

Chapter 3

INTRODUCTION

This section of the *PressureMAP Administration Manual* provides information pertaining to the hardware components used in the PressureMAP™ system. It is divided into two parts: *Remote Equipment* and *Local Equipment*. The *Remote Equipment* section identifies the types of cable pressurization monitors (CPAMS) that can be used with PressureMAP. It also explains the basic configuration requirements for setting up older-style terminals and printers to receive PressureMAP reports and alarms via telephone modem connections. *Local Equipment* describes hardware requirements for the computer equipment on which PressureMAP is installed.

Note: PressureMAP Version 28, like Version 27 Linux, is not required to operate only on a MAP Engine computer, as was the case previously for PressureMAP systems using the SCO UNIX operating system. This requirement change can be attributed to the greater flexibility of the secure and scalable standards-based Linux operating system and the availability and support of hardware drivers for various equipment configurations. Customers wishing to install PressureMAP Version 28 on a computer other than a MAP Engine will need to comply with the minimum hardware requirements specified on page 3-2.

REMOTE EQUIPMENT

The MAP Engine computer and associated software has been designed and tested to perform with a variety of automatic monitoring systems, printers and remote terminals. In order to achieve desired performance standards, only this equipment can be used with PressureMAP Version 28. This equipment is listed below.

Monitoring Equipment

PressureMAP and the associated Management Analysis Programs have been designed and tested to work with specific monitoring systems. The manufacturers and model types that are compatible with PressureMAP are listed below:

- **System Studies Incorporated**
Models: 289H LSS, 289H-M LSS, uM260 Micro Monitor, Dial-a-Ducer*, Universal Stand-Alone Module (USAM)*

*Manufacturer-discontinued Product
- **Chatlos Systems, Inc., Technicom Systems, Inc., TX Industries**
Model Numbers: 600, 640 List 1, 640 List 2-CP1, 640 List 2-CP12, 640 List 2-CP20, 640 List 2-MPUZ, 640 List 2-MX, 640 List 3, 640 List 3-MX, Hercules 740, Hercules 940, Teleducer 50
- **Lancier**
Model Numbers: DW101 and DW1005

- **Nicotra**
Model Numbers: MINIDAS I and MINIDAS II (MINIDAS-2400)
- **Sparton Technology, Incorporated**
Model Numbers: 5301A (including most software versions in existence prior to June 1, 1990), 5310 (only when used as a satellite to a Model 5301), 5335A, 5345A, 5301B, 5303B, 5304B, 5330B, 5335B, 5345B, 5318 MMU. (Please note that the old Sparton 5300A is no longer supported, effective with PressureMAP Version 21.)
- **TMACS**
Model Number: 1000
- **TELSEC**
Model Number: 1500, 2000
- **Puregas**
Model Number: PVD 800

Note: Please contact System Studies if you are using a Cable Pressurization Automatic Monitoring System (CPAMS) monitor that we do not currently support. Other types of CPAMS monitors may be added to the list in the future.

Printers and Terminals

The PressureMAP system will continue to operate with virtually any type of remote terminal or old-style teletype printer. All remote terminals and printers used to access information from the MAP computer must have provisions for setting data bits, parity, and baudrate. In addition, they must also be able to print or display the ASCII character set.

The modem baud rates for remote printers and terminals must be compatible with the corresponding modem at the MAP computer. The printers and terminals must also have provisions for making data bit and parity settings. All remote equipment must be set to **8 data bits** and **no parity**. In addition, the equipment used must support the ASCII character set and have scrolling capabilities. It must also provide a way to turn the **CAPS LOCK** feature **ON or OFF**. These are the general requirements for remote equipment. If you have questions regarding other settings, please refer to the instruction manual that is supplied with your equipment.

LOCAL EQUIPMENT

Due to the greater versatility and hardware support available for the Linux operating system, it is no longer a requirement to install PressureMAP only on a System Studies-certified MAP Engine computer. Hardware configurations that meet or exceed the basic component requirements listed on the following chart will be adequate for running PressureMAP Version 28.

Hardware	Specifications
MAP Engine VIII or Customer-selected server class computer	2.4 GHz CPU 1024 MB RAM 143 GB Hard Disk Drive DVD-RW Drive 100 MBPS Network Adapter
Digi PortServer	Digi PortServer TS 16 terminal server, with firmware version 82000684_V2

In addition to the hardware specified above, it is recommended that a copy of BackupEDGE™ 3.00 be purchased for your PressureMAP system. BackupEDGE makes it possible to back up office and device data to a variety of storage media, including CD-ROM, DVD-ROM, RAM disk and a remote computer via FTP. If you do not wish to purchase the third-party BackupEDGE utility, at the very least your hardware platform should include an electronic tape drive. PressureMAP's System Administration Menu includes the capability to back up office and device data to a standard tape drive. However, there is no similar menu procedure for CD/DVD-RW drive or remote computer backup. For these options you will need BackupEDGE.

Additional Equipment

The following is a list of hardware approved by System Studies Incorporated for use with PressureMAP operating on the MAP Engine or equivalent computers. FIGURE 3-1 illustrates a type of rack configuration commonly used for PressureMAP.

Serial Port Concentrator – The serial port concentrator that is currently certified for use with MAP System computers is the Digi PortServer® TS 16. The previously-certified Digi PortServer II and MODEM/8EM expansion modules are no longer available for purchase (effective Spring 2013). This new Digi PortServer TS 16 uses a network connection to provide access to 16 serial ports for modem communications.

Please note that the Corollary communications card, long ago discontinued by the manufacturer, is no longer supported in PressureMAP Version 28 on computers which run the Linux operating system.

External Modems – Currently, there are only two modems available for purchase from System Studies that have been certified by us to be compliant with the PressureMAP software and MAP Engine computer:

1. MultiModem ZDX 56 Kbps stand-alone analog modem (Part No. 9800-5174)
2. MultiModem ZDX V.92 Voice / DTMF modem (Part No. 9800-5175) – used for communications with the System Studies Dial-a-Ducer™. Please note that the Dial-a-Ducer is a discontinued product, but it is currently supported by System Studies.

The following additional equipment is required for modem-based communications to complete a basic system configuration for a Digi PortServer/modem application:

- Eight telephone lines
 - At least five lines must be made accessible for incoming calls—three for user access and two dedicated to receive alarms.
 - The remaining three lines must use the dial out codes (for example, all must require "9" to dial out, or all must not use "9" to dial out).
- Eight modular serial modem cables
- Seven 1-gigabyte 1/4-inch backup tape cartridges
- One 6-foot RJ-45 cable

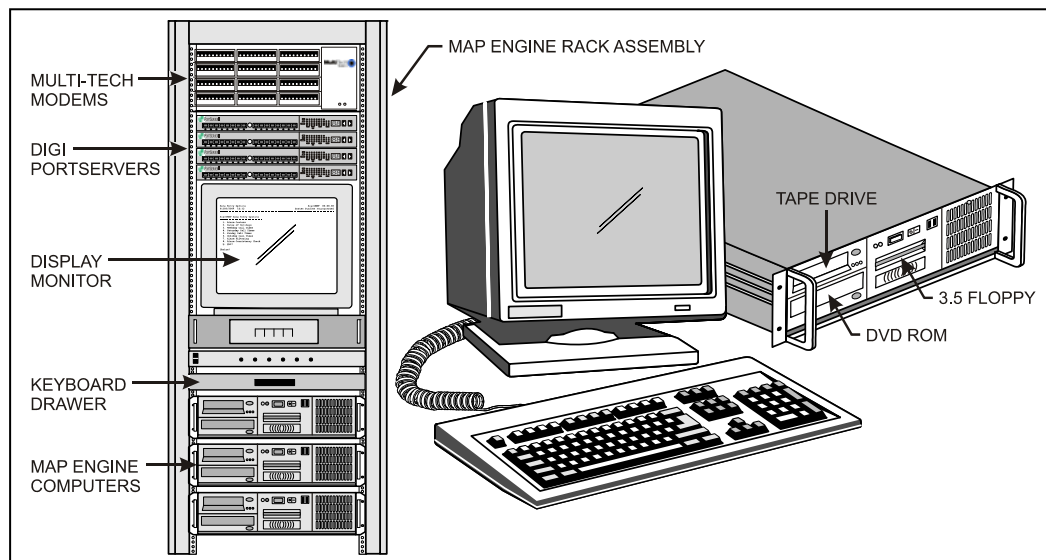


FIGURE 3-1: PRESSUREMAP COMPUTER EQUIPMENT

PortServer® II and PortServer® TS 16 are registered trademarks of Digi International.