The Peripheral Expansion Network Node Module provides an Ad-NeT-PluS network interface for remote monitoring and control of an integral Axis AX peripheral bus (PBUS). Two (2) versions of the peripheral expansion network node module are available; one for a Class B, Ad-NeT-PluS peer-to-peer network (AX-PENN) and one for Class A, Ad-NeT-PluS peer-to-peer network (AX-PENN/ST7).

Like the AX-CTL base card peripheral bus, the peripheral expansion network node module's (AX-PENN or AX-PENN/ST7) peripheral bus (PBUS) can support 16 of any specific Advanced PBUS module to a maximum of 32 PBUS modules. Peripheral bus modules include; audio amplifiers, switch/LED modules, switch/LED driver modules, fan/damper control modules, LED modules, conventional zone modules and four point relay modules.

In addition to providing a remote network interfaced peripheral bus, the peripheral expansion network node module can also support a standard Axis AX keyboard display (AX-DSP). An example of a product utilizing this feature would be the Advanced AX-LOC local operating control panel.

Besides supporting an optional AX-DSP keyboard display, each peripheral expansion network node module (AX-PENN or AX-PENN/ST7) can support a supervised panel strip printer and/or external 80 column wide carriage printer.

Normally installed in an enclosure like the AX-LOCs, an optional single aperture plate is available for AX-PENN (/ST7) mounting. This optional plate allows the AX-PENN (/ST7) to be installed in any Advanced enclosure.

**Features**

- Remotely Located PBUS Module Support
- Available as Class A or B Ad-NeT-PluS Network Node
- Supports up to 32 Advanced PBUS Modules
- Supports up to 16 of any PBUS Module Type
- Serial Port for Connection of Optional AX-DSP
- Integral RS232 Interface for External Printer/CRT
- Strip Printer Interface Port
- Power Supply/Charge Monitoring Input
- Fifteen On-Board Status LEDs
- USB Port for Programming

**Listings and Approvals**

- ETL ANSI/UL 864 Listed: 101564744NYM-001
Specifications

Operating Voltage  15-30VDC (24VDC Nominal)
Operating Current AX-PENN: 65 mA, AX-PENN/ST7: 90 mA
Operating Temperature 32 °F - 120 °F (0 °C - 48 °C)
Humidity 95% (Non-Condensing)
Dimension 6" (H) x 5" (W) x 1" (D)
Supervised Input 3.3K EOL
Programming Buttons Reboot, Program, Commision
10-Pin Serial Port Optional AX-DSP Port
Serial Interfaces USB, RS232 (Isolated)
PBUS 32 Maximum Modules

Ordering Information

AX-PENN  Peripheral Expansion Network Node, Class B
AX-PENN/ST7  Peripheral Expansion Network Node, Class A
590-398  Metal Mounting Plate with Screws