E-RJ8-RS485

RJ45 Sensor Port Hub
Installation Manual

The E-RJ8-RS485 RJ45 Sensor Port Hub provides support for up to 8 NTI RS485 sensors when connected to an RJ45 Sensor port on an E-2D/5D/16D Enterprise Environment Monitoring System. When connected to a SYSTEM with firmware version 3.8 or newer, any NTI RS485 sensor connected to the Sensor Port Hub will be sensed and added to the list of sensors on the E-xD Summary Page in the web interface. Up to three E-RJ8-RS485 Sensor Port Hubs can be connected to an E-16D, up to two can be connected to a E-5D, and one can be connected to an E-2D.
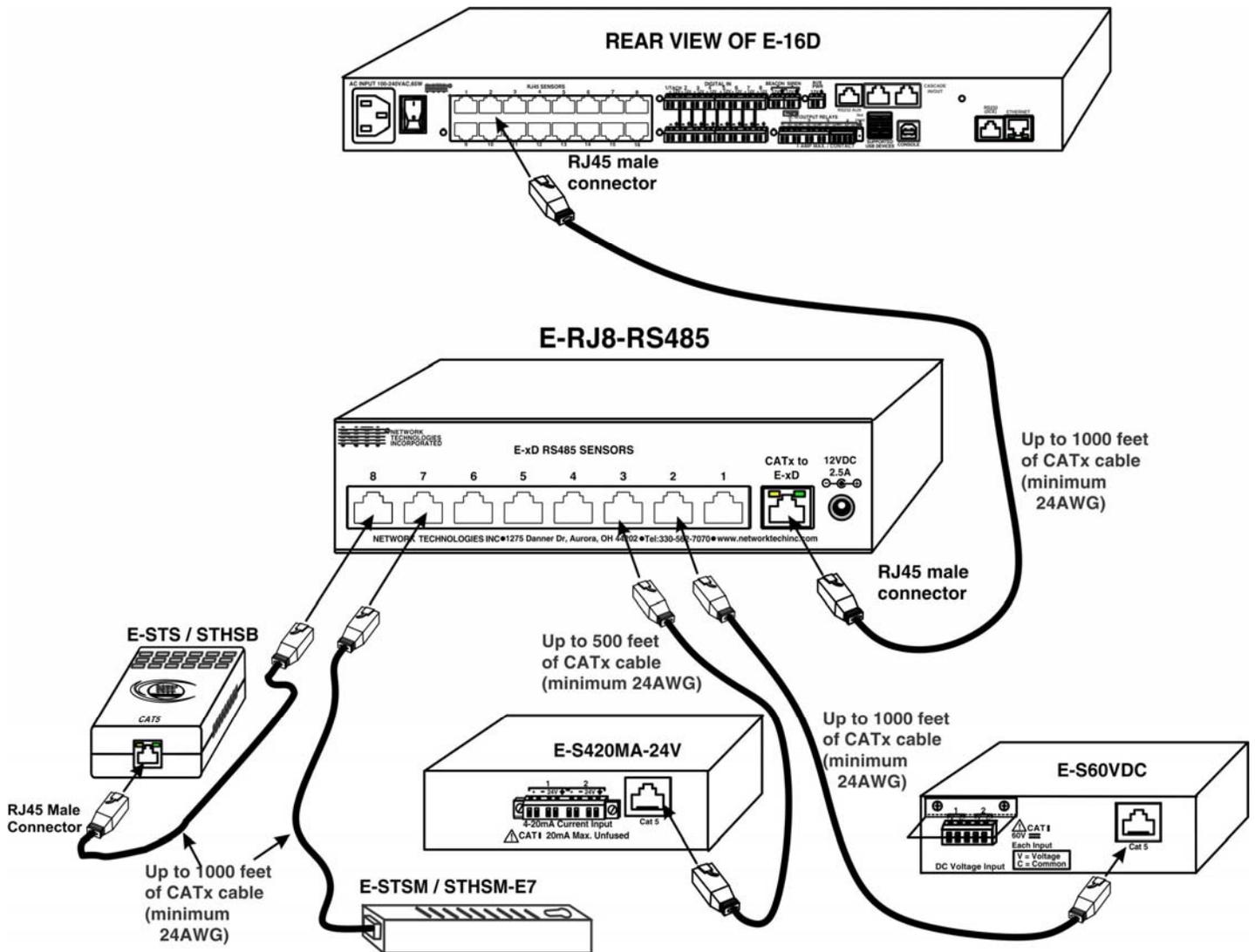
Features:

- Supports the connection of up to eight NTI RS485 sensors using one RJ45 sensor port.
    - Up to three E-RJ8-RS485 can be connected to an E-16D
    - Up to two E-RJ8-RS485 can be connected to an E-5D
    - One E-RJ8-RS485 can be connected to an E-2D

- Provides RJ45 modular jacks for connecting NTI RS485 sensors such as temperature, humidity, temperature/humidity, AC voltage and current monitor, DC voltage monitor, and others.

- Supports CAT5/5e/6 cable up to 1000 ft. (305 m) between E-16D and hub. Sensor cable lengths connected to the hub are as specified per sensor (maximum 1000ft. each).(i.e. the E-S420MA-24V has a maximum specified CATx cable length of 500ft.(152m))

- Powered by 12VDC 2.5A external power supply (included).

- Compatible with E-2D/5D/16D (firmware version 3.8 and newer)

- Regulatory approvals: CE, RoHS

- Operating temperature: 32 to 158°F (0 to 70°C)

- Storage temperature: -4 to 176°F (-20 to 70°C)

- Compatible with **E-SER-2FOSMST** Fiber Converter/Extender.

    - Use to extend hub up to 1.2 miles (2 km) from the ENVIROMUX unit.

Note: The E-RJ8-RS485 does not directly support contact sensors (i.e. Motion Sensor, Door Contact Switch, Smoke Detectors, etc) . The Alarm/Sense (Pin 2) and Tamper (Pin 5) signals of the RJ45 Sensor port in an E-xD are not supported.   To connect contact sensors, an E-DI16DO(R)16 Digital Input Expander must first be connected.

Connections

1. Connect a CATx patch cable up to 1000 feet long (24AWG minimum at this length) between an RJ45 Sensor port on the E-xD and the "CATx to E-xD" port on the E-RJ8-RS485.

Note: The length of CATx cable that can be used between the E-RJ8-RS485 and the sensor will vary.   Refer to the manual for each sensor to be connected for cable length limitations.

2. Connect the 12VDC power supply to the E-RJ8-RS485 and plug into power.

3. Connect up to 8 NTI RS485 sensors to the 8 ports on the E-RJ8-RS485. Some limitations apply, see chart below for current list of compatible sensors.

RS485 Sensors and Adapters used with the E-16D/5D/2D.

NTI #	Description
E-ACDCLM	AC & DC Voltage and Current Monitor
E-ACLM-3P480	3-Phase Power Monitor
E-ACLM-P-xx	AC Line Monitors
E-ACLM-V	AC Line Monitor
E-ALDS	Leak Location Detection Sensor
E-AV-LC-7	Low Cost Air Velocity Sensor
E-CO2-THS	Carbon Dioxide, Temperature, Humidity and Dew Point Sensor
E-DCLM-6	DC Voltage and Current Line Monitor
E-DI16DO16	Digital Input/Output Expander
E-DI16DOR16-V2	Digital Input/Output Expander
E-DUST	Optical Dust Sensor
E-S420MA-24V	Current Sensor Adapter
E-S5VDC	Voltage Sensor Adapter
E-S60VDC	Voltage Detector Converter
E-LIS	Light Sensor
E-NLS	Noise Level Sensor
E-PLSD	Programmable LED Sensor Display
E-STHSM	Temperature/Humidity Sensor
E-STHSB	Temperature/Humidity Sensor
E-STHS-LCDW	Temperature/Humidity Sensor W/ LCD
E-STHS-LSH	Temperature/Humidity Sensor-Low Self-Heating
E-STHS-PRC	Precision Temperature/Humidity Sensor
E-STS	Temperature Sensor
E-STS-O	Outdoor Temp Sensor-Cable Restraint Assembly
E-STSM-E7	Temperature Sensor
E-STSP-7	Pipe Temperature Sensor
E-STSP-SL-7	Pipe Temperature Sensor-Spring Loaded

Note: Any additional RS485 sensors that become available from NTI will also be compatible unless otherwise indicated.

Note: Sensors connected to the E-RJ8-RS485 are not visible using E-MNG management software but are visible in E-MNG-SH management software.