

# NTI e-16d-24v Large Enterprise Environment Monitoring System with 24VDC Power

## Power Port

- 100 to 240 VAC at 50 or 60 Hz via IEC connector. (Country-specific power supply cable included.)
- Power consumption: 35W
- Connection for Earth Ground.
- Fuse protection.
- Optional 24VDC power.
- Accepts 20~32VDC (24VDC nominal).

## RJ45 Sensor Ports

- Sixteen RJ45 modular jacks for connecting NTI temperature, humidity, temperature/humidity, liquid detection, smoke detection, glass break, vibration and motion sensors.

## Digital Inputs

- Eight screw terminals pairs for connecting dry contact devices.
- Input voltage: 0VDC to +25VDC.
- Provides +12VDC, 50mA for terminals 1-7, and +12VDC, 350mA for terminal 8 only.
- Fuse protection.

## Digital Outputs

- Four screw terminals pairs.
- Potential-free relay switch contacts.
- Normally open / normally closed connection points.
- Maximum switching load: 0.5A at 100VAC, 1A at 30VDC, 0.5A at 48VDC.

## Beacon Port

- One screw terminal pair.
- Provides +12VDC, 180 mA to supply an alarm beacon.
- Fuse protection

## Siren Port

- One screw terminal pair.
- Provides +12VDC, 180 mA to supply a siren.
- Fuse protection

## AUX Power

- One screw terminal pair.
- Provides 12VDC, 150mA.

## USB Device Ports

- Four female USB Type A connectors for connecting USB modem or for downloading log data to USB flash drive.
  - Two USB ports on front panel and 2 on back panel.

## USB Console Port

- One female USB Type B connector for connecting a PC for serial terminal access.

## RS232 (DCS) Port

- One female RJ45 serial port for terminal access.

## Ethernet Port

- One 10/100 Base-T Ethernet port with RJ45 Ethernet connector.
  - Supports full- and half-duplex.

## RS232 AUX Port

- One RJ45 port for connecting a serial GSM modem or a remote serially-controlled device.

## Cascade In/Out Ports

- Two RJ45 jacks.
- A maximum of 5 systems can be used in a cascaded configuration via RS485 to increase the number of sensor ports (1 master, 4 slaves).
  - Each slave unit needs its own unique RS485 address value that can range from 1-255.

- Use CAT5/5e/6 patch cables with RJ45 connectors wired straight through
- Up to 4,000 feet between the master unit and the slave unit.
- The last slave must have a terminating plug (E-TRMPLG, not included) in the empty socket.
- Uses a single Web interface for all systems connected.

#### Protocols

- HTTP/HTTPS, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSHv2, SSLv3, TLS, LDAPv3, XOAUTH2, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, IPV6, WAP 2.0, RADIUS
  - Support for XOAUTH2 provides higher security authentication for email accounts (e.g. Gmail).
- Compatible with any SNMP management software.
  - The unit can be polled via SNMP.
- Operates and configures via HTTP/HTTPS web page, Telnet, SSH, or USB/RJ45 serial interface.
- An IP address can be assigned to the E-16D automatically by a DHCP server.
- Generates SNMP traps, email alerts, syslog messages, and SMS messages (via USB 3G modem).
  - Alerts are posted in event log, which is accessible through Web user interface.
  - Email alerts can be sent to 17 addresses.
    - Users can configure the schedule for when they will be alerted, as well as customize the e-mail subject line for each sensor alert.
  - SNMP traps have unique OID's (Object Identifiers) for each sensor.
    - OIDs for sensor and contact values for E-16D.

#### Internal Temperature Sensor

- Applications from 32 to 104°F (0 to 40°C).
- Accurate to within  $\pm 1.35^\circ\text{F}$  ( $\pm 0.75^\circ\text{C}$ ).

#### Internal Humidity Sensor

- Applications from 20% to 80% relative humidity at temperatures between 32 to 104°F (0 to 40°C).
- Accurate to within  $\pm 5\%$  relative humidity.

#### Internal Power Sensor

- Measures mains voltage: 0 to 255 VAC
- Measures battery voltage: 0 to 20 VDC
- Measures voltage on 24VDC models: 20 to 32VDC
- Alerts are sent when there is a power outage and when power returns.

#### Back-up Battery

- Rechargeable sealed lead-acid battery.
  - Battery removal/disposal instructions.
- Provides back-up for one hour.

#### MTBF

- E-16D: 39,685 hours.

#### Dimensions

- WxDxH (all options):
  - Without supplied rackmount kit: 16.19x10.01x1.75"
  - With supplied rackmount kit: 19x10.01x1.75"

#### Environmental

- Operating temperature: 32 to 104°F (0 to 40°C).
- Storage temperature: -22 to 140°F (-30 to 60°C).
- Operating /Storage Relative Humidity: 17 to 90% non-condensing RH.

#### Regulatory Approvals

- CE, RoHS

#### Warranty

- Two years