

# NetPerformer<sup>®</sup> SDM-9350

Multi-Service Access Gateway for Branch Offices



NetPerformer SDM-9350 delivers a converged communications solution for branch office voice and data transport over a variety of popular WAN infrastructures.



Integrate disparate phone systems

Conserve network bandwidth

Simplify network management

Reduce network infrastructure

Integrate networks seamlessly

Save communications costs

## Affordable Converged Communications

The NetPerformer SDM-9350 is designed for efficient, cost effective voice and data integration for branch offices to transport traffic to corporate headquarters. The NetPerformer SDM-9350 packetizes and compresses voice traffic and delivers it in a combination over a data network, allowing companies to realize substantial cost savings on intra-enterprise voice communications. The NetPerformer SDM-9350 is a key component of the NetPerformer premium suite of products, all of which have been optimized specifically for the evolving needs of complex, distributed enterprise networks.

## Compact. Standardized. Flexible.

The NetPerformer SDM-9350 efficiently packetizes and compresses voice, fax, modem, and data traffic, and transports it along with LAN, SNA, or serial data over various WAN infrastructures such as IP, Frame Relay, Leased Lines, channelized services, and Satellite (Point-to Point/Multipoint). The SDM-9350 is a multi-service integrated access device and provides two analog voice ports that can be configured for E&M (Types I, II, and V), FXS or FXO support. The unit is expandable to four voice ports, and Ethernet LAN interface can also be added. Fractional T1 and E1 connections to the WAN are also available.

Each unit comes standard with four serial ports allowing aggregation of Frame Relay connections. This means that a company's existing routers can be integrated and fully supported, protecting previous investment of networking gear. And, of course, NetPerformer's comprehensive routing and protocol suite can also be used to directly provide the routing functionality.

All voice and data entering the unit is prioritized by protocol then combined for transport over a single network connection over private or public data networks. This functionality is provided by PowerCell™ - Verso's award-winning, cell-based QoS prioritization technology.

## Integrated Voice and Data Capability in a Compact Design

The SDM-9350 is an ideal solution for the needs of the branch office in a converged network. The SDM-9350, in conjunction with the rest of the NetPerformer product line, allows each individual site to be configured with just the right combination of services, performance and scalability, avoiding unnecessary cost.

## Support for Modem and Fax

The SDM-9350 can support all the telephony needs of today's distributed enterprise networks, saving cost by integrating all types of traffic onto a single network.

## Any-to-any Voice Switching

Integrates the disparate phone systems of individual sites, eliminating the need for consistency among sites, reducing costs and increasing flexibility.

## Support for PowerCell

Verso's award-winning technology for voice and data integration and prioritization, which allows the entire network to operate at optimal performance for all supported traffic types.

## SNMP-Compliant MIBs and Graphical Management

Through ACTView 3000, including integration with HP's OpenView™ for Windows and Sun Solaris, let the SDM-9350 be managed using today's most popular and universal network management paradigms.

## Adherence to Standards

The SDM-9350 seamlessly integrates with any public network, and ensures compatibility with leading Frame Relay switches.

## System Details

- Desktop or rackmount chassis
- Power: 90 to 264 VAC 50/60 Hz DCE, HD26F
- Number of serial ports: 4
- Serial connector: MD-26
- Interface: RS-232C, X.21/V.11, RS-530, RS-449/RS-442, V.35 (CE mark), software configurable
- Analog voice: 2 voice/fax channels on base unit, up to 4 with voice expansion card
- Number of expansion slots: 2

## Expansion Options

- MOD-VC-01: 2 analog interfaces: FXS, FXO, E&M 4w/2w (types I, II and V) software configurable
- LAN (maximum one per unit):
  - > MOD-ETH-01: Ethernet (10Base2/10BaseT)
  - > WAN: T1/E1 CSU/DSU dual ports
- Fractional T1/E1 CSU/DSU: G.703/704:
  - > 32 logical ports
  - > Drop and insert
  - > RJ48 connectors for T1 and E1 120 ohms
  - > BNC connectors for E1 75 ohms

## Network Connections

- Network topology: public and private Frame Relay, mesh, hierarchical, star, point-to-point, Satellite point-to-point/multipoint (SkyPerformer option)
- Circuits: leased, switched or Frame Relay
- Link port protocols:
  - > Synchronous full duplex HDLC, Frame Relay, RFC-1490, user-UNI, network-UNI, PowerCell
- Link port speed: 9.6Kbps to 2.048Mbps
- Frame Relay:
  - > Local management interface: LMI, ANSI T1.617/annex D, ITU-T Q.933/annex A, CLLM or disabled
  - > PVCs: 96 per node, automatic DLCI discovery, SVC for voice application only
- IP WAN:
  - > PowerCell over IP, using Ethernet, PPP, Frame Relay
  - > Automatic node discovery and rerouting with least cost metric routing
  - > Automatic load balancing, bandwidth on demand (over leased line) and dial back-up, time-of-day connect
  - > Performance level: 900 cells per second
- Dialing protocols: V.25bis, X.21, AT and control leads

## Telephony Features

- Voice compression algorithms: ACELP 8Kbps, 5.8Kbps, 4.8Kbps, ACELP Comfort Noise 8Kbps, 6Kbps, ADPCM
- G.726, PCM G.711
- Fax support: Group III at 2.4, 4.8, 7.2, 9.6, 12 and 14.4Kbps
- Modem Relay: V.32bis modulation up to 14.4Kbps
- Impedance: 600/900 ohms or complex

## LAN Support

- 1 Ethernet expansion module (optional), Ethernet II and IEEE 802.2, 802.3, SNAP
- Protocol support:
  - > Standards: IP RIP V1/V2 or static, OSPF, NAT, Multicast IGMP PIM-DM V1/V2, BootP/DHCP relay, IPX RIP and SAP, LLC2, Source Routing, Source Routing Transparent
  - > 802.1D Spanning Tree Protocol (STP), MAC Layer, Transparent Bridging
  - > Filter criteria: based on protocol, address (source, destination or SAP) or custom filtering
  - > 8 classes of service, 16 priority weights

## Data Features

- Number of user ports: up to 4
- User port maximum speed: 2.048Mbps
- Data compression: 4:1 (up to 128Kbps output)
- User port protocols:
  - > SNA: SDLC, LLC2 or Frame Relay RFC-1490 (BAN, BNN), maximum of 64 PUs per unit (types 1, 2.0, 2.1, 4/5), local SDLC and LLC2 spoofing, SDLC/LLC2 conversion
  - > Legacy Sync: PPP, BDLC, HDLC, SDLC, X.25, X.25 over Frame Relay (annex F/G), COP, BSC, DDCMP, VIP, ALC, IBM/RJE, Uniscope, Poll/Select, Siemens Nixdorf, JCA, Zengin
- Frame Relay: RFC-1490, UNI-DTE, UNI-DCE
- Asynchronous: ENQ/ACK, XON/XOFF, transparent, CTS/DTR
- 8 classes of service, 16 priority weights

## Network Management

- SNMP management via ACTView 3000 Network Management System for HP OpenView for Windows or Sun Solaris
- Menu-driven async console port (VT-100) via DB-9 male connector, autosensing DTE/DCE
- Remote Telnet access to command port

- FTP upload and download of software and configuration
- Traps, traces and extended statistics
- Username/password security control, administrative filtering

## Physical Characteristics

- Height: 2.5" (6.4 cm)
- Width: 17" (43.2 cm)
- Depth: 12.5" (31.8 cm)
- Weight: 11 lbs. (5 kg)
- Shipping weight: 16 lbs. (7.3 kg)

## Environmental Tolerances

- Operating temperature: 0° to 45° Celsius
- Relative humidity: 10% to 90%, non-condensing

## Regulatory – Compliance and Agency Approval

The SDM-9350 complies with or has obtained Regulatory Agency approval at least against the following standards:

- EMC - Emission FCC CFR 47 Part 15 EN 55022 (1994) + Amendment 1 AS/NZS 3548 (1995)
- EMC - Immunity EN 50082-1 (1992)
- Safety EC 950 (1991) + Amendments 1 to 3 EN 60950 (1992) + Amendments 1 to 3 UL 1950 3rd Edition CSA C22.2 N°950 AS/NZS 3260 (1993) ACA TS001 (1996)
- Telecom - Analog FCC Part 68 IC CS-03 Part 1 ACA TS002
- Telecom - Digital FCC Part 68 IC CS-03 Part 2 TBR 001 TBR 002 TBR 012 TBR 013 ACA TS002 ACA TS003



Pulse Supply  
 909 Ridgebrook Road., Sparks, Maryland 21152, USA  
 TEL : +1-410-583-1701 FAX : +1-410-583-1704  
 E-mail: sales@pulsesupply.com  
<https://www.pulsesupply.com/netperformer>

www.pulsewan.com  
 verso@pulsewan.com  
 Toll Free: 888-785-7393  
 Int'l: 951-699-3891