INSTALLATION GUIDE FOR THE

ENVIROMUX-DUST

INTRODUCTION

The NTI ENVIROMUX-DUST Optical Dust Sensor monitors air particle levels when connected to an ENVIROMUX-16D, ENVIROMUX-5D or ENVIROMUX-2D Server Environment Monitoring System (SYSTEM). When connected to a SYSTEM via 18-24AWG CAT5/5e/6 cable (up to 1,000 feet away), the air particulate level can be monitored and the SYSTEM can be configured to alert users as to variations in that particulate level.
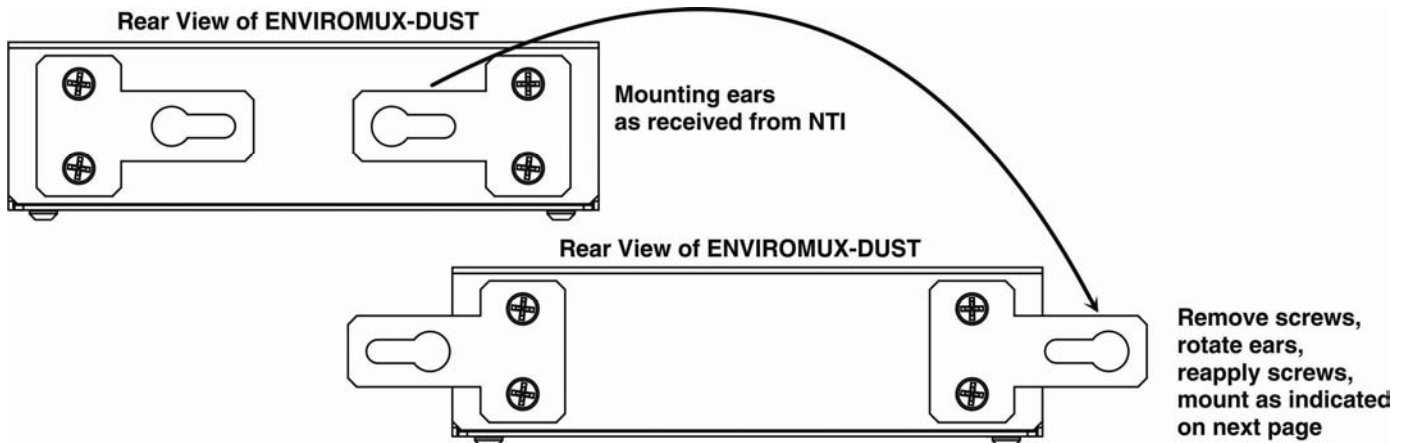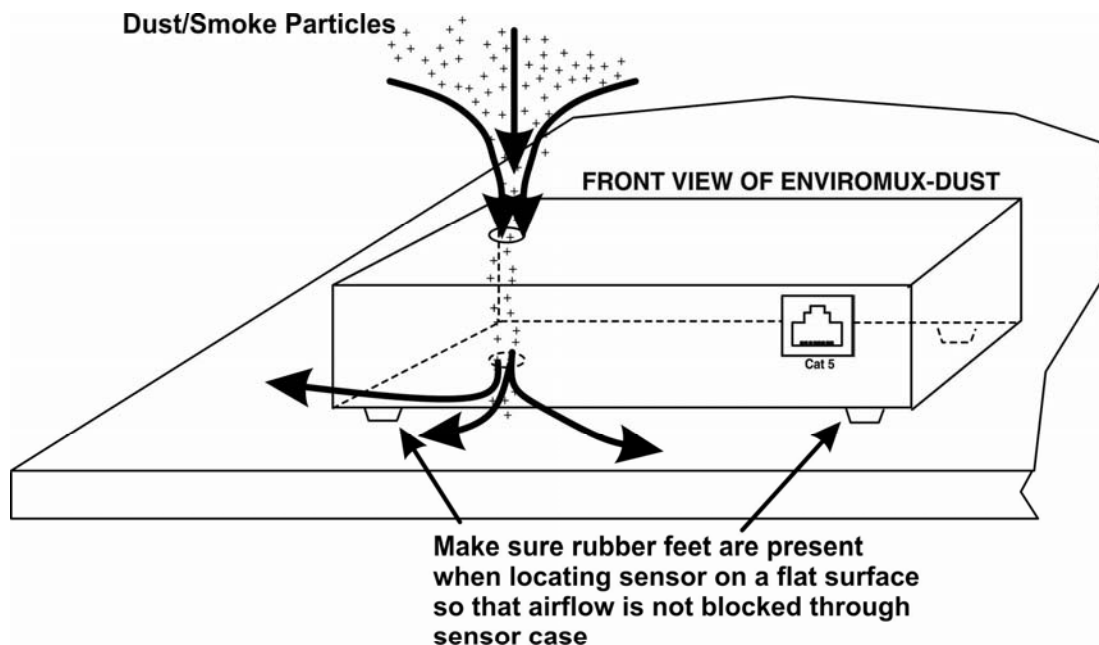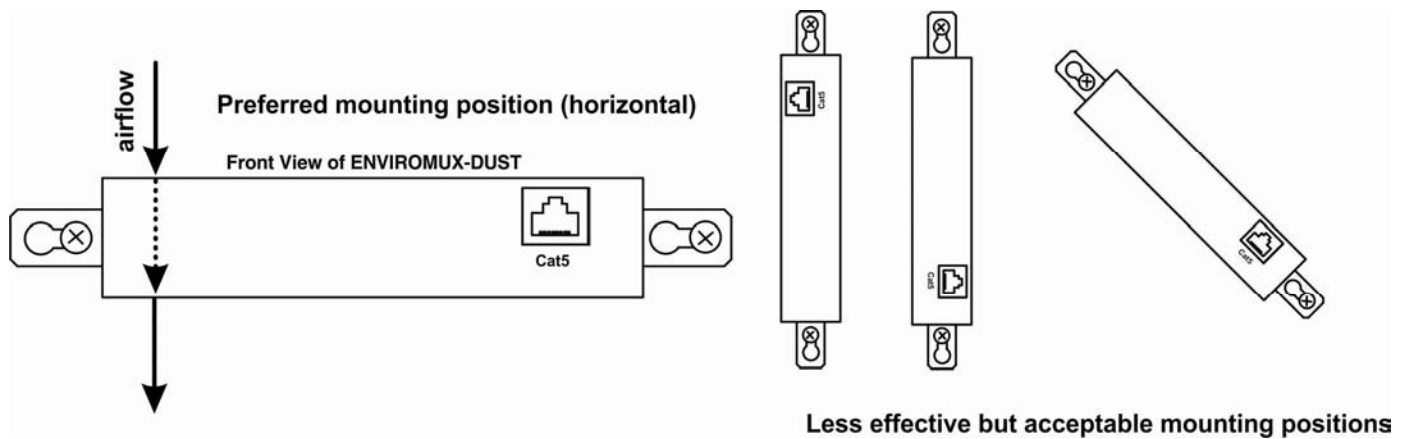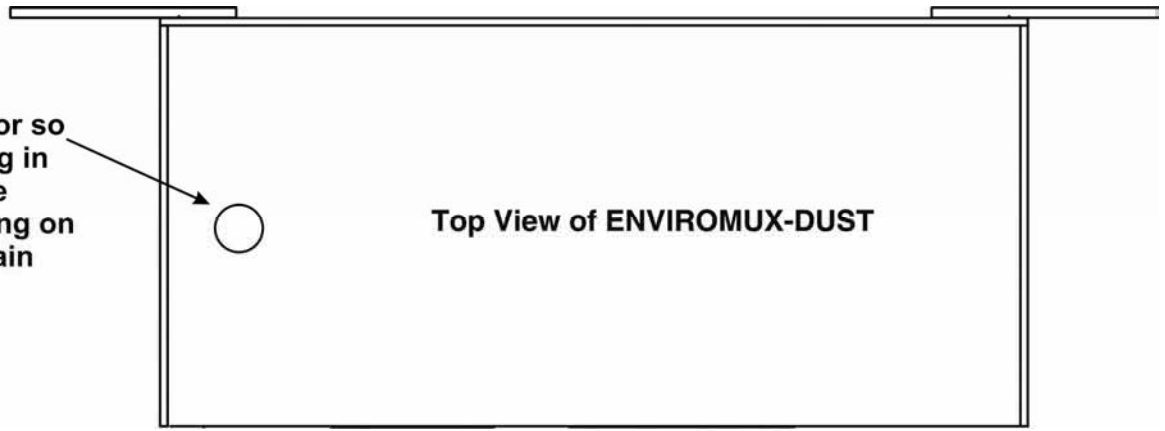
Features:

> Note: The ENVIROMUX-xD must be running firmware version 2.10 or later in order to use the ENVIROMUX-DUST with it. Refer to the ENVIROMUX-xD manual for firmware upgrade instructions as needed.

➢ Detects the presence of dust and fine particles using an infrared emitting diode (IRED) and phototransistor
➢ Able to distinguish smoke from house dust
➢ RJ45 connector for cable connection
➢ Voltage supply: 5VDC and 12VDC
➢ Current consumption: < 50mA
➢ Dimensions (WxDxH) in: 5.9x2.3x1.2 (150x58x30 mm)
➢ Operating temperature: 32 to 149°F (0 to 65°C)
➢ Supports 18-24AWG CAT5/5e/6 cable up to 1,000 ft. (305 m.) (not included)
➢ Includes Mounting Ears
➢ CE certified
➢ RoHS compliant

INSTALLATION

ENVIROMUX-DUST can be mounted using the mounting ears provided.   To use the ears, remove the screws securing the ears to the rear of the ENVIROMUX-DUST, turn the ears around, and reapply the screws.


Rear View of ENVIROMUX-DUST

Mounting ears as received from NTI

Rear View of ENVIROMUX-DUST

Remove screws, rotate ears, reapply screws, mount as indicated on next page

Mount the sensor so that this opening in the case and the matching opening on the bottom remain clear for air to pass through.

Top View of ENVIROMUX-DUST

airflow

Preferred mounting position (horizontal)

Front View of ENVIROMUX-DUST

Cat5

Less effective but acceptable mounting positions

Dust/Smoke Particles

FRONT VIEW OF ENVIROMUX-DUST

Cat 5

Make sure rubber feet are present when locating sensor on a flat surface so that airflow is not blocked through sensor case

CONNECTION

Connect an 18-24AWG CAT5/5e/6 patch cable (up to 1,000 feet long) between the "Cat 5" port on the Dust Sensor and an "RJ45 Sensor" port on the SYSTEM.   (The use of smaller gauge CATx cabling will result in shorter distances that can be spanned.)

Note: Each row of RJ45 Sensor connectors on the ENVIROMUX-xD (1-8 and 9-16) is rated for a combined load of 500mA. Each ENVIROMUX-DUST uses less than 50mA.   When applying sensors, be sure that the total load on each row does not exceed 500mA or failure of the SYSTEM may result.
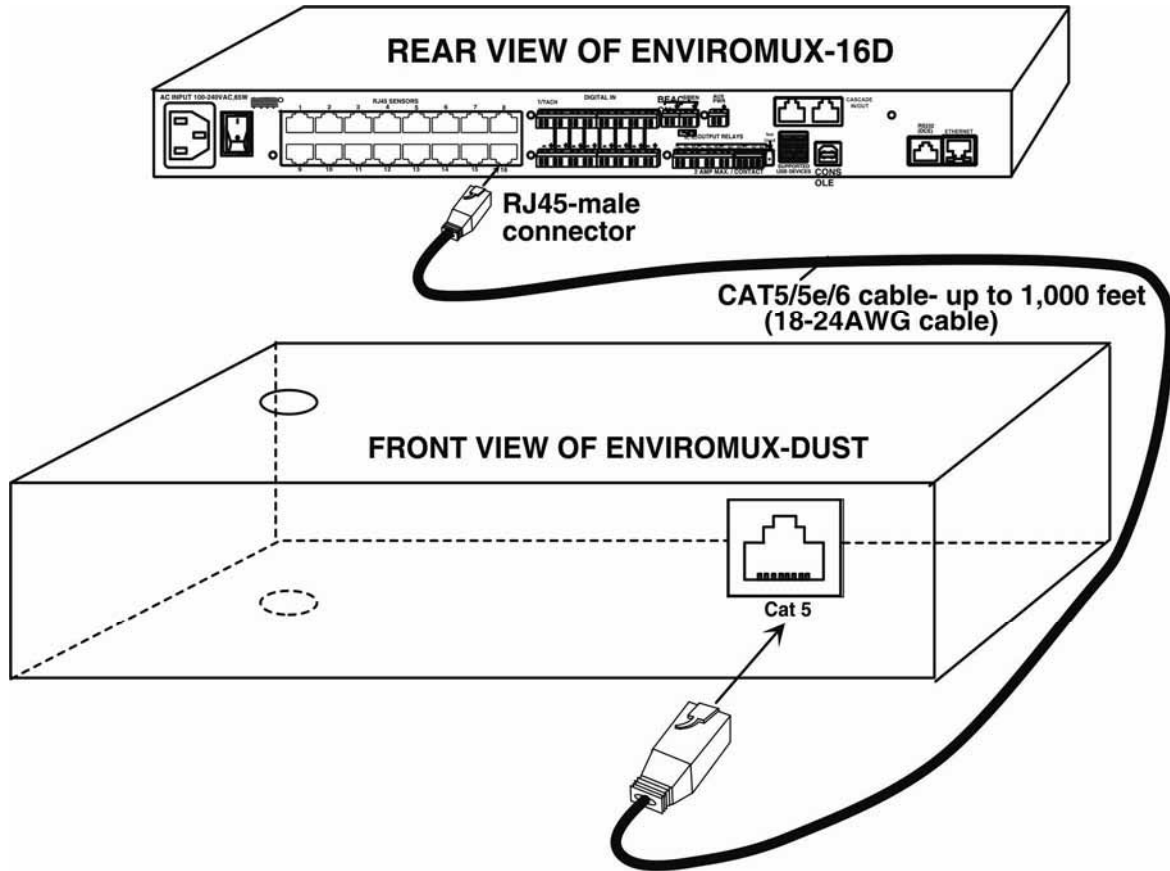
Configure the SYSTEM to react to changes in the dust level measured by the sensor, as desired. See example on page 4.

Summary

Internal Sensors

No.	Description	Type	Value	Status	Action
1	Internal Temperature	Temperature	28.8°C	Normal	View Edit
2	Internal Humidity	Humidity	31%	Normal	View Edit
3	Input Voltage	Voltage	14.0V	Normal	View Edit

Sensors

Conn.	Description	Type	Value	Status	Action
1	Sensor #1.1	Dust Level	0.00mg/m³	Normal	View Edit Delete

DUST SENSOR VIEWED ON SUMMARY PAGE

Sensor #1.1 Configuration (Type: Dust Level)

Sensor Settings

Description
Sensor #1.1
Descriptive name for the sensor

Min. Level
0.0
Min. supported value for the sensor

Max. Level
1.0
Max. supported value for the sensor

Min. Non-Critical Threshold
0.0
Min. threshold below which indicates an non-critical alert condition

Max. Non-Critical Threshold
0.1
Max. threshold above which indicates an non-critical alert condition

Min. Critical Threshold
0.0
Min. threshold below which indicates an alert condition

Max. Critical Threshold
0.5
Max. threshold above which indicates an alert condition

Refresh Rate
10   Sec ▾
The refresh rate at which the sensor view is updated

⊞ Group Settings

⊞ Schedule Settings

⊞ Non-Critical Alert Settings

⊞ Critical Alert Settings

⊞ Data Logging

Save

Alert Simulation

Simulate Alert   Clear Alert

EXAMPLE OF SENSOR CONFIGURATION PAGE

TECHNICAL SPECIFICATIONS

Description	Specification
Measurement Medium	air particles (i.e. smoke and house dust)
Sensor Type	infrared emitting diode (IRED) and phototransistor
Connector	RJ45 Female
Cable Length supported	18-24AWG CAT5/5e/6 cable to 1,000 ft (305 m). (not included)
Detection Range	0.00-1.00 mg/m^3
Operating temperature	32 to 149°F (0 to 65°C)
Current consumption	< 50mA
Power	5VDC and 12VDC from the SYSTEM
Size (In.) WxDxH	5.9x2.3x1.2 (150x58x30 mm)
Certifications	CE certified, RoHS compliant

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.

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