



High Speed Routing for Data/Voice Networks

Introduction

GDC's PacketMATE 1321 (PM-1321) is a reliable, feature-rich router designed for outdoor enclosures and other extended temperature applications that require an operating temperature range from -20 deg. to 70 deg. C. The flexible chassis design makes installation easy in desktop, wall-mount, or rack-mount environments.

PM-1321 provides two expansion slots in a compact steel chassis that includes a fanless processor, high-speed DDR memory, dual 10/100/1000 ethernet, and flash storage. With add-on network cards, the PM-1321 can route multiple IP network connections including fractional or full T1/E1, 56/64K DDS, basic rate ISDN (BRI), and 56K dial-up.

The PM-1321 includes modular driver support for WAN protocols including PPP, Cisco HDLC, frame relay and ATM. Real-time port status and performance monitoring simplifies troubleshooting for LAN and WAN connections.

The PM-1321 offers a wide range of software features including NAT firewall, interface bond, bridging, QoS, VPN, dynamic routing, peer-to-peer traffic control, lawful intercept, VoIP gateway, and more.

Intended Use

The PacketMATE 1321 is part of GDC's line of high performance low cost routers. The PM-1321 is ideal for small-scale routing applications including branch offices and outdoor POPs. It offers wire-speed performance and unwavering reliability in a small flexible package. The advanced capabilities of the PM-1321 make it an excellent choice for a wide range of business, service provider, and military routing applications. The PM-1321 can replace Cisco 1700, 1800, 2600 and 2800 routers, and is a great router for VPN and QoS applications that require wire-speed performance.

Feature Highlights

- Extended temperature operation from -20 to +70 deg C.
- Small footprint with versatile mounting options: desktop or wall-mount installation
- Replaces Cisco 1700, 1800, 2600 and 2800
- Onboard dual 10/100/1000 ethernet
- Routes eight T1 or E1 ports at wire speed
- Heat sink cooling minimizes power consumption and increases reliability.
- Lawful intercept including CALEA
- VoIP gateway and SoftPBX
- PowerCode™ OSS ready
- Runs on LINUX™ OS
- 31-day performance guarantee;
1 year warranty on parts and labor;
Free 24/7 support for 1 year
- Free software upgrades

Front and Rear Panel Features

- Two 10/100/1000 ethernet ports for easy connection to most LANs.
- Console port to configure the router.
- Power switch on the back panel for added security.
- Two expansion slots for add-on network cards.
- Heat sink thermal management of electronics.

Physical Specifications

Hardware

Chassis: Steel and aluminum set-top or wall-mount
 Processor: 1.6 GHz Intel Atom N270 single core
 Chipset: Intel 945GSE
 Memory: 1 GB (2 GB optional)
 Storage: 8 GB compact flash
 LAN: Onboard Dual 10/100/1000 ports
 Management Port: Serial console

Performance

Linux OS
 500,000+PPS base CPU
 1,000,000+ PPS with CPU upgrade

Expansion Interface

Two 32-bit 33 MHz expansion slots

Dimensions (Desktop)

Height: 7.2 inches (18.3 cm)
 Width: 4.7 inches (11.8 cm)
 Depth: 8.6 inches (21.9 cm)
 Weight: 6.2 lbs (2.8 kg)
 Shipping Weight: 11.1 lbs. (5 kg)

Electrical Specifications

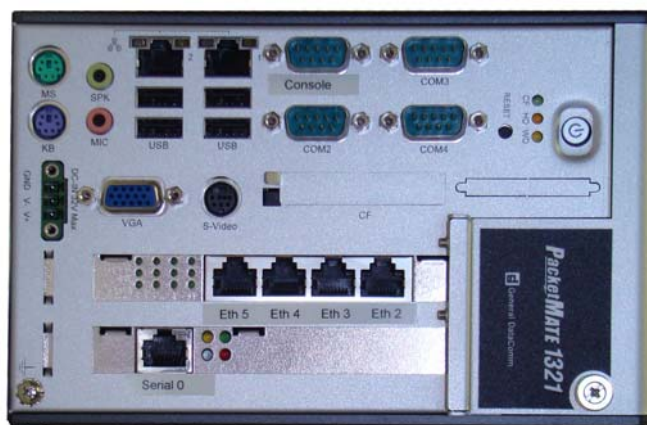
Power Supply Design: External AC-DC adapter
 AC Mains: 100 - 240 VAC, 47 to 63 Hz
 DC Output: 24 VDC at 2.5 amps or 60 W
 Nominal Draw: 15 watts
 DC Input: 9 to 32 VDC with overvoltage protection

Options

Memory Options: 2 GB
 LAN Card Options: 1 and 4-port gigabit ethernet
 WAN Card Options:
 1, 2, 4 and 8-port serial, T1 or E1
 1-port basic rate ISDN (BRI)
 1-port 56K modem
 Voice Card Options:
 1 to 4-port FXO/FXS
 1, 2 and 4-port ISDN BRI
 1, 2 and 4-port T1/E1 PRI

Software Features

Linux -based OS
 High-performance kernel
 Scalable platform
 Menu-driven configuration
 PowerCode BMU function
 VoIP gateway and SoftPBX
 Web caching
 Web filtering with Netsweeper
 Intrusion detection and prevention
 VoIP capture and analysis
 On-line and off-line upgrades
 Local and remote logging
 Real-time monitoring
 Quality of Service (QoS)
 Bandwidth limiting
 Packet filtering
 Port forwarding
 Packet processing by PVC or DLCI
 Peer-to-peer traffic control
 System scheduler
 PPP, Cisco HDLC, and frame relay
 MLPPP and MLFR
 PPPoE and PPPoA client and server
 ATM and IMA
 CEF-compatible bonder
 RIP, OSPF, IS-IS and BGP
 SNMP or NetFlow/Æ accounting
 NAT firewall (1:1 and 1:many)
 NTP clock synchronization
 T1/E1 drop and insert
 LAN and WAN bridging
 Concurrent bridging and routing
 Secure telnet (ssh v.2)
 L2TP tunneling (LNS and LAC)
 GRE, IPsec and CIPE tunneling
 Remote RADIUS
 TACACS+
 DHCP client and server
 IPsec and SSL VPNs
 VRRP router failover
 Lawful intercept
 VLAN tagging
 IPv6



Rear Panel Connectors