ANX

Description

The Gamewell-FCI, Addressable Node Expander (ANX) is a networking interface board that is used to expand the overall E3 Series® capabilities in the system node count, FocalPoint® integration and Ethernet connectivity. This powerful interface provides greater data exchange between the following units.

- E3 Series FACP
- S3 Series FACP
- FocalPoint Graphical Workstation
- Installer's PC

The ANX allows the E3 Series and S3 Series Networks to expand to two rings. Each ring contains up to 61 nodes, not including the ANX. By bridging the two networks together, each of the E3 and S3 network node counts are increased to 122 nodes. The multi-ring network expansion can activate outputs on any node on the bridged networks including the Control-by-Event functions originating from a connected network (See Figure 1-Shared Ring Capability). Audio paging and voice messages are also transferred over the two networks through the ANX.

The use of the ANX's Ethernet port allows the communication between the E3 Series System, the FocalPoint Gateways and Workstations through the TCP/IP. From the FocalPoint Workstation, you can activate "virtual switches" in the ANX for CAM control and status monitoring which might include bypass, control switching, voice evacuation notification or any auxiliary control function.

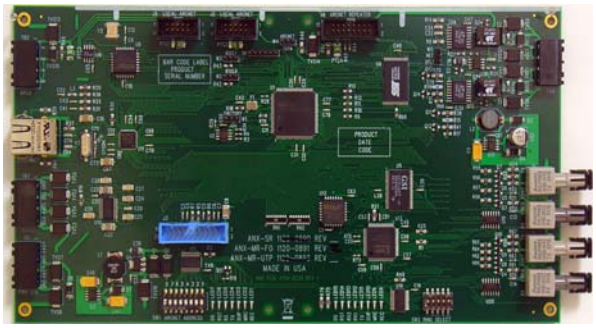
Installers can use the ANX's Ethernet port for high-speed configuration downloading into either of the E3 Series or S3 Series rings, saving time over using the typical RS-232 connections. The ANX can also be used as a downloading gateway for commissioning and is not required to be a part of the system.

The ANX expands the operation of the E3 network so that it can support both Mass Notification and Emergency Communication System applications used in campuses, large industrial or manufacturing facilities, hospitals, high-rise and multi-building complexes.

The following three types of ANX sub-assemblies provide Ethernet connectivity via an Ethernet port.

- Addressable Node Expander - Single Ring (ANX-SR).
  - contains a single E3 Series local network connection.
- Addressable Node Expander - Multi-Ring Twisted-Pair (ANX-MR-UTP) contains the following:
  - a primary and secondary network interface for multi-ring communication.
  - includes twisted-pair copper (UTP) on the secondary network connection.
- Addressable Node Expander - Multi-Ring Fiber Optic (ANX-MR-FO) contains the following:
  - primary network interface for multi-ring communication.
  - a fiber-optic (FO) connectivity on the secondary network connection.

Addressable Node Expander



ANX

Features

- Complies with UL® Standard 864 (9th Edition).
- Expands the E3 and S3 Networks to two rings, containing 122 nodes allowing a multi-ring network expansion.
- Provides expanded data exchanges between the E3 network and the FocalPoint Graphic Workstation.
- Includes high-speed configuration downloading through the ANX Ethernet port.
- Installed in the standard E3 Series cabinet enclosures.
- Bridges two of either the E3 Series or S3 Series Networks to activate outputs on any node on bridged networks.
- Offers shared ring capability.

FocalPoint Features

- Displays device descriptions for points on events only.
- Shows a single icon per SLC device.
- Provides up to 512 Virtual Points for programmable control and status monitoring within FocalPoint for:
  - System control switch (Enable/Disable, Bypass).
  - Voice evacuation speaker circuit control switch.
  - Auxiliary control circuit switch.
- Provides Ethernet connectivity to allow a high speed supervised connection to the FocalPoint Gateway.
- Includes additional point information to the end user.
- Allows the user to send the following commands over the E3 Network.
  - Acknowledge
  - Reset
  - Silence
  - Enable/Disable
- Shows the current status on the E3 and S3 networks.
- Sends the time to the E3 and S3 networks.

SIGNALING
UL LISTED S1869
FM APPROVED 3025415
MEA Approved FDNY: COA #6077
7165-1703:0125

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

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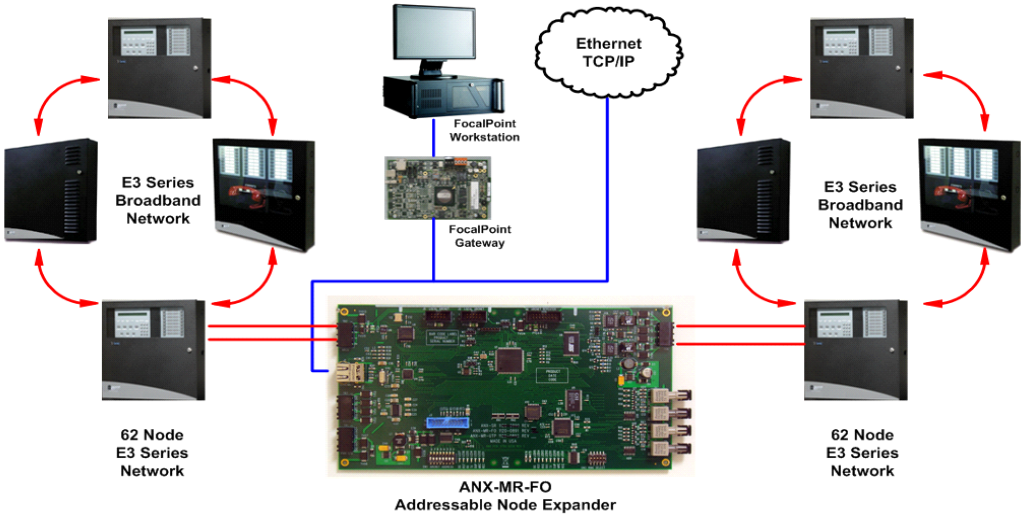

Figure 1: Addressable Node Expander Connection in a Multi-Ring Network Expansion Configuration

Ethernet

The Addressable Node Expander uses TCP/IP and incorporates heavy PPL/PSL/ re-use of the mainstream components. The three types of ANX sub-assemblies can provide Ethernet connectivity via an Ethernet port. This Ethernet port offers an enhanced network interface between the E3 Series and S3 Series fire alarm control panel and the FocalPoint Graphic Workstation. This feature improves the communication to monitor the alarm supervisory and trouble conditions of the FocalPoint Graphic Workstation. The E3 Series configuration data can be loaded into the network nodes via the ANX Ethernet port and CAMWorks™.

A Download program utility is provided to extract data (excluding the CAMs and voice files on the INI-VG Series) into a job file that allows the ANX to extract all point information in existing panels. The following list the information that can be retrieved from the ANX.

- Custom labels programmed to identify each point.
- System information that details the configuration of analog addressable monitor and control points
- Information stored in the CAMWorks job file
- Compare feature to display configuration differences
- Converts low level CAMs into corresponding high level CAMs during the download of the CAMWorks configuration data for the following node types:
  - ILI-MB-E3
  - ILI95-MB-E3
  - NGA
  - SLP-E3
  - ILI-S-E3
  - ILI95-S-E3
  - ANX

Specifications

Operating Voltage:	24 VDC (from the PM-9/PM-9G power supply)
Operating/Supervisory Current:	0.066 amp
Alarm Current:	0.066 amp
Operating Temperature:	32° to 120° F (0° to 49° C)
Relative Humidity:	0 to 93%, non-condensing at 90° F (32° C)
Supervised	

Wiring Specifications: (ANX-MR-UTP & ANX-MR-FO only):

Copper Wire:	16 to 18 AWG twisted-pair, unshielded. Up to 3,000 feet (914.4 m) between each node.
Fiber-Optic Cable (ANX-MR-FO only):	Up to 200 microns (optimized for 62.5/125 microns). Up to 8 dB loss between each node.

Ordering Information

Part Number	Description
ANX-SR	Addressable Node Expander-Single Ring
ANX-MR-UTP	Addressable Node Expander-Multi-Ring Twisted-Pair
ANX-MR-FO	Addressable Node Expander-Multi-Ring Fiber Optic

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