

INSTALLATION GUIDE FOR THE ENVIROMUX-S420MA



INTRODUCTION

The NTI ENVIROMUX-S420MA Sensor Converter monitors 4-20mA sensors (up to two) when connected to an ENVIROMUX-SEMS-16. The 4-20mA sensors can be any ISA Type 2, ISA Type 3, and ISA Type 4 sensor. When connected to an ENVIROMUX-SEMS-16 via CAT5/5e/6 cable (up to 1,000 feet away), the 4-20mA sensors can be monitored and the ENVIROMUX-SEMS-16 can be configured to alert users as to variations in the current levels.

Features:

- External RJ45 device monitors up to two 4-20mA sensors
- Supports ISA Type 2, ISA Type 3, and ISA Type 4 sensors
- Provides 18VDC, 25mA for each sensor
- 8-position screw-terminal connection
- Supports CAT5/5e/6 cable up to 1,000 ft. (not included)
- Includes Mounting Ears
- RoHS certified

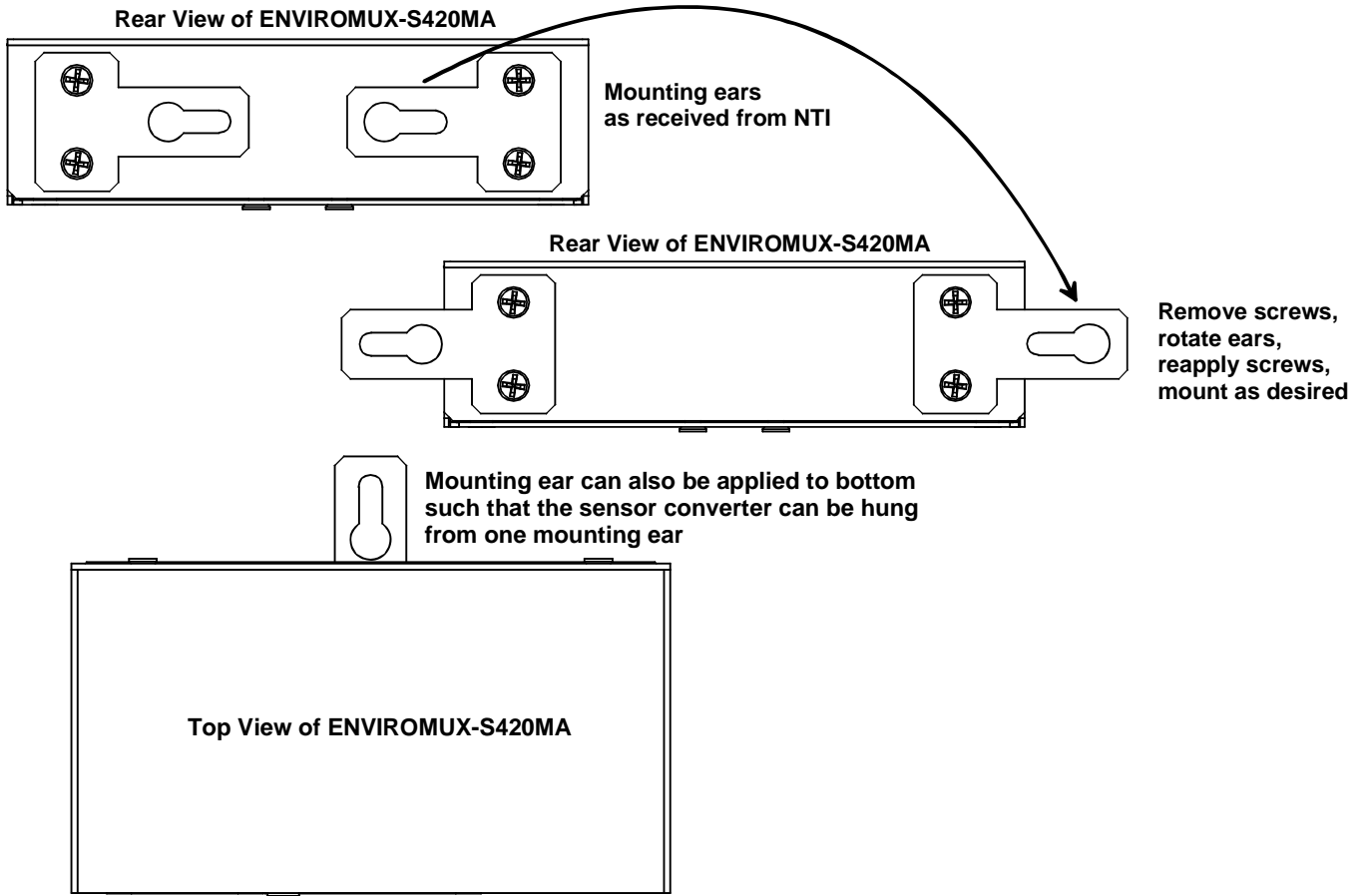
Note: The ENVIROMUX-SEMS-16 must be running firmware version 2.4 or later in order to use the ENVIROMUX-S420MA with it. Refer to the ENVIROMUX-SEMS-16 manual for firmware upgrade instructions as needed.

MATERIALS SUPPLIED

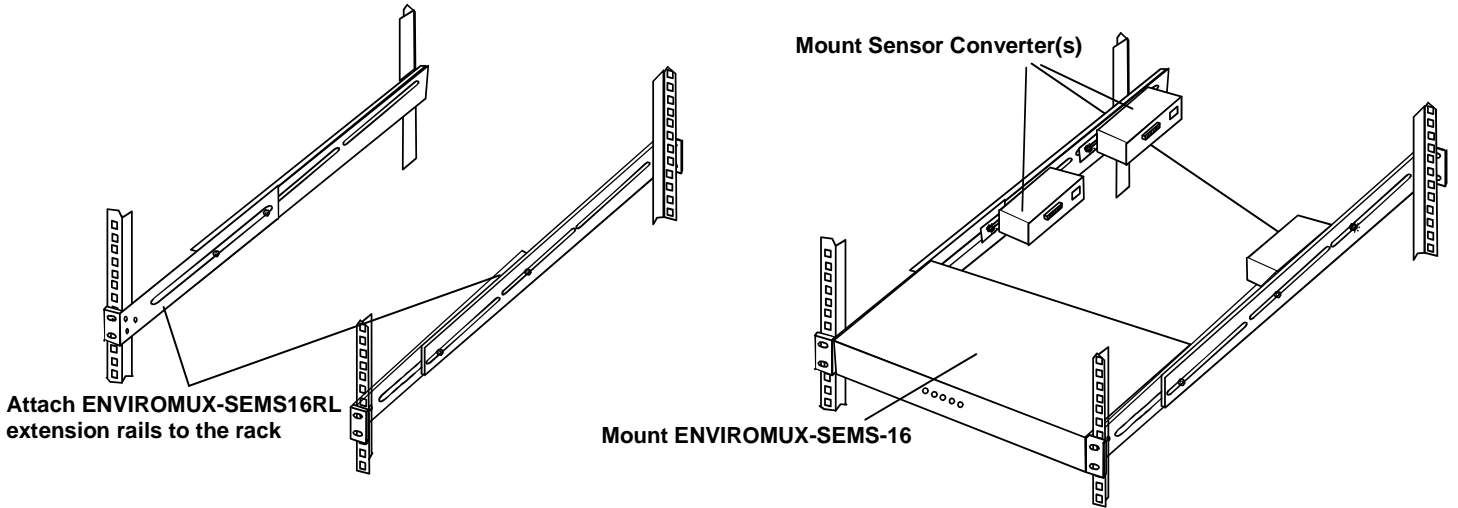
- ENVIROMUX-S420MA Sensor Converter
- 1K Ohm Resistor (for use with ISA Type 4 Sensors)

INSTALLATION

Mount the ENVIROMUX-S420MA using the mounting ears provided. To use the ears, remove the screws securing the ears to the rear of the ENVIROMUX-S420MA, turn the ears around, and reapply the screws. Alternatively, secure one ear to holes on the bottom of the unit so that it can be hung as shown in the image below.



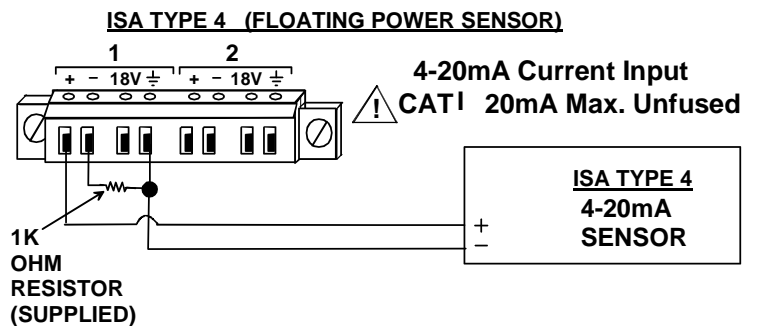
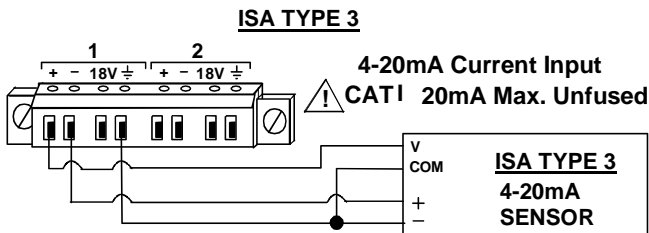
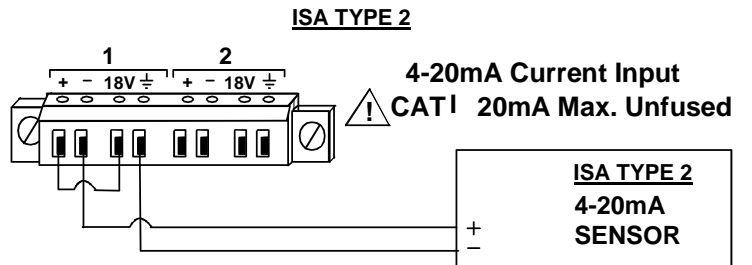
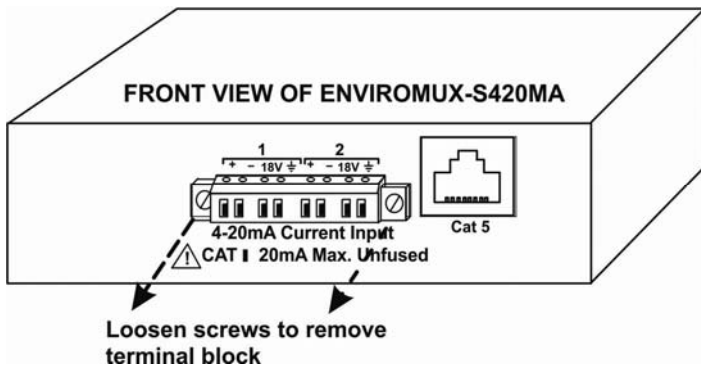
To mount multiple Sensor Converters in close proximity to the ENVIROMUX-SEMS-16, install an extension rail kit (NTI ENVIROMUX-SEMS16RL - sold separately) and mount Sensor Converters as seen in the illustration below.



CONNECTION

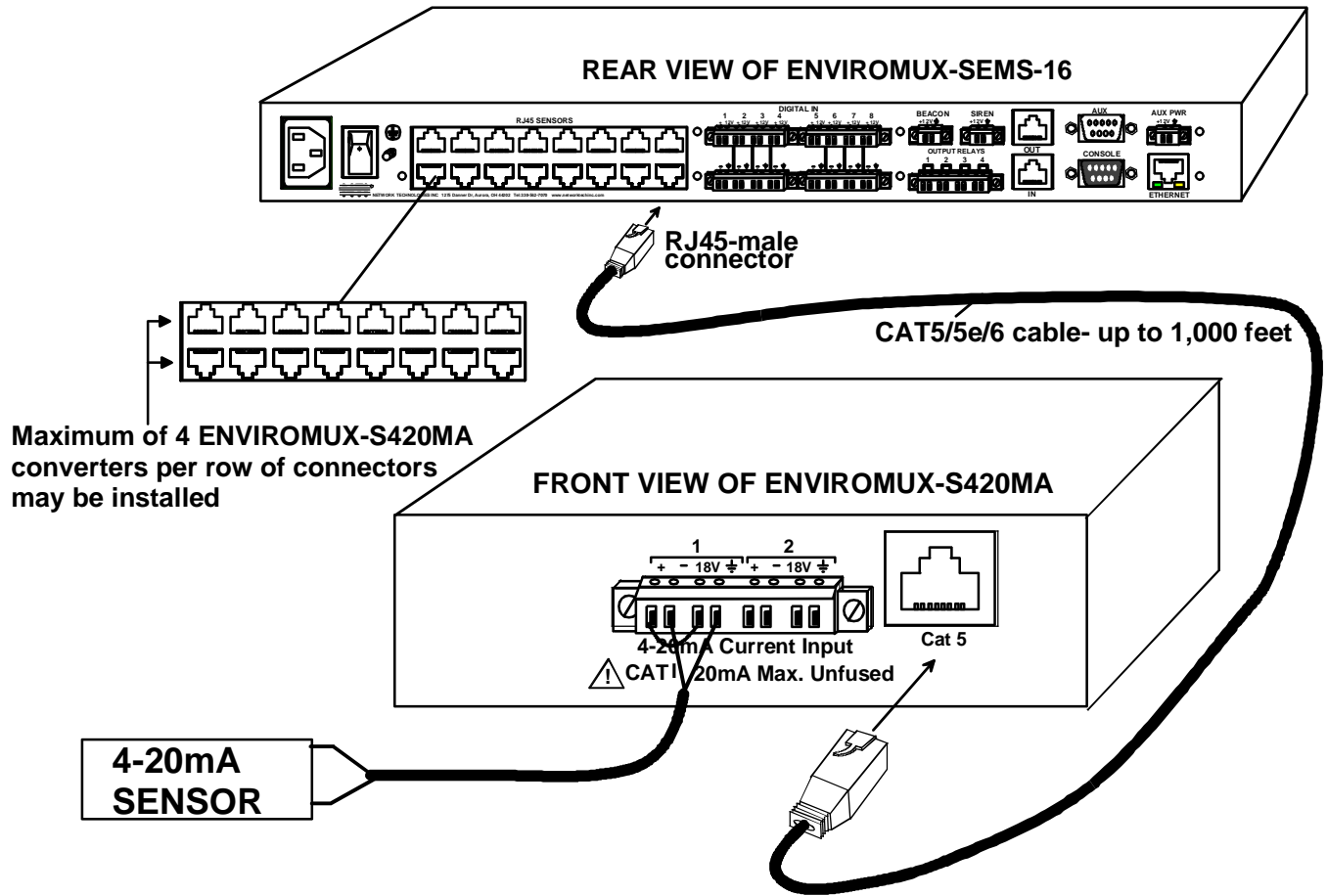
1. Connect a 4-20mA sensor to the “+ , - , 18V, and \perp (earth ground)” connections of either group 1 or group 2 (as shown below) on the removable terminal block. Connection methods for ISA Type2, ISA Type 3, and ISA Type 4 are shown below.

Note: The wire connection terminal block is easily removed from the Sensor Converter for more convenient wire termination.



- Connect a CA5/5e/6 patch cable (up to 1,000 feet long) between the “Cat 5” port on the Sensor Converter and an “RJ45 Sensor” port on the ENVIROMUX-SEMS-16.

Note: A maximum of eight (8) converters may be connected to an ENVIROMUX-SEMS-16. Up to four (4) may be connected to RJ45 Sensor ports 1-8, and up to four (4) more to RJ45 Sensor ports 9-16.



- Configure the ENVIROMUX-SEMS-16 to react to changes in the analog sensor, as desired. See the ENVIROMUX-SEMS-16 manual under “External Sensor Configuration- Custom Sensors”

Right: Image of Current Sensor Configuration page from ENVIROMUX-SEMS-16 web interface.

Current Sensor Configuration

Type: Current RJ45 Connector: # 1

Description: Thermostat-outside Group: Group # 1

Minimum Level: 40.0 Maximum Level: 20.0

Disable alerts for this sensor

Associate to a custom sensor

Custom sensor type: Thermometer Unit: F

SNMP Custom Type ID: 32

Minimum Level: 0.0 (corresponding to 4mA) Maximum Level: 110.0 (corresponding to 20mA)

Thresholds

Minimum Threshold: 40.0 Maximum Threshold: 80.0

Sampling

Sampling Period: 10 Sec Add to Data Log File

Add Reading to Log File Every: 60 Min

Alert Settings

Alert Delay: 30 Sec Notify again after: 30 Min Notify when return to normal

Automatically acknowledge alert when condition clears

Alert Notifications

Enable E-mail Alerts Enable SNMP Traps Enable SMS Alerts

Enable Syslog Alerts Enable Siren Alerts Enable Alarm Beacon

Outputs

Associate Output: None On alert: open the output contact

On return to normal: open the output contact

Apply Status Remove

ENVIROMUX-STHS-xxx Wiring Instruction

Models Included:

ENVIROMUX-STHS-PLT-120/-140/-180

ENVIROMUX-SHS-PLT

ENVIROMUX-STHS-DCT

ENVIROMUX-STHS-WLM

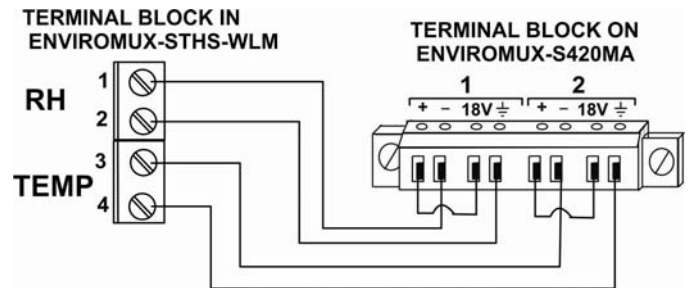
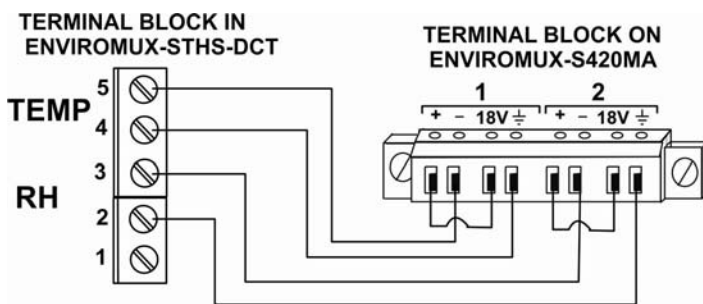
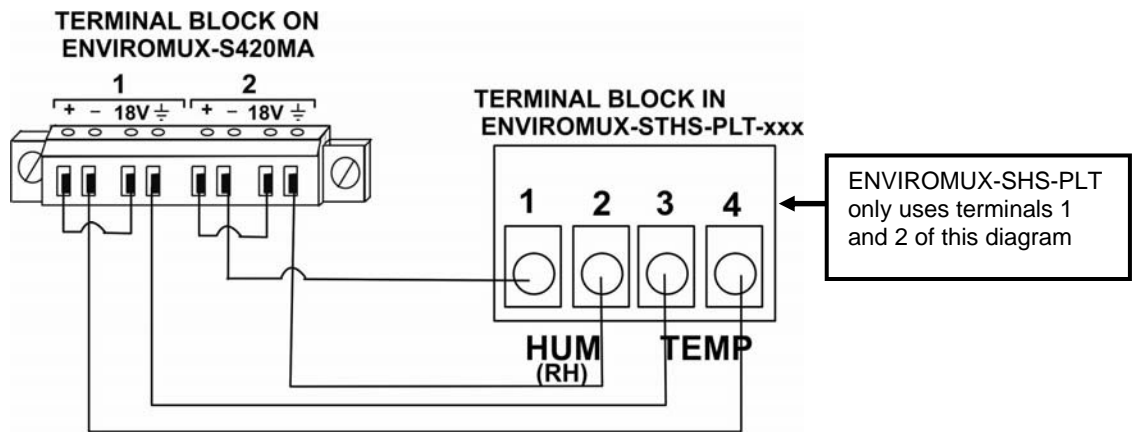
The ENVIROMUX-STHS-xxx are precision temperature and humidity sensors (ENVIROMUX-SHS-PLT senses only humidity) that require the ENVIROMUX-S420MA to operate. Use the images below to make proper connections for installation.



Outside view- ENVIROMUX-STHS-PLT-120



Inside view- ENVIROMUX-STHS-PLT-120



For use and operation of the precision temperature and humidity sensor, see the manual provided by the manufacturer.

TROUBLESHOOTING

Problem	Solution
Message "OUT OF RANGE" appears in sensor status page	Wires to sensor are not connected to terminal block.

TECHNICAL SPECIFICATIONS

Description	Specification
Measurement Range	4-20mA
Measurement Accuracy	+ 0.5% of full scale
Resolution	± 15 uA
Power	Powered by ENVIROMUX-SEMS-16
Size (In.) W x D x H	4.15x2.3x1.2

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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-S420MA

SERIAL NO: _____

DATE: _____

INSPECTED BY: _____