Digi PortServer II and Expansion Module

The PressureMAP Management Analysis Program has added greater flexibility and versatility in data communications with the certification of the Digi PortServer II™ multiport server (see photo). This server is both a replacement for the discontinued Corollary equipment and a breakthrough in improved MAP System communications performance.

Expandable Capability

The Digi PortServer II (System Studies Part No. 9800-5417) offers up to 16 individual serial ports—expandable to 64 with multiple server modules—which are addressed by PressureMAP via a standard Ethernet network connection or direct serial cable connection. Unlike the Corollary equipment, which required a four port Corollary card inside the MAP computer and one or more eight port Corollary boxes connected to the MAP computer via a six foot cable, the PortServer II can utilize a Local or Wide Area Network connection in communicating with PressureMAP. This capability is particularly suited to centralized monitoring applications.

The Digi PortServer II's capability is easily expanded by connecting it to the Digi AccelePort PORTS/16em port expansion module (Part No. 9800-5155). The PORTS/16em provides an additional 16 serial ports for external modems, printers and other serial equipment. Please note that Digi International has discontinued the AccelePort MODEM/8em and MODEM/4em modem modules.

Digi PortServer II

Each of the modular Digi components described can be installed in a 19-inch equipment rack using a Digi Rack Hardware shelf (Part No. 9800-5149). This equipment includes a face plate with equipment cutout and mounting holes, as well as a horizontal shelf.

The primary advantages of the Digi PortServer II are the following:

Features

- Expandable configuration. The primary PortServer II accommodates up to three expansion modules for a total of 64 serial ports using the same IP address (twice the maximum for a Corollary configuration in one PressureMAP system). Each port may be connected to an external modem, terminal or printer with appropriate cabling.
- Can also be used when directly connected to PressureMAP, independent of a LAN/WAN.
- Frees up a slot in the MAP Computer. Without the need for a Corollary card for the Corollary Concentrator, the available slot can be used for other equipment/capabilities.
- Because it uses a network connection, the PortServer can be placed in any remote location where a LAN or WAN connection for PressureMAP is available. As a result, toll charges for data acquisition, alarm and report distribution, user access, and remote 289H LSS Diagnostics are either eliminated altogether or significantly reduced. (Note: Due to the insecure nature of the Internet and its routing variations, the Digi PortServer II is not recommended for use on the Internet.)

Components

The information below describes the basic equipment components. Additional information regarding the PortServer II and AccelePort modem modules is available by contacting System Studies.

PortServer II
Front Panel Overview:

- On/off switch
- Bank of LEDs to report status information (see photo)
- Alphanumeric display that indicates the port on which the current LED display is reporting
- Push-buttons that enable you to select a port to monitor, run a diagnostic test, or reset configuration to default values

Side Panel Overview:

- Expansion chassis Out connector (which provides connection to a PORTS expansion module, enabling you to add ports to the PortServer II)
- D.C. power supply connector (connection to PortServer II power supply)
- 10Base T connector for twisted-pair connection to an Ethernet
- 10Base 2 connector for coaxial connection to an Ethernet

Rear Panel:

- 16 EIA-232 compatible serial connectors

Specifications

PortServer II

Ethernet Connections:	One 10BaseT twisted-pair Ethernet port with RJ-45 8-pin connector One 10Base2 Ethernet port with a BNC coaxial connector
Ports:	16 EIA-232 synchronous/asynchronous serial ports, each with a 10-pin RJ-45 connector that accommodates either an RJ-45 or RJ-11 plug. Each port supports 115.2 Kbps. Connection of an expansion module may reduce per-port available band width. One External Bus Interface (EBI) connector, allowing the connection of expansion and/or AccelePort modem modules (3 maximum). Provides up to 64 ports with three 16em expansion modules connected.
Power Requirements:	Internal +5 volts ± 5%, 1.8A max +12 volts ± 5%, 420mA max -12 volts ± 5%, 330mA max External 43W 50/60Hz power supply. 100-250 VAC.
Environment Requirements:	Ambient temperature: 10^{o} C (50^{o} F) to 55^{o} C (130^{o} F) Relative Humidity: 5% to 90% Air movement: normal connection Altitude: 0 to 3,660 meters (0 to 12,000 feet)

Dimensions:	Length: 12 inches (305 mm) Width: 7 inches (178 mm) Height: 2.4 inches (61 mm) Weight: 2.25 lbs (1.0 kg)

AccelePort PORTS/16em specifications for Ports, Environment and Dimensions are basically the same as those listed above. However, the 16em has two EBI connectors –one in, one out–and it is powered by the EBI connection to the PortServer.

Additional information regarding the operation and use of the Digi PortServer II and AccelePort port expansion module with your PressureMAP system is available by contacting System Studies Incorporated at (800) 347-8255 or (831) 475-5777.