



INSTALLATION GUIDE FOR THE E-DUST

INTRODUCTION

The NTI E-DUST Optical Dust Sensor monitors air particle levels when connected to an E-16D, E-5D or E-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.

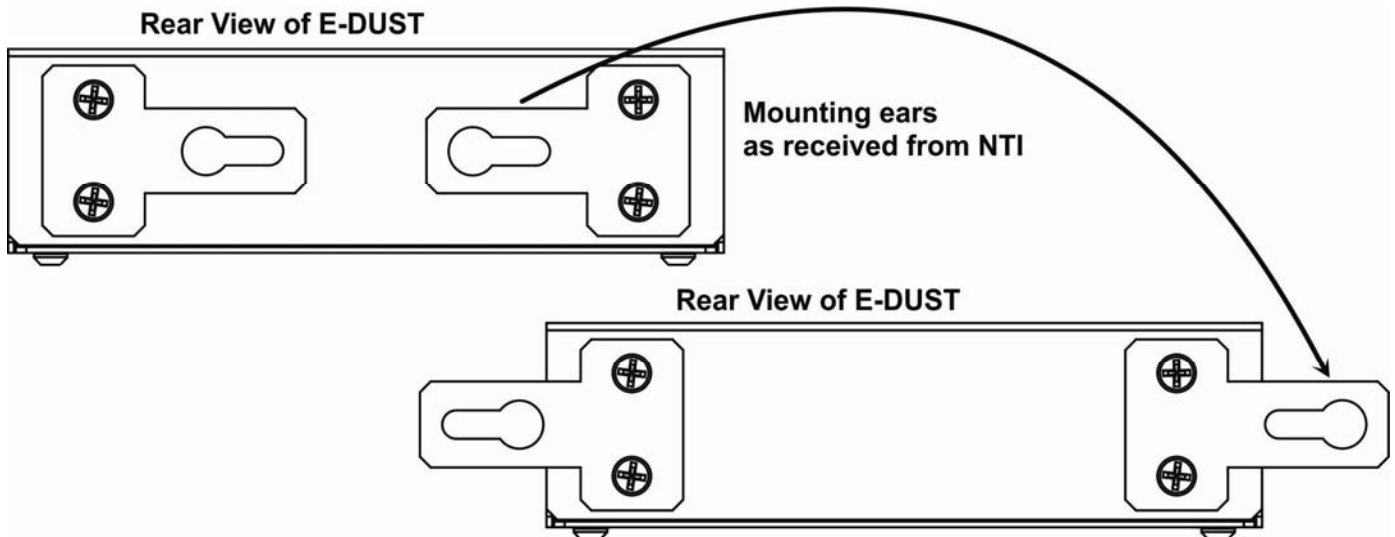
Features:

- Detects the presence of dust and fine particles using an infrared emitting diode (IRLED) 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

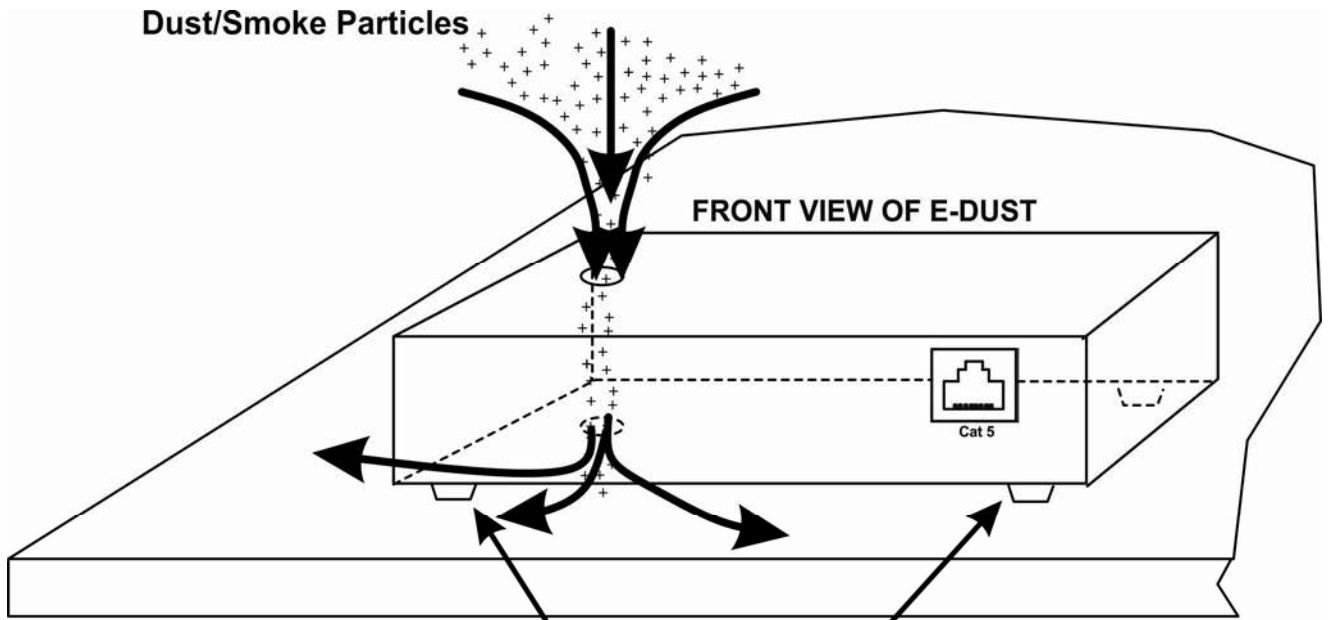
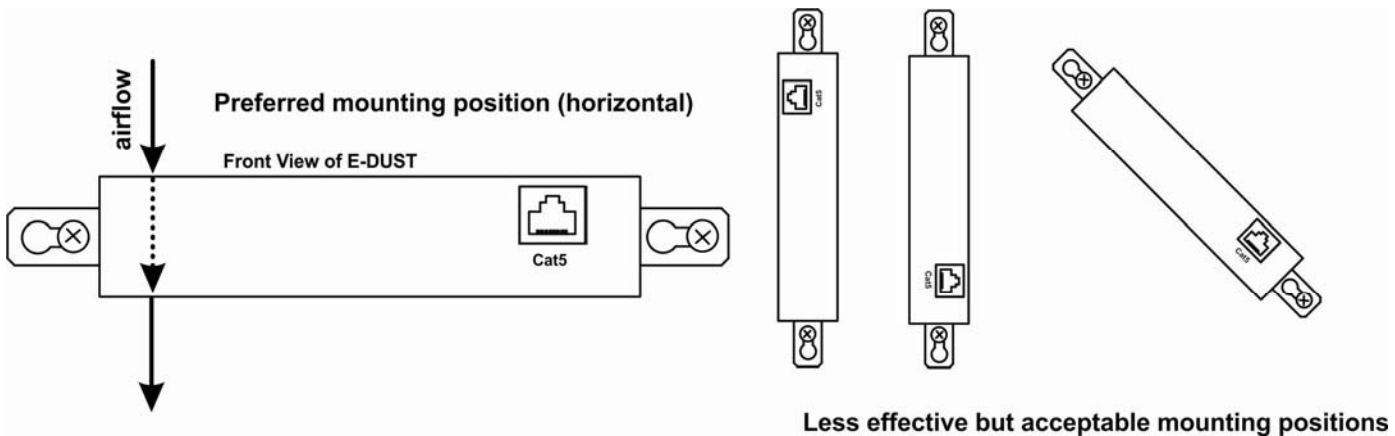
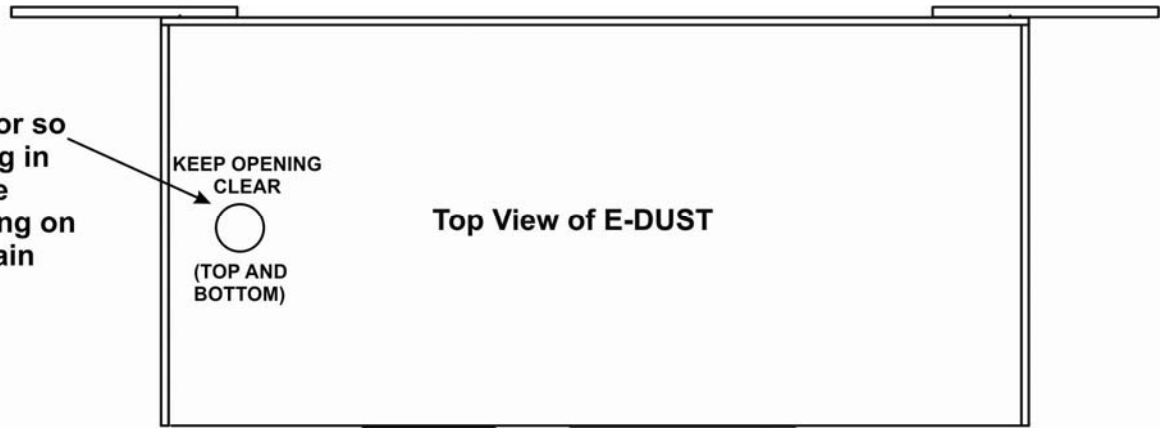
Note: The E-xD must be running firmware version 2.10 or later in order to use the E-DUST with it. Refer to the E-xD manual for firmware upgrade instructions as needed.

INSTALLATION

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



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

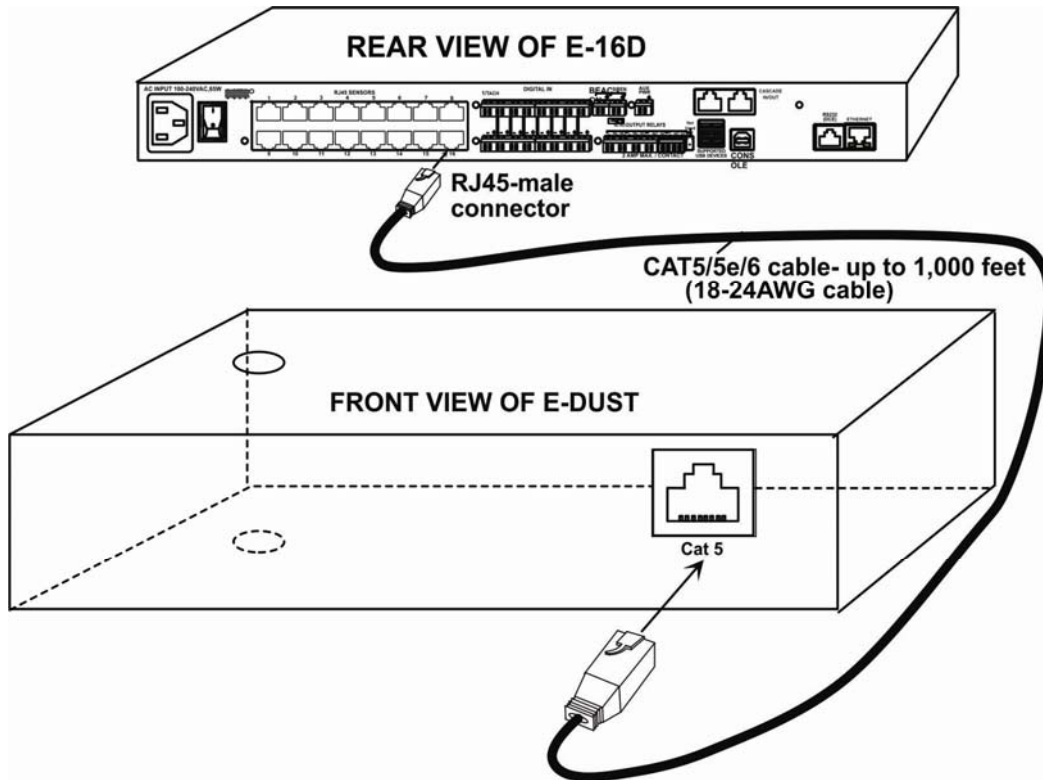


Make sure rubber feet are present when locating sensor on a flat surface so that airflow is not blocked through sensor case

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 E-xD (1-8 and 9-16) is rated for a combined load of 500mA. Each E-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.



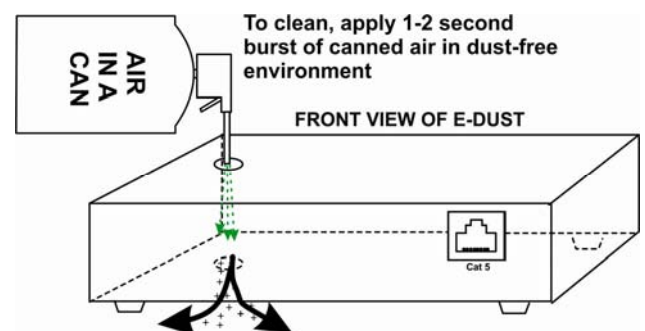
CONNECT THE E-DUST TO E-16D

CLEANING

In the event the Dust Sensor fails to return to a 0 level value in the web interface when removed from a dust-filled environment, the sensing element may need to be cleaned.

To clean the Dust Sensor:

1. Disconnect the CATx cable from the sensor and move the sensor to a dust-free environment.
2. Spray a 1-2 second burst of canned air (NOT from an air compressor) into either the top side or bottom side of the sensor opening in the case.
3. Reconnect the CATx cable with the sensor in a dust-free environment and check the reading on the web interface. Repeat this procedure until a 0 level is attained while in a dust-free environment.



CONFIGURATION

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/m ³	Normal	View Edit Delete

DUST SENSOR VIEWED ON SUMMARY PAGE

Sensor #1.1 Configuration (Type: Dust Level)

[-] Sensor Settings

Description	<input type="text" value="Sensor #1.1"/> <small>Descriptive name for the sensor</small>
Min. Level	<input type="text" value="0.0"/> <small>Min. supported value for the sensor</small>
Max. Level	<input type="text" value="1.0"/> <small>Max. supported value for the sensor</small>
Min. Non-Critical Threshold	<input type="text" value="0.0"/> <small>Min. threshold below which indicates a non-critical alert condition</small>
Max. Non-Critical Threshold	<input type="text" value="0.1"/> <small>Max. threshold above which indicates a non-critical alert condition</small>
Min. Critical Threshold	<input type="text" value="0.0"/> <small>Min. threshold below which indicates an alert condition</small>
Max. Critical Threshold	<input type="text" value="0.5"/> <small>Max. threshold above which indicates an alert condition</small>
Refresh Rate	<input type="text" value="10"/> <input type="text" value="Sec"/> <small>The refresh rate at which the sensor view is updated</small>

[+] Group Settings

[+] Schedule Settings

[+] Non-Critical Alert Settings

[+] Critical Alert Settings

[+] Data Logging

Alert Simulation

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

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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.

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