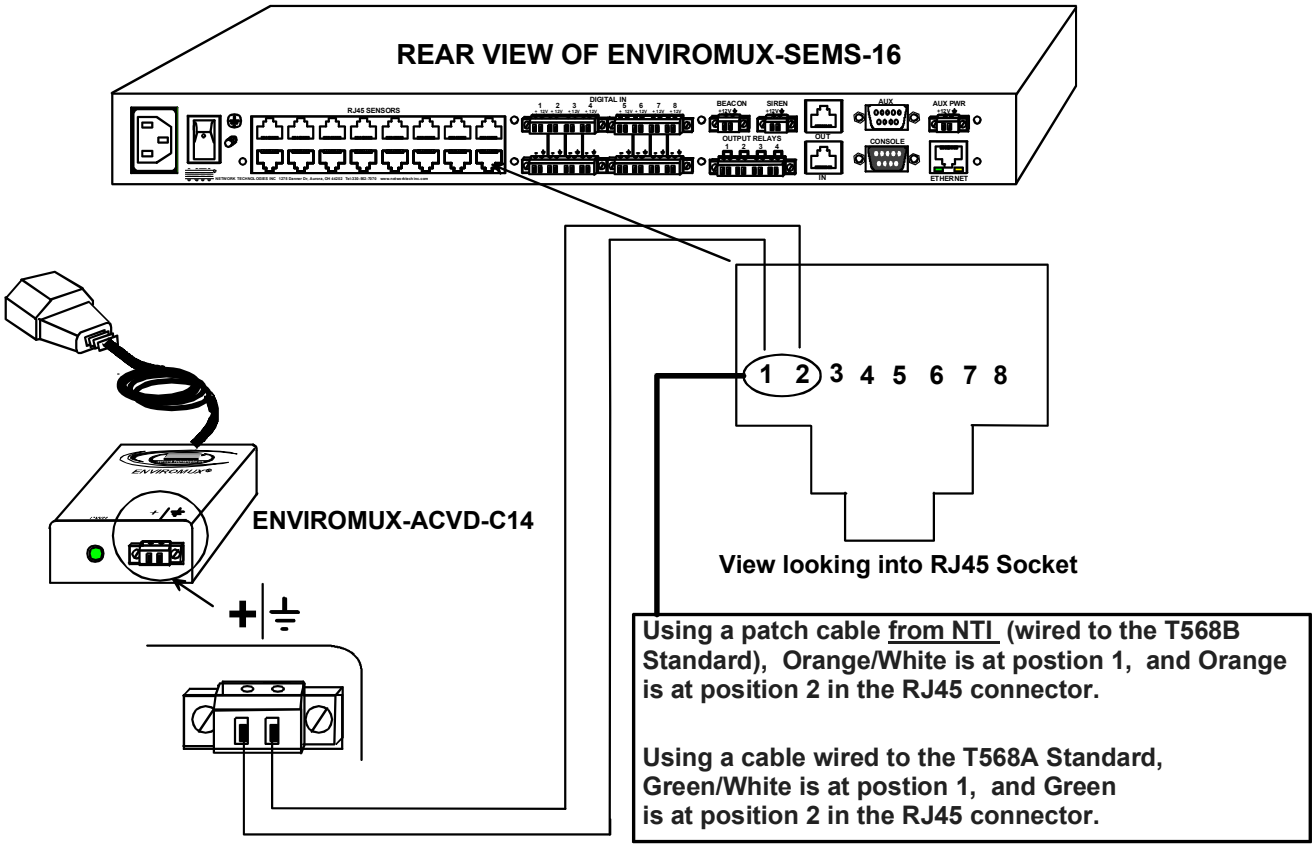
TERMINAL ON ENVIROMUX-ACVD-515		RJ45 Socket Pin #	Cable Wire Color (T568A Standard)	Cable Wire color (T568B Standard)
+	→	1	Green	Orange
⏚	→	2	Green/White	Orange/White



RJ-45 Jack
TIA/EIA 568A Standard



RJ-45 Jack
TIA/EIA 568B Standard



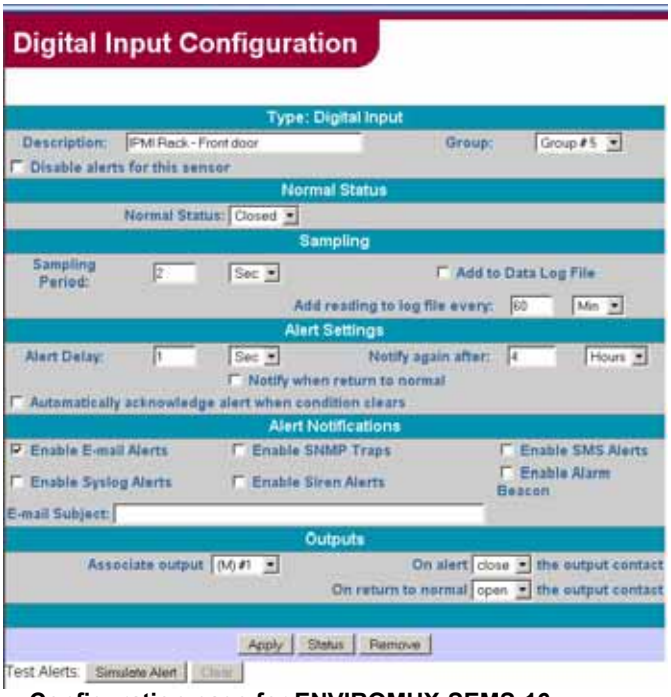
Wire connections for ENVIROMUX-SEMS-16 using RJ45 Sensor sockets

OPERATION

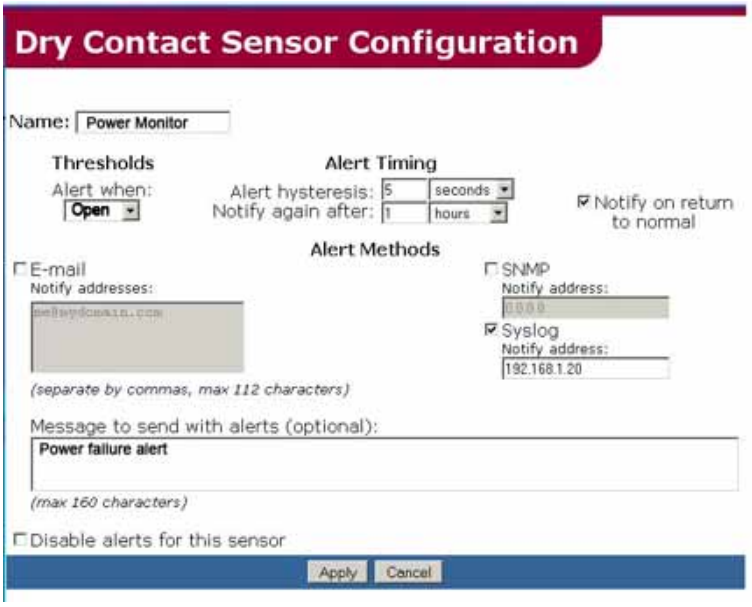
The ENVIROMUX-ACVD-xxx is designed to **close** the circuit between the " + " and " ⏚ " terminals when AC voltage is greater than 70VDC. If the voltage drops below 35VAC, the circuit will **open**. The "PWR" LED on ENVIROMUX-ACVD-xxx will illuminate when the circuit is closed.

The circuit status can be monitored by either the ENVIROMUX-SEMS-16 or the ENVIROMUX-MINI. Each ENVIROMUX can be configured to send alert notifications when the circuit opens or closes. Configuration of the ENVIROMUX-ACVD-xxx is done on the "Digital Input Configuration" page of the ENVIROMUX-SEMS-16 web interface and the "Dry Contact Sensor Configuration" page of the ENVIROMUX-MINI web interface. A sample configuration page from the web interface for each product is shown below.

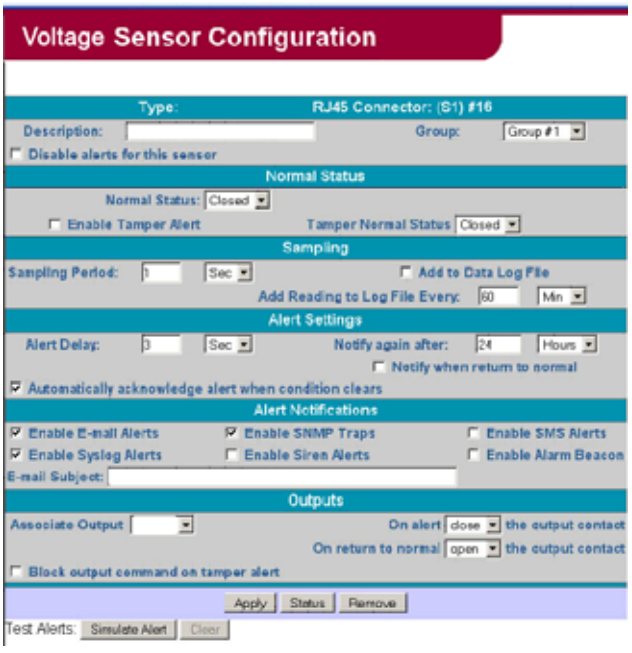
Please refer to the appropriate section of the ENVIROMUX manual for additional information on the configuration pages. (See ENVIROMUX-SEMS-16 manual pages 27-31 "External Sensor Configuration" and "Contact Sensors", or ENVIROMUX-MINI manual pages 17-18 "Sensor Management".)



Configuration page for ENVIROMUX-SEMS-16 (using Digital Inputs)



Configuration page for ENVIROMUX-MINI

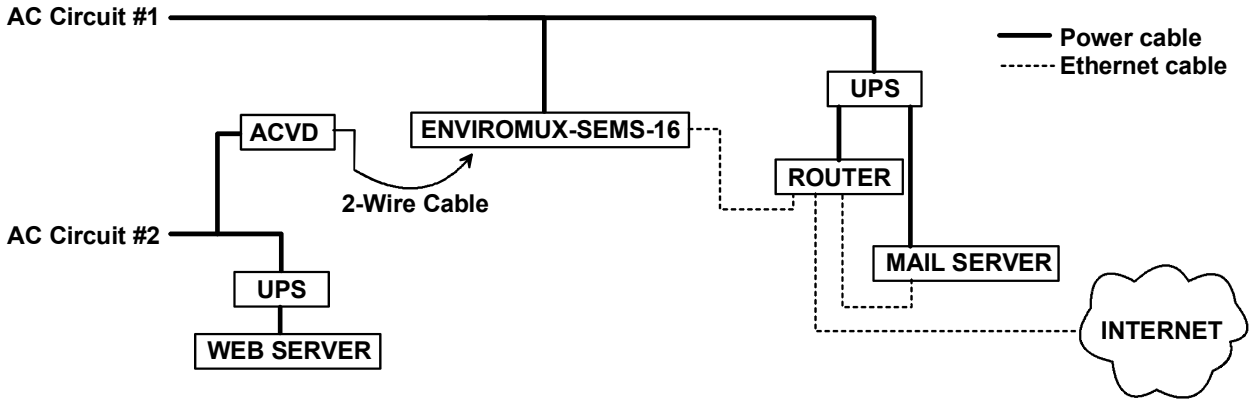


Configuration page for ENVIROMUX-SEMS-16 (using RJ45 Sensor Inputs) ➔

INSTALLATION NOTES

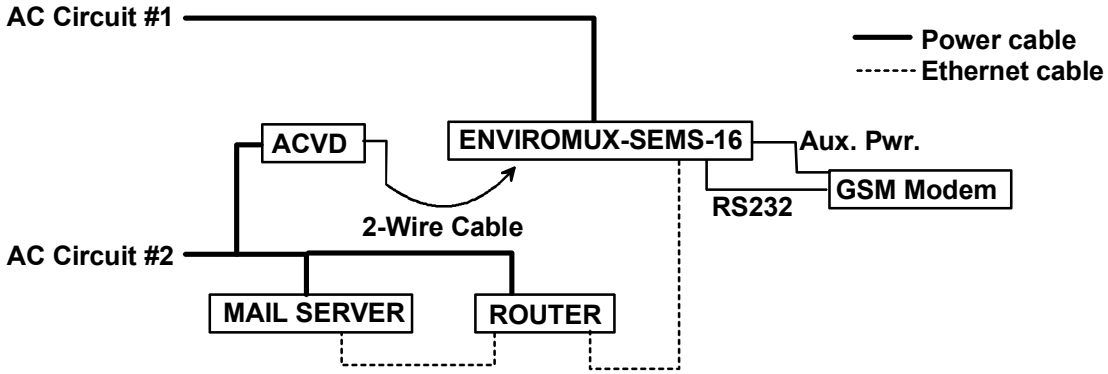
- It is not necessary to install an ENVIROMUX-ACVD-xxx to monitor the AC circuit which provides power to the ENVIROMUX-SEMS-16. The ENVIROMUX-SEMS-16 has built-in power monitoring and battery backup and will send an alert in the event of a power failure.
- In order for the ENVIROMUX-SEMS-16 to send an e-mail alert, the attached network components (routers, mail server, etc.) must have power. If you are using the ENVIROMUX-SEMS-16 and ENVIROMUX-ACVD-xxx to monitor the AC circuit providing power to any of these network components, be sure they will not lose power during a fault condition. (See image below.)

ENVIROMUX-SEMS Installation #1



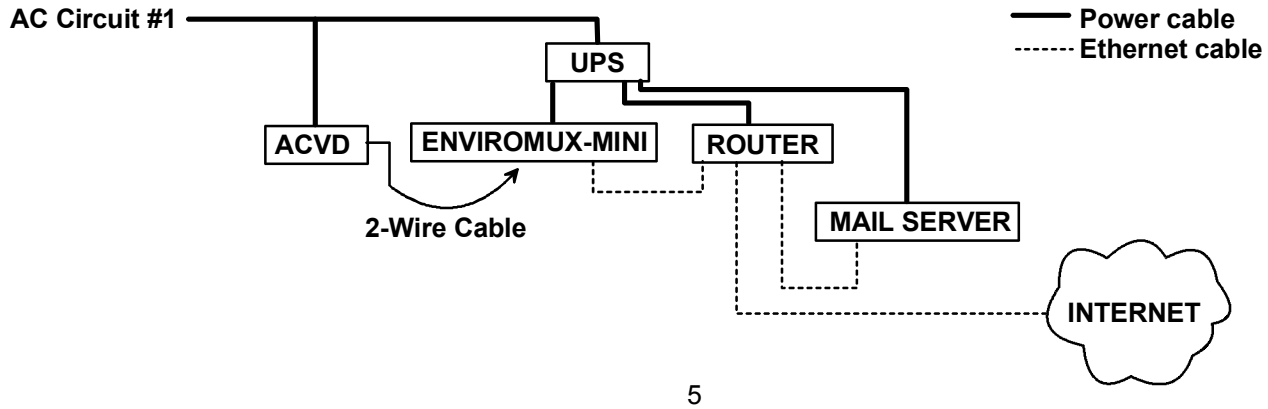
- If your network components will lose power during the AC fault condition, use an alternate means to send alerts such as a GSM Modem (ENVIROMUX-GSM) or Auto Voice Dialer (ENVIROMUX-AVDS). The ENVIROMUX-GSM and ENVIROMUX-AVDS are powered by the "Aux Pwr" port on the ENVIROMUX-SEMS-16. (See image below.)

ENVIROMUX-SEMS Installation #2



- If you are using the ENVIROMUX-ACVD-xxx to monitor the AC Circuit which provides power to the ENVIROMUX-MINI or any of the necessary network equipment (router, mail server, etc.), be sure they will not lose power during the AC fault condition. (See image below.)

ENVIROMUX-MINI Installation



TECHNICAL SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Input Voltage Range	0-250VAC
Power	Powered by 35-250VAC via power cord (25mA Max.)
Size (In.) W x D x H	2x2.5x1

CHANGES

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from date of purchase. Please contact Network Technologies Inc at (800) 742-8324 or 330-562-7070 for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

MODEL NO: ENVIROMUX-ACVD-_____

SERIAL NO: _____

DATE: _____

INSPECTED BY: _____